POLICY NO. DC 1.5

BICYCLE PLANNING

CONTENTS

WESTERN AUSTRALIAN
PLANNING COMMISSION

BACKGROUND NOTES

1. This policy describes the planning considerations which should be taken into account in order to improve the safety and convenience of cycling.

2. One third of Western Australia's population, or approximately 500,000 people, own or use a bicycle. Of the cycling population, 55 percent (or 255,000 people) are "regular cyclists", riding at least once per week, about 192,000 trips being made each day by bicycle representing 6.2 percent of all vehicle trips. Bicycle trips have doubled in the past 10 years and as many trips are now made by bicycle as by bus and ferry combined. Significantly, surveys have shown that an additional 8 percent of car drivers or passengers would consider changing to the bicycle for travel if there were more cycling facilities.

3. The resurgence of cycling for transport and as a recreational activity over the past two decades has resulted in the preparation of a number of advisory documents related to bicycle planning. In October 1974 a committee was established to examine the needs of cyclists in Perth. Its findings were released in August 1975. In 1980 further examination of the need for provision of cyclist facilities was undertaken, culminating in a report with policy recommendations. More recently, in 1983, a study team was formed to develop a Bikeplan for the Perth Metropolitan Region, which was published in 1985.

4. State and local government agencies have been encouraged to promote cycling as a mode of transport because of:

    - recognition of the adverse environmental effects of motor vehicles, particularly the private car;
    - moves towards the development of low-energy lifestyles, initially as a response to the “energy crisis” of the mid-1970s;
    - the need to make more efficient use of transport infrastructure;
    - increasing awareness that cycling reduces congestion and the need for car parks.

5. In early 1987 Bikewest (now a unit of the Department of Transport) was established, primarily to coordinate bicycle matters between State government departments and local governments throughout the State. This policy is designed to supplement the work of Bikewest, and statements such as Bike Ahead (1996) and the Perth Bicycle Network Plan (1996) by setting out the role of planning authorities in providing for cyclists.

6. It is recognised that the safety and attractiveness of cycling can be affected by decisions at all levels of the planning process. At its meeting of 27 June 1987, the State Planning Commission made the following commitments to bicycle planning:

    - to consider the needs of cyclists in all strategic and statutory planning activities in cooperation with Bikewest;
    - to ensure the needs of cyclists are accommodated in planning briefs and in the development of parks and reserves;
    - to encourage provision of end-of-trip facilities for cyclists (such as bicycle parking and shower facilities) in all new buildings at employment centres;

- to plan for bicycle routes and paths in new subdivisions and ensure developers provide these facilities; and
- to encourage the provision of bicycle routes along riverfront areas of Perth, in line with Government policy.

The Commission reconsidered and updated the policy in July 1998.

7. This policy should be read in conjunction with the following:

Policy No. DC 1.4 - Functional Road Classification for Planning

Policy No. DC 2.2 - Residential Subdivision

Policy No. DC 2.6 - Residential Road Planning.

1. INTRODUCTION

1.1 The aim of bicycle planning is to provide for the safe and convenient movement of cyclists. It seeks to increase mobility for people without access to a car, and to encourage a transfer of journeys from private cars to bicycles.

1.2 This document sets out policy objectives and measures to achieve greater consideration of cyclists' needs and to promote an understanding of cyclists' requirements by planning consultants, developers, and State and local government. The bicycle planning principles contained in this policy should be observed by those with responsibility for planning and designing our cities and suburbs. However, it is acknowledged that additional imposts on the subdivider may have a detrimental effect on housing affordability, consequently the need for, and payment towards, facilities for cyclists should be assessed in this context.

1.3 Considerable variation exists in the levels of knowledge, competence and skills between various groups of cyclists, ranging from the competent, experienced commuter cyclist to the inexperienced (novice) recreational or child cyclist. Consequently there is a need to provide a range of facilities to cater for the diverse needs of these different groups. Generally, experienced and competent cyclists prefer to use the existing road network, while young, inexperienced and recreational cyclists will choose segregated facilities if available, or streets with little motor vehicle traffic.

1.4 Present bicycle planning practice is toward the integration of cyclists onto the road network by eliminating hazards and problems often encountered in on-road cycling. This practice is based on the growing awareness that segregated dual-use paths are rarely either cost-effective or even successful in substantially reducing bicycle/motor vehicle accidents. However there is still a need to provide segregated facilities for young and inexperienced cyclists, near schools and other community facilities.

1.5 As about 75-80 percent of bicycle trips are for transport purposes (i.e. destination oriented), developers will be encouraged to provide safe and convenient cycling facilities within a new subdivision or development. There will be instances where other agencies such as State and local governments will be responsible for the sharing of costs associated with connection of the facility to the existing bicycle route network.

1.6 Detailed engineering design standards for on-road and off-road bicycle facilities should be in accordance with the AUSTROADS Guide to Traffic Engineering Practice Pt 14, Bicycles, 1993.

2. POLICY OBJECTIVES

- ❏ To make cycling safer and more convenient through the provision of end-of-trip facilities and by the provision of better cycle route networks.
- ❏ To ensure that the needs of cyclists, are recognised and provided for by planning and road construction authorities.
- ❏ To encourage more work, school and shopping trips to be made by bicycle through the provision of more (and better) cycling facilities.
- ❏ To increase the general awareness of the benefits of cycling.
- ❏ To ensure adequate consideration is given to the provision of cycling facilities in planning studies and in the implementation of statutory planning controls.

3. POLICY MEASURES

3.1 Bicycles and the Road Network

3.1.1 In view of cycling being a predominantly on-road activity, road planning authorities should give adequate consideration to cyclists' needs and ensure that cycling is safely integrated with other road users. Consideration and implementation of the AUSTROADS bicycle facility engineering guidelines by road planning and construction authorities will assist in providing safer on-road conditions for cyclists.

3.1.2 A cycling network should be developed for urban areas by:

- improving the existing road network and new subdivisional roads to meet the needs of cyclists more effectively. (Consideration needs to be given to road pavements and traffic lane widths,

surface conditions, on-road parking, intersection layout, localised "squeeze points", and reduced operating speeds);

- providing off-road facilities of adequate standard where there is a strong demand (such as near schools) and where the opportunity exists;
- providing information to enable cyclists to make the most effective use of the network;
- ensuring that the needs of cyclists are adequately catered for in the planning, design and construction of extensions to the existing road network.

3.2 Cycling Facilities in New Subdivisions

3.2.1 Account should be taken of the Residential Road Planning Policy (DC 2.6) to ensure that most roads within the residential cell or precinct are safe for cyclists and pedestrians.

3.2.2 In the planning of a new subdivision, two fundamental issues relevant to cycling need to be considered:

- the provision of safe cycle routes to and through the subdivision (i.e. accessibility to facilities outside the subdivision such as regional recreation centres, suburban shopping centres, public transport stations, employment centres); and
- provision of safe cycling conditions within the new subdivision itself (i.e. local area bicycle movements to schools, shops, local parks and other community facilities).

3.2.3 Cyclists should be encouraged to use routes other than busy distributor roads by the adequate provision of suitable alternative routes which are both direct and continuous as they pass from one residential cell to another. As district and local distributors will often be used by adult and secondary school age cyclists regardless of the provision of dual-use paths, they should be designed to accommodate cyclists.

3.2.4 The following matters should be taken into account in subdivision design:

- Where regional or local bike plans have been prepared, the proposals of the bike plans should be incorporated into the design.
- Within a new subdivision (particularly in residential areas) the emphasis should be on on-road facilities linked by segregated paths where necessary to ensure continuity of the cycle route system.
- Segregated dual-use paths or cyclepaths may be required along one side of district distributor roads, providing access to bus stops, grade separated crossings, or regional community facilities. Use could be made of the carriageway of subdivisional roads which run parallel with the district distributor.
- Segregated dual-use paths or cyclepaths may be required along one side of those local distributor roads without frontage access, where strong demand exists such as near schools and shops where inexperienced/novice cyclists may be expected. These paths should form part of an overall cycle route network.
- Subdivision design should provide for bicycle access along river and coastal foreshores, and across artificial obstacles such as major roads, and other transport facilities.
- Dual-use paths or cyclepaths (utilising well-designed public access ways or other reservations) between culs-de-sac heads, and between long sections of parallel roads, provide an important element of the network.

3.2.5 A cycle route network plan for a residential precinct should be based on the principles set out in Figure 1, which depicts the ideal provision of on-road and off-road facilities in a new subdivision.

3.3 Bicycles in Local Area Traffic Management Schemes

Local governments undertaking local area traffic management schemes should give consideration to cycling and ensure any devices installed enhance cycling access and safety, and have no detrimental impact on cycling opportunities.

3.4 Bicycle Parking and End-of-Trip Facilities

The provision of appropriate bicycle facilities through the imposition of development conditions dealing with such matters as the

type, number and location of bicycle parking facilities, and the installation of showers and change rooms is supported for locations such as:

- shopping centres
- factories
- offices
- educational establishments
- sport, leisure and entertainment centres
- health centres and hospitals
- libraries and other public buildings
- rail and bus stations
- major places of employment
- parks
- beaches and recreation venues
- tourist attractions.

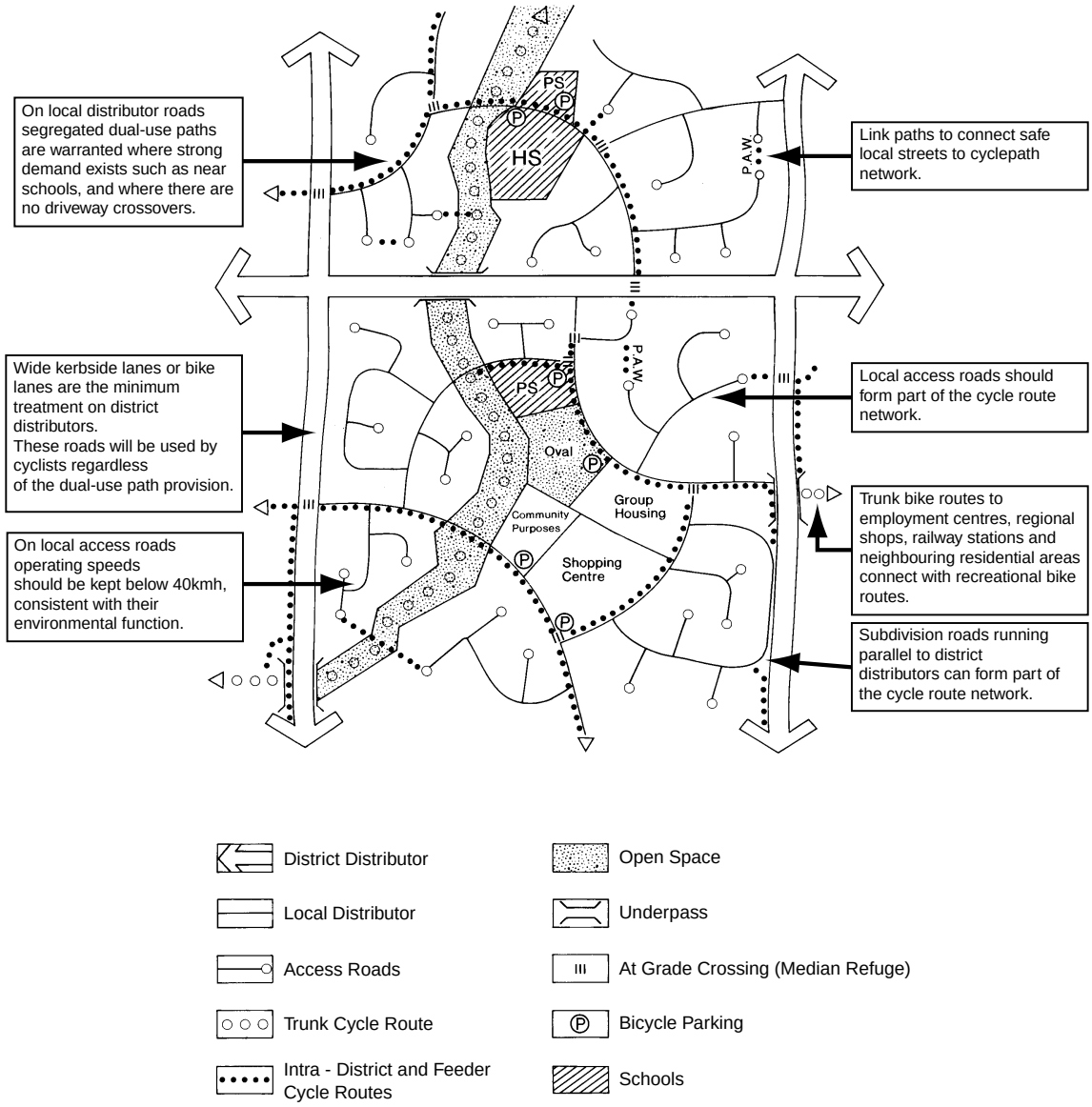

Figure 1. Bicycle Planning and Subdivisions Design Principles

3.5 Dual-Mode Transport

Transperth/Westrail and other appropriate agencies will be encouraged to facilitate dual-mode transport (or the use of bicycles to feed public transport systems) and develop improved cycling facilities at (and to) railway, bus stations, in particular by:

- installation of secure bicycle parking facilities at rail, bus stations (lockers and hitching rails);
- improvements in access to stations, including railway crossings, with better links to the local cycle route network and residential areas;
- acceptance by authorities to the carriage of bicycles on public transport;
- modifications to railway carriages and buses to enable bicycles to be carried.

3.6 Consideration of Cycling in Planning Studies

3.6.1 Cycling should be included as a consideration in structure plans for future growth areas.

3.6.2 Planning authorities can further the provision of safe and convenient cycling facilities by:

- the inclusion of cycling as a matter to be considered in the brief for a study;
- reporting on how measures to encourage and provide for (safer) cycling can be implemented in a subdivision design;
- examination of the impact of a proposed development upon any existing or proposed cycling route;
- incorporation of significant proposals and recommendations of a bike plan into a local area or regional planning study;
- discussion of the role of cycling as an integral component of a tourism development.