seasonal field sports based on the standard requirements indicated by each sport.

It will be seen from this table that the total standard space requirements for winter field sports are barely 60% of those of summer field sports. Analysis of existing facilities, however, shows that other factors need to be taken into acount. Most winter sports have inadequate facilities to meet current needs, despite the fact that the double use of grounds is greater in the winter than in the summer. The reason for this is that many areas used for cricket are not suitable for winter sport because of size, unsuitable surface and lack of dressing facilities. In addition, the areas used for cricket are in many instances far more intensively used. An examination of several areas has shown that many cricket pitches are not sited with sufficient distance between them to provide the standard playing area required and there is considerable overlapping of playing fields. An example of this can be seen in a portion of Princes Park, where within an area of 56 acres there are 25 cricket pitches, two dressing pavilions, four tennis courts with a pavilion, and a children's playground. The whole area is enclosed by a double row of trees. To provide for these same facilities, allowing for the standard areas required, a total area of approximately 100 acres would be needed.

As such conditions are typical of those in most of the large inner parks, it can be assumed that while the land requirements of summer field sports are much greater than those of winter sports, they are in fact at present using much smaller areas than the standards required for such sport. Furthermore, it is easier to overlap playing fields for cricket than it is with most winter games except baseball. Apart from additional space requirements, facilities at many of the existing reserves and parks could be improved considerably. Many playing surfaces are too rough for field games, and the dressing accommodation and sanitary facilities, particularly for winter sports, in many cases are inadequate.

Another factor referred to by many sporting associations is the lack of enclosed grounds for other than cricket and football. The only enclosed facilities available to most other branches of sport are the two ovals of Olympic Park, which are shared by many sports and used both on Saturdays and Sundays. It would seem that at least two additional centrally located enclosed grounds are needed to provide for field sports other than cricket and football. It has been suggested that if two or three sports such as baseball, hockey and soccer were each to play one game during the afternoon on an enclosed ground it would create such added interest as to attract sufficient spectators and revenue to maintain the ground.

Relationship of Playing Fields to Existing Open Space

Before estimating total gross area required for playing fields, it is necessary to examine the degree to which existing parks and reserves used as playing fields have been developed for that purpose. Table 78 shows the relationship between

the areas used for summer and winter field sports, and the total gross areas of the parks and reserves that are at present actually being used for such field sports.

The gross area figures include only those reserves and parks used for playing fields, but in some instances these include areas used for other forms of recreation such as bowling greens, croquet greens, tennis courts and children's playgrounds, where such activities are intermingled in park areas used for summer and winter field games. The net areas are obtained by multiplying the actual number of playing fields used for each sport by the standard space requirements, including an allowance for dressing accommodation. In the case of enclosed spectator grounds the actual areas enclosed have been used.

Although these figures are not exact in relation to the actual areas being used, they are sufficient to indicate the general degree of development in different areas. It will be seen that the parks and reserves used for playing fields in the older inner areas are generally more intensively used for that purpose than those in the outer suburbs.

To obtain a true comparison between gross and net areas, allowance must be made for those areas not available for use as playing fields. This is caused by several factors, such as the irregular shape and size of some parks, the location of many reserves alongside the banks of rivers and streams, unsuitable surface and the use of portion of the gross area for other purposes, such as roads or paths and tennis courts or bowling greens, as well as for passive recreational uses.

In some areas it may not be possible to use more than 50% of the gross area for playing fields. This is illustrated

Table 77
SUMMARY OF EXISTING NEEDS OF SEASONAL
FIELD SPORTS

| Sport | Standard Area | Existing Facilities | Deficiency | Total Requ | irements |
|--|------------------|------------------------|------------|------------|----------|
| 0.00 € 1.000 M × 1.000 M | (Acres) | (Grounds) | | (Grounds) | (Acres) |
| Summer | | | | | |
| Cricket | 3.5 | 710 | 100 | 810 | 2,835.0 |
| Athletics | 4.5 | 3 | 4 | 7 | 31.5 |
| Cycling | 4.5 | 7 | 4 | 11 | 49.5 |
| Hockey | 2.5 | 5 | 5 | 10 | 25.0 |
| Tota | l | | | | |
| summer field sports | | 725 | 113 | 838 | 2,941.0 |
| Winter | | | | | |
| Football | 3.5 | 300 | 40 | 340 | 1,190.0 |
| Rugby | 3.5 | 13 | 3 | 16 | 56.0 |
| Hockey | 2.5 | 57 | 5 | 62 | 155.0 |
| Lacrosse | 3.5 | 21 | _ | 21 | 73.5 |
| Soccer | 3.5 | 7 | 7 | 14 | 49.0 |
| Baseball | 3.5 | 46 | 6 | 52 | 182.0 |
| Total | | | | | |
| winter field sports | | 444 | 61 | 505 | 1.705.5 |

in some of the large reserves adjoining creeks where, although the existing reserves may be fairly fully developed, the actual area available for playing fields is barely half the total area. On the other hand, in the more intensely developed inner areas nearly 75% of the areas are being used as playing fields. In providing for future requirements for field sports it is reasonable to assume, therefore, that at least an additional one-third must be added to the net requirements to allow for unsuitable land and land use for other purposes.

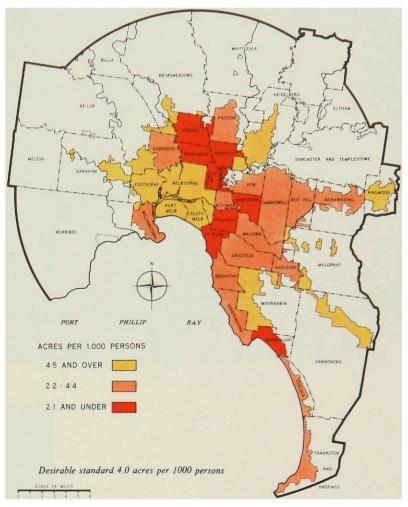
Standards

In fixing an overall standard for estimating the future gross area required for all field sports, excluding golf and racing, the total area required for summer field sports can be taken as being sufficient to provide for the winter field sports. The net area considered necessary to meet current needs for the summer seasonal field sports is 2,941 acres, or 2.2 acres per 1,000 persons. If an additional allowance of one-third is added for unsuitable land and land used for other purposes, the gross figure is increased to three acres for each 1,000 population. This figure should be adequate to provide for all field sports, excluding tennis, golf and racing.

It has already been shown that most tennis courts are located on private land used either for clubs courts, private hire courts or courts attached to private houses. An increasing proportion of future courts will need to be provided on public land if adequate facilities are to be maintained for the large proportion of the population who want to play tennis. As the courts outside public reserves at present comprise some 750 acres or 0.6 acres for each 1,000 of population, it is reasonable to make allowance for an additional one acre for each 1,000 people to ensure adequate provision for this sport in the future. This would increase the gross standard figure for all outdoor field sports, excluding golf and racing, to four acres for each 1,000 persons.

Adequacy of Existing Open Space for Playing Fields for Present Needs

Map 50 shows the adequacy of playing field space in each municipality in relation to the abovementioned standards.



50 OPEN SPACE AVAILABLE FOR PLAYING FIELDS

Table 79 compares the existing gross area used for playing fields, excluding tennis, golf and racing, with the area required according to the standard.

It would seem, therefore, that if the present total gross area was fully developed it would provide adequate facilities for most field sports for the existing population. The surplus area is largely accounted for by undeveloped land in the western and eastern districts.

Table 78

INTENSITY OF DEVELOPMENT OF EXISTING OPEN SPACE USED FOR PLAYING FIELDS

| | Gross Area of Reserves (Acres) | Net Area of Playing Fields (Acres) | | | | Acres per | |
|----------|--------------------------------------|------------------------------------|--------------------|--------|--------------------|-----------------------------|-----|
| District | | Summer | % of Gross Area | Winter | % of Gross Area | 1,000 population Gross Net | |
| Central | 933 | 683 | 73 | 383 | 41 | 3.6 | 2.6 |
| Western | 486 | 277 | 57 | 183 | 38 | 4.5 | 2.6 |
| Northern | 720 | 463 | 64 | 281 | 39 | 2.5 | 1.6 |
| Eastern | 1,099 | 555 | 50 | 342 | 31 | 4.2 | 2.1 |
| Southern | 1,282 | 564 | 44 | 406 | 32 | 2.8 | 1.2 |
| Total | 4,520 | 2,542 | 56 | 1,595 | 35 | 3.3 | 1.9 |