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Inquiry Secretary House of Representatives Sustainable Cities 2025 Parliament House CANBERRA ACT 2600

Dear Dr Dacre

SUBMISSION TO THE HOUSE OF REPRESENTATIVES INQUIRY INTO SUSTAINABLE CITIES 2025

Thank you for the opportunity to make a submission to the House of Representatives Inquiry into Sustainable Cities. Newcastle City Council has considered the Discussion Paper *Sustainable Cities 2025: A Blueprint for the Future* and would like to make the following comments.

The Terms of Reference for the Environment and Heritage Committee in this inquiry clearly outline the integrated nature of environmental, economic and social impacts of unsustainable city development. However, Council also notes the focus on environmental related issues within the Discussion Paper.

The inclusion of value statements such as 'preserve the essentials of the Australian lifestyle' can be highly subjective and open to widely differing interpretations over time. This statement raises questions as to what are these 'lifestyle essentials' and are they currently sustainable? These "essentials" can and do change over time and the history of the urban form of Newcastle provides such an example.

NEWCASTLE – HOW DID WE GET HERE?

The urban structure of Newcastle was highly influenced by its early mining, port and related economic activities. This saw the development of a series of linked villages or suburbs, prior to World War II, that were all highly pedestrian oriented and based around local work and retail nodes. This was considered essential to the Australian way of life at that stage. The majority of these early suburbs make up the existing inner city and middle ring suburbs of Newcastle.

These early suburbs developed a housing density of between 19 to 30 dwellings per hectare based on a diverse range of housing (medium density and separate houses) built on a range of block sizes $(100m^2 \text{ to } 600m^2 \text{ +})$. To provide an example, the inner city suburb of Cooks Hill has an average housing density of 24.5 dwellings per hectare within a suburb area of 87 hectares. The population

density is 45 persons per hectare and the area now supports a lively retail and cafe strip. Its dwelling structure can be seen in Table 1 below.

TABLE 1 – Cooks Hill		na pontiti, and a free produced of the second s		
Private dwellings and Persons in occupied private dwellings	Dwellings	Persons	Occ. Rate	% of dwellings
Separate house	332	782	2.3	24.1
Semi-detached, row or terrace house, townhouse	449	933	2.1	32.7
Flat, unit or apartment:	448	713	1.6	32.6
Unoccupied private dwellings (vacant)	132	0	0	9.6
Total	1,373	2,449	1.8	

Table 1: data sourced from 2001 ABS Census.

The Newcastle suburbs developed post WWII demonstrate a significantly different urban form and structure. This can be clearly demonstrated in the example of Maryland, an outer western suburb of the Newcastle LGA. The dwelling structure is outlined in Table 2 below. Development commenced in this urban fringe area in the 1970's with the primary developer being the NSW Government agency Landcom. Maryland has an average housing density of 9 dwellings per hectare within a suburb area of 402 hectares. The population density is 26.4 persons per hectare, around half the density of Cooks Hill. The average lot size is 600m². This suburb supports a local shopping centre and local access is highly car dependent.

TABLE 2 - Maryland	2001									
Private dwellings and Persons in occupied private dwellings	Dwellings	Persons	Occ. Rate	% of dwellings						
Separate house	2,146	6,594	3.1	90						
Semi-detached, row or terrace house, townhouse	115	242	2.1	4.8						
Flat, unit or apartment:	22	34	1.5	0.9						
Unoccupied private dwellings (vacant)	98	n.a.	0	4.1						
Total	2,384	6,878	2.9							

Table 2: data source 2001 ABS Census.

The differences in the urban structure of these Newcastle suburbs, as briefly described, have significant ramifications for many sustainability issues as noted in the *Sustainable Cities 2025* discussion paper.

A significant impact can be seen in the area of sustainable transport and nodal complementarity, and this is clear from Tables 3 and 4 below. Cooks Hill (Table 3) is well serviced by public transport (buses and a reasonable walking distance to trains) and this reflects in the level of car ownership by households. Twenty one percent of all households in this suburb do not own a motor vehicle. This contrasts significantly with Maryland (Table 4) where only 3.3% of households do not own a motor vehicle. Private buses provide a low level of public transport in this western area and there is no convenient access to train services. The rate and usage of motor vehicles in this suburb is considerably higher that the Cooks Hill example.

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Table 3 – Cooks Hill				
Number of households with:	1981	% of hshlds	2001	% of hshlds
No motor vehicles	280	32	262	21.1
1 motor vehicle	383	44	531	42.7
2 motor vehicles	119	14	263	21.1
3 or more motor vehicles	44	5	54	4.3
TOTAL HOUSEHOLDS	878		1,241	

Table 3: source 1981 and 2001 ABS Census

Table 4 - Maryland				
Number of households with:	1981	% of hshlds	2001	% of hshids
No motor vehicles	14	3.1	76	3.3
1 motor vehicle	221	48.5	852	37.2
2 motor vehicles	191	41.9	985	43
3 or more motor vehicles	25	5.5	292	12.7
TOTAL HOUSEHOLDS	456		2,384	

Table 4: source 1981 and 2001 ABS Census

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A recently completed research project auspiced by Newcastle City Council and the University of Newcastle, the *Newcastle Air Emissions Inventory* has provided a breakdown on air pollution sources in the Newcastle LGA. This study has recently found that motor vehicle emissions are significantly contributing to regional air pollution with nitrogen oxides and carbon monoxides produced from a range from combustion processes. The majority of the nitrogen oxide emissions (over 50%) and carbon monoxide emissions (nearly 80%) are attributed to motor vehicles. Further examples of Council's work in this area can be found at: <u>www.newcastle.nsw.gov.au/services/environment/airquality</u>

The number of motor vehicles in the Newcastle LGA has increased by 50% from 1971 to 2001, particularly with the development of outer suburbs such as Maryland. Spatial mapping of 2001 Census data within the Newcastle LGA clearly shows the rise in the percentage of households with multiple car ownership the further a household is from a public transport route. Further information and discussion regarding public transport can be found in the attached documentation (Submissions to the Ministerial Inquiry into Public Passenger Transport and the Ministerial Review of Bus Services.)

The Maryland example is a suburban scenario common across Australia, not just Newcastle. The experience in the Newcastle LGA indicates that the First Home Owners Grant Scheme has supported the building of new housing predominantly on the urban fringe, with consequent social impacts. The concentration of residential populations at the urban fringe creates community isolation, increased car dependency and the growth of residential populations without basic support services, facilities or transport.

This form of fringe development also results in significant impacts on the environment, as the ability of new development to meet the principles of Environmental Sustainable Development (ESD) is limited. The provision of new housing at the urban fringe results in the loss of land as a productive resource, significant clearing of vegetation, undermining of native species and habitat and change to natural topography and hydrological cycles. The finished product

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consists of a three to four bedroom house with significant amounts of hard paved surfaces that generate increases in water runoff, limited landscaping that provides any shade and soil structure support, and requires artificial air-conditioning to provide a reasonable level of occupant amenity.

There is much about the suburb of Maryland however, that captures what has been considered 'essential to the Australian lifestyle', as it has been built over the past few decades. There is a high demand from families wanting to live in this type of suburb. Maryland is highly car dependent with high levels of multiple vehicle ownership, has relatively low housing and population densities per hectare, and a high proportion of separate houses on larger size lots.

The local Maryland shops are within walking distance of only a small number of residents in the suburb. The tendency has been for the development of larger regional shopping centres that cater for 10 or more suburbs, at the expense local 'corner' shops in each suburb. Without a commercial centre (regardless of its size), many suburbs lack a community focal point, places for young people to gather and socialize locally, a diversity in commercial operators and outlets that provide low rent premises for start up businesses. Local work opportunities are often subsequently poor. Regional shopping centre rents are high and this encourages only franchised high-turnover businesses to establish in an area.

Yet a sustainable community is one that provides a high quality of life within the capacity of the environment. As can be seen by these local examples, suburbs developed at lower densities and without adequate public transport infrastructure are having a long term significant impact both on the local natural environment and ultimately, social and economic impacts for the residents.

The local legacy of these types of suburbs will remain and impact not only locally, but also contribute to significantly and ongoing negative outcomes for the sustainability of Australian cities on a number of intersecting scales.

WHAT IS NEWCASTLE DOING ABOUT BEING A SUSTAINABLE CITY?

Newcastle City Council has accepted responsibility for local sustainability as demonstrated by Council's commitment to Local Agenda 21. This can be seen by the work undertaken by Newcastle Council over the past decade

- Hosting the acclaimed international 'Pathways to Sustainability' conference in July 1997. This conference showcase the role of local governments in developing sustainable communities.
- Fostering commitments to youth, social planning and economic development.
- Hosting Australia's first Energy Town meeting in July 2000.

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- Participating in the Summit on Sustainable Development (Johannesburg, 2002).
- Developing a Strategic Directions Statement to map important future pathways as perceived by the Newcastle community.
- The Newcastle Urban Strategy (NUS) Council's primary strategic document
- Further support for the NUS is provided by the Newcastle Environmental Plan (NEMP2), the Social Plan and the Economic Development Strategy.

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- Development of the Greenhouse Action in Newcastle (GAIN) Plan which links into the Cities for Climate Protection Program.
- Production of the Climate Cam which measures Newcastle's greenhouse gas generation and won the United Nations Association of Australia World Environment Day Awards 2002 (Local Government Category, Best Specific Environmental Initiative Award).
- Creation of a multidisciplinary City Strategy Group to drive policy and programs from an ESD perspective.
- Development of the Newcastle 'Indicators of a Sustainable Community' project.
- Development of partnerships which are contributing to an integrated approach to problem solving using sustainability as a key principle.
- Instigating a quadruple bottom line approach throughout the organisation.

This commitment has led to the development of a number of initiatives that facilitate micro organic changes across a number of issues. These initiatives are outlined in the context of the visionary objectives outlined in *Sustainable Cities 2025* discussion paper and where possible, an example of the work (policy document, brochure/flyer or website) are included.

1. Preserve bushland, significant heritage and urban green zones.

The primary strategic documents for Newcastle Council in this area are the Newcastle Environmental Management Plan 2003 (Stage 2) and the Green Spaces Strategy 2000.

The Newcastle Environmental Management Plan (NEMP 2) uses a "systems approach" to identify environmental issues and priorities across 11 environmental themes. A systems framework looks at issues and their management within the context of relationships between people, their built environment and their natural environment. Such a systems approach stresses the connections between issues, rather than looking at each issue in isolation. The themes covered in this plan are:

- Air
- Energy and greenhouse
- Biodiversity
- Land use
- Council
- Transport
- Coast
- Waste
- Estuary
- water

NEMP 2 provides a brief overview of each theme outlining issues of concern. The overlaps or links in natural, social, economic and organisational systems are highlighted and key actions or critical steps to address the links are explored. Therefore, NEMP 2 attempts to manage the natural, human, social and economic systems to deliver critical environmental outcomes. A summary paper is attached. The full document will soon be available on <u>www.newcastle.nsw.gov.au</u>.

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The Green Spaces Strategy 2000 aims to provide a "big picture" framework for the management of open space across the city. It acknowledges that this land may be owned and managed by a range of different agents and suggests a range of mechanisms that can be used to develop consistent and sustainable approaches to land management. By taking this direction, we will improve the conservation of our natural resources and biodiversity, increase the connectivity of our open space system and achieve our urban design objectives.

These documents will work along side the *Newcastle Urban Strategy* (NUS) as a key approach to achieving the NUS goals. The *Green Spaces Strategy 2000* can be viewed at <u>www.newcastle.nsw.gov.au/council/plans</u>

2. Ensure equitable access to and efficient use of energy, including renewable energy sources.

Significant progress has been made in this area through the actions of AMEIF (Australian Municipal Energy Improvement Facility) a business unit of Newcastle Council. An outline of a variety of their projects is available at <u>www.newcastle.gov.au/services/environment/ameif</u>.

Projects currently include

- Community Refit Project
- Cleaner Production
- Green Energy Project
- Alternative Fuels Project.

The Greenhouse Action in Newcastle (GAIN) Plan is a direct outcome of Council's 1995 Newcastle Environmental Management Plan (NEMP). It sets out clear actions to reduce the city's greenhouse gas emissions and resource consumption. The full document can be viewed on Council's website at www.newcastle.nsw.gov.au/council/plans/action/gain

3. Establish an integrated sustainable water and stormwater management system addressing capture, consumption, treatment and re-use opportunities.

Newcastle Council has developed an 'Urban Water Package' which undertakes a whole of systems approach to urban water management. This package provides a vision, strategic direction and principles as well as clear guidance for the sustainable management of flood risk and stormwater in Newcastle. The Newcastle Urban Water Cycle Policy identifies the relationship between rainfall, potable water supply, stormwater, flooding, environmental flows and wastewater in environment. viewed be an urban This policy can at www.newcastle.nsw.gov.au/about/sustainable/water.

Newcastle City Council, with funding obtained through the Environment Protection Authority's Stormwater Trust and Coast and Clean Seas have undertaken innovative projects throughout Newcastle with the aim of reducing the impact that the community, businesses and industry have on local waterways. The projects have various focuses including community awareness and education about stormwater and water quality issues, the installation of water treatment devices

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and providing information and services to assist businesses and communities in adopting more water friendly behaviours. Examples of these projects and their brochures are provided.

4. Manage and minimise domestic and industrial waste.

Council has a Solid Waste Management Strategy designed to guide Council's waste management operations to the end of the decade. It will enable Council to achieve the objective of halving the city's annual landfilled waste volume compared to that of 1990. Meeting this objective will be a crucial milestone in the realisation of Council's vision of "no waste to landfill by 2010".

The philosophy adopted in strategy is one of achieving a permanent waste management solution through sustainable resource management. This will be achieved by implementing and managing a set of programs designed to:

- Modify community attitudes about waste minimisation and resource recovery.
- Maximise the recovery of valuable resources from the City's waste stream, processing these materials using technology to extend their lifespan.
- Manage Council's waste management activities as a viable business unit.
- Develop and exploit environmentally sustainable opportunities for the benefit of the Newcastle and Hunter communities.
- Encourage the Hunter Region to become the leader in Australian regional waste management practice.

More information about our waste strategy management and initiatives can be found at - <u>www.newcastle.nsw.gov.au/services/environment/waste</u>

5. Develop sustainable transport networks, nodal complementarity and logistics.

There is clear recognition that within the Lower Hunter region, Newcastle is the focus of future population and employment growth, and will remain the Hunter Region's primary centre for regional economic activity, cultural facilities, entertainment venues and public transport within the region and beyond.

Providing an effective public transport service, based on the integration of land use and transport services is essential, if Newcastle is to become an efficient, equitable and well-planned City.

The urban development strategies adopted for both Newcastle and Lake Macquarie support mixed use urban centres and transit oriented development. These strategies advocate higher residential and employment densities around designated urban centres where people can find local employment. It is envisaged that these nodes will be served by high quality public transport services, with direct links to local and regional centres. The *Newcastle Urban Strategy*, which was adopted by Newcastle City Council in March 1998, outlines key

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strategies for achieving greater integration of transport and land use, based on the principles of Newcastle Urbanism.

However, a consistent theme of reports dealing with public transport in the Lower Hunter is the poor performance of the existing services. Problems have been identified with:

- remote, unresponsive and inefficient management of the systems
- route duplication coupled with a lack of routes in some areas
- uncoordinated timetabling
- non-integrated fare systems
- low levels of service including frequencies and times of running.

Newcastle Council has prepared submissions into public transport and these are available as attachments (Submission to the Ministerial Inquiry into Public Passenger Transport, June 2003 and Newcastle City Council Submission to the Ministerial Review of Bus Services, September 2003). Further work on public transport issues has been done by the Lower Hunter Councils Liasion Group and this is available from Council ('Sustainable Transport in the Lower Hunter Region' – issues paper, 2003)

Further material and information is available at: www.newcastle.gov.au/council/plans/research/publictrans intro

6. Incorporate eco-efficiency principles into new buildings and housing.

Newcastle Council developed and implemented Development Control Plan 51 (Energy Smart Homes) in 1999. This DCP only applies to residential dwellings and an objective of this DCP is to improve the quality and energy efficiency of residential dwellings. This is partially achieved by the application of the NatHERS rating system for thermal performance. DCP's 40 and 57 (both apply to the Newcastle City Centre) also incorporate eco-efficiency principles in these documents.

The application of this DCP in Newcastle has seen an increase in the number of houses built on a concrete slab, using a cut and fill method within the building lot. This has had a significant impact on environmental outcomes, particularly in the western suburbs of the Newcastle LGA, as already noted on page 4 of this submission.

The development and implementation of eco-efficiency principles and policy for commercial and industrial buildings has commenced in some local government areas within Australia. An example in Newcastle is the Fig Tree Place stormwater demonstration site for a medium density development which recycles stormwater for reuse. However, there has not yet been a consistent approach by all levels of government.

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7. Provide urban plans that accommodate lifestyle and business opportunities.

The Newcastle Urban Strategy (NUS) is Newcastle Council's primary strategic document. The NUS provides the direction for the development and management of Newcastle over the next 25 years and beyond, while being sufficiently flexible to accommodate future economic trends and the social and environmental needs and aspirations of the community. It evolved over 2 years with extensive community involvement, to develop a holistic approach to City Planning, although its main foci are land use and urban design.

The Strategy's key objective is to promote existing urban centres as mixed use places, with higher employment and housing densities than in the past, with buildings and streetscape works that celebrate local identity and respect local character.

At the core of the Newcastle Urban Strategy is:

- The Principles of Newcastle Urbanism, that establish an approach to urban design, planning and management.
- Strategy Statements, that establish Council's approach to various matters such as place management, regional planning and transport planning and management.
- Vision, Objective and Action Statements for the City Centre, District and Local neighbourhood centres, that describe their future roles and set the direction for development, to contribute incrementally to these Urban Centres becoming socially vibrant, public transport-supportive, mixed use places.

Support for the NUS is extended by other strategic documents that have a city wide strategic direction. These are the Newcastle Economic Development Strategy and the Social Plan. Further strength is given by DCP's that support mixed use areas and shop top housing.

A SHARED VISION OF SUSTAINABLE CITIES?

The notion of sustainability is generally poorly understood and difficult to define, given that people understand the concept along a wide spectrum based on their own values, education and culture. It has therefore become an increasing challenge to reach agreement on sustainability within various community and government sectors.

Therefore, the realisation of sustainability objectives needs to be supported by a range of mechanisms and processes that

build a capacity within communities to understand issues

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 define at a local level, key objectives and actions to work toward achieving sustainability objectives.

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This needs to be an iterative process. Research, science, technology and multi media have provided the tools and capacity to understand and address sustainability issues.

It has been Newcastle's experience that sustainability needs to rooted in local values, coupled with an understanding of the relationship of the City's footprint and how it intersects at a regional, national and global scale. Local communities have the greatest capacity to be engaged in debate, understand local issues within wider contexts and understand, support and participate in local actions that move toward sustainability. These opportunities need to be harnessed by local leaders and champions committed to a pathway that moves toward change.

Whilst local communities have the capacity and commitment to develop a shared vision and define local and regional values, their local government's ability to provide robust planning, decision making, monitoring and regulatory tools is limited by the scope of its vested powers and frequently uncomplimentary State and Commonwealth planning, policy and programs.

Council, together with the community, has developed a sophisticated policy suite and partnership base to address the critical issues of urban water cycle management, a fundamental aspect of sustainable cities. However, the delivery of that program is constrained by Council's capacity to adequately resource identified needs and opportunities.

Council, in partnership with a broad stakeholder group, is preparing an Estuary Management Plan for the Hunter. The Hunter Estuary contains critical ecosystems and habitats. It comprises both Ramsar wetlands and other wetlands included on the interim Register of the National Estate and protected under international treaty.

Local, State and Commonwealth Government funds are contributing to the largest national rehabilitation projects in the Estuary, on Hexham Swamp and Kooragang Island. These projects are responding to local values and recognition of significance on a national and global context. The viability of the Estuary is an integral part of a sustainable Newcastle.

Significant concern now exists over the impact of State Government Port development projects in the Estuary that have not considered local values, have not allowed an inclusive planning process, is not known to have considered options against any sustainability criteria and if realised, threatens the long term sustainability of remnant ecosystems and Australia's International Treaties (JAMBA and CAMBA). A recent report by the Healthy Rivers Commission highlighted this issue. Further work by the NSW Government (Estuary Concept Masterplan) has identified an agenda for further action.

Recent State and Commonwealth decisions to cease important funding programs, including the NSW Stormwater Trust and the Coast and Clean Sea Program have directly impacted on Newcastle. Local examples, where sustainable cities initiatives are now being constrained in Newcastle, include within the urban watercycle area and Hunter Estuary management programs.

The difficulty in providing a triparted regulatory framework within Government that is responsive to local, regional or catchment-based issues is well understood.

As such it is often the case that the critical decisions required for sustainable cities are unable to be realised.

As a large coastal council we understand, through research and science, that the population pressures and potential global warming impacts we face over the next 20 years, will increase the already significant challenge Newcastle will face in progressing toward achieving sustainability as a city and region.

Yours faithfully

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David Crofts GROUP MANAGER CITY STRATEGY

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LIST OF ATTACHMENTS

AIR QUALITY

Newcastle Airshed Management Plan – strategies, studies and plans: www.newcastle.nsw.gov.au/services/environment/airquality

BUSHLAND & GREEN ZONES

- Newcastle City Council, NEMP Summary document, 2003
- The Green Spaces strategic policy document can be viewed at:

www.newcastle.nsw.gov.au/council/plans

TRANSPORT

- Newcastle City Council, Submission to the Ministerial Inquiry into Public Passenger Transport, June 2003
- Newcastle City Council, Submission to the Ministerial Review of Bus Services, September 2003.
- More information about transport in Newcastle and the Lower Hunter is available at www.newcastle.gov.au/council/plans/research/publictrans_intro

ENERGY

- Community Refit Project, AMEIF, July 2003, flyer
- Cleaner Production, AMEIF, June 2003, flyer
- Alternative Fuels Project, AMEIF, June 2003, flyer
- Green Energy Project, AMEIF, June 2003, flyer
- GAIN Plan website www.newcastle.nsw.gov.au/council/plans/action/gain

URBAN WATER

- Newcastle City Council, 'Newcastle's Urban Water Policy', June 2003.
- Newcastle City Council, Blackbutt Neighbours Where does your stormwater go?'
- Newcastle City Council, 'Kotara Roof to Creek Project', postcards (2) and information pamphlet (August, 2003)
- Newcastle City Council, ' ... cleaning the beach', poster
- Newcastle City Council, 'The Baffle Box, Cleaning the Creek', poster
- Newcastle City Council, 'Water on the Web' Urban Water Policy package at www.newcastle.nsw.gov.au/about/sustainable/water

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'Newcastle Creeks Alive', flyer

WASTE

www.newcastle.nsw.gov.au/services/environment/waste/initiatives

URBAN PLANNING

The Newcastle Urban Strategy can be viewed at <u>www.newcastle.gov.au/council/plans/future</u>

ADDITIONAL INFORMATION HELD BY THE COMMITTEE

ATTACHMENT TO SUBMISSION NO. 147

ATTACHMENTS, APPENDICES AND PHOTOGRAPHS PROVIDED WITH SUBMISSIONS ARE HELD IN THE COMMITTEE OFFICE