



Public open space planning in Western Australia: New residential developments

Position Paper
March 2010
Revised October 2011



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Photo: M. Carter, 2007

Introduction

The purpose of this document is to identify key issues associated with the planning and management of public open space within new residential developments in Western Australia. While many of the issues raised within this paper may also apply to planning and management of public open space within established residential areas, it is recognised that provision of public open space within new developments presents immediate and more pressing concerns.

Public Open Space (POS) refers to publicly accessible land set aside for sport, recreation and community purposes and may include parklands, sporting fields, playgrounds, bushland and built areas such as civic squares, plazas or skate parks. POS within residential developments contributes to a range of community service and environmental functions. Apart from providing spaces for sport and physical activity, children's play and exploration, relaxation and social interaction, POS can enhance the visual amenity of the landscape and assist with urban water management and nature conservation. Use of POS plays a role in engendering a sense of place and community connection, influencing feelings of community safety, contributing to economic value of neighbourhoods, providing spaces for community facilities, cultural festivals and events and significantly enhancing residents' quality of life.

This position paper was developed for Parks and Leisure Australia, WA Region (PLA WA). In general, PLA WA membership consists of individuals and organisations involved in sport and recreation facility planning, community development and parks design, management and maintenance. Local government officers who perform these roles are well-represented within the membership, as are independent consultants providing facility planning and management, community development and landscape services.

Information was gathered through a series of interviews conducted with PLA WA members from July to September, a discussion workshop held in early September 2009, email correspondence from individual members, and a presentation to members in late October 2009. While there is some documented evidence to support many of the comments, most are based on individual observations and anecdotal evidence only. There were various points of views expressed by contributors and this paper represents the overall position adopted by PLA WA.

Overview of key issues

Most international standards of allocation of public open space are associated with population density and calculated per 1000 population ^[1]. However, the level of allocation varies across nations. In the United Kingdom, a standard of 6 acres (2.43 hectares) per 1000 population is now promoted. Within the United States, POS allocations in new developments vary across the country and calculation of required POS may vary from 2.5 to 4.25 hectares per 1000 population. In some US states, POS allocation is not governed by statutory requirements and may be determined by perceived resident demand and accepted (profitable) models of residential development ^[2]. In many ways Western Australia has been fortunate to have a recognised standard of provision, and now is an opportune time to question the quantum and nature of that standard.

Many decisions relating to POS planning within residential developments in Western Australia are based on an historical allocation of 10% of subdivisible land for public use. In 1955, the Stephenson-Hepburn Plan for metropolitan Perth proposed that a minimum of 10% of subdivisible land be allocated to POS for recreational purposes such as children's play areas and sports fields. This initial allocation was based on an English local authority model. In translating this model to Western Australia, Stephenson recommended allocation be set at

0.5 acre of POS per 1000 persons, not 1 acre per 1000 habitable rooms as previously recommended ^[3]. At that time, Australian house block sizes tended to be larger (approximately 0.25 acre or 1000m²) than those in England with more private open space (backyard) and Stephenson assumed there would be a lesser need for public open space.

The current accepted standard of 10% allocation of subdivisible land (refer WAPC Policy DC 2.3) is derived from recommendations found in the Stephenson-Hepburn Plan and is based on an assumption of an average of 10 dwellings per hectare (R10), with each having three occupants. As such 333 dwellings (with 1000 occupants) would require approximately 33 hectares of land which roughly equates to the stated requirements of 3.36ha per 1000 population (excluding school playing fields).

The Stephenson-Hepburn Plan and the Metropolitan Region Scheme were adopted in 1963 and POS allocations in Western Australia have remained relatively constant over the past five decades with little acknowledgement of changing social and environmental conditions^[3-5]. It is likely that the gross area of useable POS has decreased in new neighbourhoods as there appears to be little consideration of changing levels of residential density and patterns of population distribution. In addition, under Western Australian Liveable Neighbourhoods guidelines adopted over the past decade, allocation can be reduced to 8% of subdivisible land when natural areas, cultural features or urban water management facilities (open water bodies or drainage swales) are included as part of public open space^[6].

Unlike required assessments associated with environmental impact or urban water management, there is currently no explicit requirement under statutory planning frameworks to assess public open space function, design or long-term management as part of new residential development proposals. In practice, many new residential estates contain numerous small pocket parks distributed throughout each neighbourhood. While many of these parks are highly valued by residents, current emphasis on inclusion of neighbourhood spaces leaves little opportunity to develop larger multi-purpose areas suitable for sport, active recreation, relaxation and social interaction. The fragmented nature and the lack of connectivity between areas of public open space, and a corresponding lack of large areas of well-designed, multi-functional POS are emerging as major concerns for local communities. Apart from community concerns regarding limited functionality, having to distribute management and maintenance resources over a greater number of smaller parks is becoming increasingly problematic for some local governments.

General issues identified by PLA WA members relate to:

- enhancing functionality, useability and diversity of POS design;
- improving clarity of interpretation and implementation of current planning policy; and
- effective management and maintenance of public open spaces.

Further to these, more specific concerns included:

- lack of deliberative POS policy in some local government authorities and inconsistent use of terminology within existing state and local government policy documents;
- lack of involvement in planning processes by most local government leisure, recreation and park management officers; and
- associated lack of opportunity to ensure flexible, creative, adaptive, ecologically sustainable public open spaces meet current and future community needs.

As quantity of public open space provided within new areas of residential developments remains the primary focus of POS planning, issues relating to quality, useability and functionality of public open space do not receive sufficient attention. Opportunities for innovation, creativity and sustainability of urban design are being lost.

PLA WA policy positions

In response to these concerns, PLA WA puts forward the following policy positions:

1. To ensure provision of good quality public open space, POS purpose and function, design and location, management and maintenance must be considered and assessed in the early stages of local area planning. Without agreement by all stakeholders to this level of forward planning, it is likely that gaps will continue to exist between the good intentions of planners and developers in allocating and designing POS, the functional outcomes required by those responsible for POS management and maintenance, and the standard of POS expected by local communities.
2. Developing terminology definitions and allocation guidelines that are accepted and understood across different disciplines is critical to reducing confusion between planners, designers, facility managers and end-users. At present, public open space is most often defined in relation to hierarchical systems based on size, not function. Current definitions include local, neighbourhood district or regional open space and if considered, function is described as active or passive only (see background paper for more information ^[7]). PLA WA proposes that the definitions presented in Table 1 be considered. Within these definitions, POS is defined by function and includes community (COS), active (AOS) and environment (EOS) open space. (It is recognised that at the time of writing, a Department of Sport and Recreation sponsored project to develop industry accepted terminology is underway.)
3. Options for proportional allocation (representing up to 10% of subdivisible land) of community, active and environmental open space as suggested in Table 1 must be considered within future development plans. Where allocation may exceed 10% of subdivisible land, proportion of allocation based on purpose (community, active or environmental open space) would be adjusted accordingly.
4. Where housing density is increased, particularly using the proposed development frameworks supported by Directions 2031 (the spatial planning framework for Perth and Peel), the proportion of high quality POS ought to exceed the current standard of 10%. It is suggested that POS allocations of up to 50% need to be considered in areas containing high rise (R120 and above) and where regional attractions (such as foreshore or river systems) increase visitation beyond local residents.
5. Allocation of land for multi-district reserves needs to be considered as a function of both state and local government. Multi-district reserves may service communities across several local government authorities and provide opportunities for diverse recreational, sporting and nature-based activities. This is in keeping with the findings of the Crawford Report (Item 6.6) that recommends that "preference should be given to infrastructure projects that engage wide sections of the community, such as multi-sport facilities in proximity to other community infrastructure, to help with sustainability and increase social capital"^[8].
6. A mechanism to acquire large tracts of land, outside of the current Metropolitan Region Scheme, that may be suitable of multi-purpose recreational and sporting use is essential. Table 2 outlines how various levels of POS fit within current

policy and how multi-district reserves might be incorporated within current public open space hierarchies and new definitions of community, active and environmental open space proposed by PLA WA.

Table 1: Descriptions of public open space (community and active open space) and environmental open space; and options for allocation of POS as 8 or 10% of subdivisible land within new residential developments

Description	Options for allocation of POS		Function and purpose
	8% ^a	10% ^b	
Public Open Space (POS)	8% ^a	10% ^b	Publicly accessible land set aside for sport, recreation and community purposes. May include parklands, sporting fields, playgrounds, bushland/wetland and built areas such as civic squares, plazas or skate parks.
Community Open Space (COS)	4%	4%	Parkland with infrastructure such as playgrounds and open play spaces, skate parks, BBQ and picnic areas, walk paths and cycle ways, and community centres. Various levels (currently defined by size) can provide functional diversity. May adjoin active or environmental open space.
Active Open Space (AOS)	4%	6%	<p>Parkland with community infrastructure and capacity to accommodate competitive sports fields with sufficient flexibility to meet seasonal demand. Optimal location is adjacent to community or environmental open space as part of multi-purpose area with facilities for recreation and sport. Various levels defined by size:</p> <ul style="list-style-type: none"> Neighbourhood AOS: junior sport only District AOS: at least two (≥2) adult playing fields Multi-district AOS: three or more (3+) adult playing fields suitable for state sporting fixtures <p>Areas allocated to district and multi-district AOS have the capacity to accommodate required field dimensions for junior and adult fixtures, field orientation with run-off and buffer zones, plus change rooms and player amenities as required.</p>
Environmental Open Space (EOS)	2%	Not included as POS	Designated as bushland and wetland reserve, drainage swale or water catchment, road buffers, greenways and streetscapes. May be part of current Bush Forever or other reserve system and if included as part of POS, areas must be managed to enable use for public recreational purposes.

^a Based on Liveable Neighbourhoods model of POS allocation
^b Based on Stephenson-Hepburn model of POS allocation

Table 2: Description of various categories of public open space, primary responsibility for provision and management, current planning policy relating to community, active and environmental open space

Description and primary responsibility	Area	Proximity	Public Open Space (POS)		Environmental (EOS)	
			Community (COS)	Active (AOS)		
1	Local Park	≤3000m ²	150-300m	Parklands, playgrounds and other recreation-focused community facilities. Varying levels of POS provision (based on size and proximity) outlined in operational guidelines.	Standard of provision not well defined in current operational policy. Junior-size oval/s often co-located within school facilities (joint LGA & DET responsibility).	Current operational policy includes Bush Forever, drainage swales, water catchment, green corridors, streetscapes and other incidental green spaces within POS allocation. Management plan for EOS and recreational use not required.
	Neighbourhood Park	3000-5000m ²	400-600m			
	District Open Space	2.5-7ha	600m-1km			
2	Multi-district Reserve	No specific allocation, specific definition or stated mechanism for acquisition within current planning policy		Multi-purpose areas of POS, with capacity for varied recreational (COS) and sporting (AOS) functions. Allocation of AOS able to accommodate diversity of good-quality facilities suitable for junior and adult sporting fixtures.		May include or be adjacent to bushland or wetland reserves. Well suited to adopt best practice water management and sustainable design principles
	Regional Open Space	Defined and mapped within Metropolitan Region Scheme (MRS) as adopted in 1963 with various amendments since		Reserved for conservation and recreation purposes	No specific allocation for AOS within MRS	Significant contribution to urban nature conservation
	Foreshore reserves Wetlands and buffers	Appropriate community access and use defined within State Planning Policy.		Relevant state planning policies Include: SPP2 Environment and Natural Resources SPP2.2 Gnangara Groundwater Protection SPP2.6 State Coastal Planning SSP2.8 Bushland Policy for the Perth Metropolitan Region (Draft) SPP2.10 Swan-Canning River System		
<p>1. Included for approval in structure plan. Local government responsibility post development</p> <p>2. Not included in structure plan unless through voluntary negotiation. Ongoing state and local government responsibility</p>						

Strategic actions

To achieve proposed changes to the current system of public open space planning, management and maintenance, PLA WA proposes the following actions.

1. Increase understanding of public open space planning processes

To ensure personnel involved in public open space allocation, community facility management and open space maintenance understand the complexity of planning and engineering processes involved in public open space provision, it is proposed that PLA WA work with the Department of Sport and Recreation (DSR) and the Department of Planning (DoP) to co-host a series of workshops and discussion forums. These workshops and forums will be designed to:

- generate greater understanding of the perspectives and expectations of various stakeholder groups involved in all stages of POS planning, design and management;
- develop understanding of the economic implications of POS provision for all stakeholders;
- demonstrate inadequacies in current practice through case study examples;
- develop inter- and cross-sectoral dialogue and ongoing relationships; and
- enhance the capacity of local government operational staff to participate effectively in public open space planning processes.

Attendees may include:

- local government officers involved in POS planning, design and management;
- members of the Local Government Planners Association (LGPA);
- representatives from Western Australian Local Government Association (WALGA);
- urban designers, planners and consultants involved in residential development projects;
- officers from state planning authorities such as the Western Australian Planning Commission (WAPC) and Department of Planning (DoP);
- private developers and members of the Urban Development Institute of Australia (UDIA);
- members of urban design organisations such as Planning Institute of Australia (PIA) and Australian Institute of Landscape Architects (AILA); and
- associated government organisations such as the departments of Education and Training (DET), Environment and Conservation (DEC), and Health (DoH).

2. Encourage inter-sectoral POS planning and policy development

To enhance effectiveness and consistency of POS planning between state and local government authorities, it is PLA WA's position that incentives and support to develop public open space policies and planning frameworks be provided to local government. Incentives may include financial assistance or in-kind contributions such as guided policy development through access to skilled, experienced personnel. Development of local POS policy must involve needs assessment and alignment of Town Planning Schemes, biodiversity strategies, community and cultural facility planning and other relevant documents.

In addition, local government authorities must assume responsibility for inter-sectoral planning and assessment of structure plans within their own organisations. Several issues raised by PLA WA members are associated with limited understanding of planning and engineering processes (combined with a lack of involvement) by personnel responsible for community facility management and maintenance of public spaces.

Proposed development of POS would be assessed to ensure purpose, design and location meet expected functional and connectivity thresholds, as ascribed within agreed distribution plans. With attention paid to distribution of a diverse range of public open spaces across one or multiple districts, it is more likely that patterns of allocation will meet the broad needs of community members, and less likely that duplication or lack of access to particular types of POS will occur within local areas.

3. Develop effective local planning frameworks

To assist the forward planning process, it is recommended that local government authorities develop district and regional open space distribution plans that map purpose, function and design of existing public and other open spaces. Figure 1 outlines a series of questions that might be included in a potential model of planning, design and management for public open space.



Figure 1: PDM (purpose, design and management) Model for POS
(adapted from POS planning model developed by Syrinx Environmental PL)

4. Support further research

Apart from the project currently underway to develop industry accepted terminology, DSR is working to develop a research agenda that will investigate issues relating to POS provision. The Centre for Sport and Recreation Research at Curtin University of Technology is reviewing the impact of Bush Forever and water sensitive urban design on POS allocation and provision. It is expected that PLA WA members will provide significant input to both of these projects.

It is strongly recommended that all future research projects examine the costs incurred by local government authorities, developers and residents in new communities as part of public open space provision and maintenance.

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Perth, Western Australia
March 2010
Revised October 2011