



CSIR GUIDELINES FOR THE PROVISION OF SOCIAL FACILITIES IN SOUTH AFRICAN SETTLEMENTS

First Edition: August 2012



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Foreword



This guideline document seeks to provide a quantitative and rational framework for the provision of key social facilities for various levels of settlements to support the planning process and provide support to the social facility investment plans.

Improving service delivery to all people in South Africa is a key priority of government. The provision of physical infrastructure to deliver services to the community is a critical but not sufficient first step in the service delivery chain. The infrastructure must be provided spatially in a manner that is rationally based on where people live and where they can best access such services. Although government is moving towards providing more services through the internet and other electronic means, many social services still require a physical customer interface, particularly in the rural parts of the country.

Quality living environments are internally well provisioned or have access within a reasonable distance to all the government services needed to lead a productive life. We need schools, health services, police stations, recreational spaces, etc., in our immediate environment. Citizens also critically need access (at a somewhat further distance) to an office of the Department of Home Affairs and government services such as the South African Social Security Agency (SASSA) and municipal services to transact their lives. Due to the manner in which communities are distributed over the landscape, not all services can be provided viably at all locations. However, a measure of access to essential services is required and this document published by CSIR Built Environment provides guidelines of what facilities should typically be provided depending on the size of a settlement.

Current development patterns show unequal development of areas and a bias of provision of certain types of facilities. The pattern sometimes follows historical settlement patterns or income trends; other patterns show little rationality, while in some others past and present political doctrines and/or political paradigms have influenced the pattern of social facility provision.

This guideline document seeks to provide a quantitative and rational framework for the provision of key social facilities for various levels of settlements to support the planning process and provide support to the social facility investment plans.

While robust in nature, the guidelines are a living document which should be updated regularly based on changing policy goals, changes in delivery strategies, improved access and the constant change linked to the spatial realities of South Africa. As the country achieves economic growth, it will be easier to achieve greater access to services. Local assessment and the current use of facilities or community preference will influence the demand for facilities and warrant local adaptation of the guidelines and the manner of their application.

The CSIR trusts that this document will empower local and facility provision planners, providing a handy guideline for the planning and prioritising of social facility investment across towns, cities and provinces.

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Executive Director:
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August 2012

Prologue

Various policies, including the Constitution and Public Services Regulations, place an obligation on departments to improve access to services, to develop access standards for their services and remove barriers that impact on access.

The Department for Public Service and Administration (DPSA) published a document, "GUIDELINE Improving Geographic Access to Government Service Points" in 2011. That document outlines a four-step process for improving access to service points; the first step indicates how departments should go about developing geographic access standards for facilities.

This CSIR publication contributes to this process and provides a summary of all access and threshold standards that have been tested and/or discussed with stakeholders over a number of years. This document also provides a platform for line departments to further test and examine these proposed access distances and facility threshold ranges.

The CSIR publication is firstly a guide to which facilities can be expected to be provided in settlements of different sizes. The provision largely relates to meeting basic needs within a framework of the operational viability/cost efficiency of each facility type and indicates where mobile or periodic services would be a more appropriate level of service. Secondly, the guideline is a compendium of knowledge regarding appropriate access distances to facilities, as well as the number of people who are typically required to be living within this access distance to support the facility in question.

These guidelines are intended as a planning tool and should be used to set priorities within available financial resources. They cannot be considered legally binding on municipalities, provinces or national departments. However, attainment of these guidelines relating to

the location and distribution of facilities will ensure greater and more equitable access to services at a national and provincial level. To achieve equity within settlements requires a greater level of planning than represented here.

The information presented is based on several studies funded by the CSIR and two local authorities (eThekweni and Cape Town), together with provincial and national level studies. CSIR researchers have interacted with a wide range of stakeholders in developing facility provision guidelines and have also undertaken empirical testing of most of the standards documented here.

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*CSIR Built Environment project leader:
Guidelines for the provisioning of social
facilities to a range of settlement types*



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Introduction



Previous research undertaken on standards by the CSIR has been updated, revised and customised to provide a foundation for the development of specific threshold and access standards tailored for application to a range of settlement types. This process has included a review of: South African and international standards and guidelines; the facility standards developed for eThekweni during the accessibility modelling project; the KwaZulu-Natal Provincial Standards reports; and related research undertaken for the City of Cape Town.

The standards have been adjusted from time to time, as required, through a review of current practice, new empirical evidence, discussions held with national stakeholders (most recently through a DPSA-funded project on an accessibility analysis of government facilities) as well as the latest published provision standards by national government departments.

Definition of a settlement

A settlement in this regard refers to a distinct human community in its physical, socio-economic and environmental totality which requires the provisioning of services such as engineering and social services. Settlements can be ordered by size and other factors to define a settlement hierarchy, ranging from city regions to hamlets or dispersed rural settlements.

Role of planning standards and guidelines

Facility location planning standards, access guidelines and threshold norms are an essential element of strategic forward planning and are used to allocate and reserve land for particular uses and facilities and develop capital budget plans within a planning area. This is particularly true of community-type facilities – including those provided by the public sector and those provided for by private developers.

These guidelines are provided to assist in the planning of social facilities but are not legally prescriptive or binding.

In respect to planning over the long term, access standards, threshold guidelines and site sizes are increasingly important in ensuring that sufficient land has been reserved for essential facilities in terms of future growth and development without being wasteful and/or encouraging the illegal use of underdeveloped land. Besides aiding planners, standards – by providing predefined spatial norms – ideally facilitate a more equitable provision of services and facilities to diverse communities.

However, standards and guidelines should always be adapted to the local contextual conditions of each city, district, suburb and neighbourhood.

Report Structure



The report contains the following:

- SECTION 1: The **classification of settlements** for the purpose of setting varying norms for the delivery of social facilities;
- SECTION 2: **Information on using the guidelines**, and on the **context and approach** followed during their development;
- SECTION 3: A **recommended process** for managing social facility provision, including information on how and when deviation from the standards can be undertaken;
- SECTION 4: A **summarised set of access norms and threshold standards for the provision of social facilities to a range of settlement types**. The standards are based on the spatial distribution and provision requirements of social facilities at different scales and in varying contexts. (Standards are provided mainly in terms of demand thresholds and distance access/service level targets, and provide a framework for negotiating and determining appropriate facility provision and size within a range of contexts.);
- SECTION 5: More **detail on each individual facility** (with some reference to suitable site sizes) is provided where available, as well as any additional relevant information. The main focus remains on suitable access distance and facility sizes.

(More information on the general process followed in drawing up these guidelines can be found in the report "Summary Guidelines and Standards for the Planning of Social Facilities and Recreational Spaces in Metropolitan Areas" which can be found at: www.csir.co.za/Built_environment/docs/Guidelines_facilities_oct.pdf);

- SECTION 6: Main **references** and related material.

1

The Classification of Settlements for the Purpose of Setting Varying Standards for the Delivery of Social Services



Sustainable human settlements cannot be achieved without adequate social facilities that are differentiated according to varying development densities, community size, mobility levels and socio-economic variation. Social facility guidelines will allow metropolitan, district, provincial and national governments to improve investment decisions about the number, size, type, location and space requirements of social facilities based on technical information rather than political advocacy. Thus, a refined set of social facility guidelines has been developed that will support all tiers of government in providing facility networks of libraries, clinics, community halls, parks, sports fields, fire stations as well as other social facilities. These clear guidelines will, if implemented, facilitate the development of integrated housing settlements that are well provided for with respect to social facilities. This publication provides support to planners and other officials in regard to facility provision needs, relative to housing developments and general urban growth.

A classification of settlements was drawn up to act as the basis from which a set of social facility provision guidelines could be determined for each settlement type/size. The most suitable set of social facilities to meet the needs of residents (both constitutionally and in humanitarian terms) was then established in terms of those social facilities that can be viably provided at each type of settlement, while economic and administrative factors, although important, played a subsidiary role in the classification. The final categories (see Table 1) are defined based on the modification of previous typologies (including the 2002 CSIR typology, the Cities Network 2005, the Classification of Settlement Typology for Economic Evaluation, the Census classification of settlements/Municipal Services Finance model), intuitive knowledge of cities and towns, and taking into account issues such as facility provision thresholds of various facility types as well as operational and administrative requirements for government service provision.

Unfortunately, the introduction of wall-to-wall municipalities has rendered the task of providing examples of towns and villages that represent the different settlement types extremely complex. It is likely that the publication and classification of all towns based on this classification can only be finalised once the boundaries of towns as opposed to municipal boundaries have been clarified. The examples given here are broadly indicative of the settlement types represented by each category and will need to be reviewed once the town boundary determination is completed. At that time a more detailed list of examples will be published on the CSIR website.



Table 1: Classification of settlement types and catchment sizes

	HIERARCHY OF SETTLEMENTS	CATCHMENT SIZE (NO. OF PEOPLE)	EXAMPLES OF SETTLEMENT TYPES
A	Metropolitan cities/regions	> 1 000 000	Johannesburg, eThekweni, Cape Town
B	Large cities/small metros	350 000 - 1 000 000	Port Elizabeth, Bloemfontein, Pietermaritzburg, Welkom
C	Large towns/regional service centres	100 000 - 350 000	Nelspruit, Witbank, Krugersdorp, Newcastle, George, Stellenbosch
D	Small to medium towns/regional service centres	60 000 - 100 000	Ermelo, Harrismith, Mossel Bay, Bethlehem, Bronkhorspruit, Grahamstown
E	Small towns/isolated regional service centres	25 000 - 60 000	Mount Fletcher, Delareyville, Beaufort West, Graaff-Reinet, Kokstad
F	Dense dispersed settlements (Large continuous development with 10+ persons per hectare and up to 10 km ² in extent)	10 000 - 100 000	Ingwavuma, Jozini, Acornhoek
G	Villages	5 000 - 25 000	Merweville, Stella
H	Remote villages (Villages more than 20 km from larger settlements)	500 - 5 000	Prieska, Pofadder, Loxton, Keiskammahoek

NB: Villages with less than 500 inhabitants have not been formally considered as they are a separate category and would be provided mostly with mobile services on a needs basis.

2 Information on Using the Guidelines and on the Context and Approach Followed During Their Development



2.1 Facility provision norms for a range of settlement types

Facility provision standards relating to the access distance and population serving provision threshold of facilities to be provided are the starting point for the development of well-served, sustainable and integrated communities. The quality and capacity of facilities, in offering the right range of services for a specific community profile and operated by competent staff, together with good maintenance of the facilities, remain critical to the effective delivery of services, but are not included in this publication.

As much as planning should not revert to prescriptive “blue-print” planning, it is nevertheless true that without normative and quantifiable standards it becomes difficult to measure and compare levels of provision and then determine current and future facility needs impartially. The classification of settlement types presented here is a first step in the process of assigning social facility provision to settlement types based on equitable and measurable parameters and should be used as a guiding mechanism in terms of the provision levels of specified social facilities rather than strict provision requirements. For funding and

allocation/implementation of social facilities, a process of needs analysis and budgetary investigation would also have to be undertaken on a case-by-case basis before final facility construction.

Generally, normative facility provision guidelines should ideally serve three purposes, namely to:

- 1) Determine the threshold of facilities and in certain cases land requirement for facilities;
- 2) Serve as a departure point for negotiations with respect to facility provision and capital budgeting for Integrated Development Plans (IDPs) and provincial and local planning processes; and,
- 3) Provide a basis for developing a spatial distribution network for a facility type across a region or province – but without this being the final determinant of the scale and detail location of a facility which would require more local input.

These guidelines can be used as:

- A strategic guide for facilities planning at a town level. Distribution within cities or large towns at a neighbourhood, district and metropolitan scale requires more

detailed local planning or GIS facility location analysis;

- A working tool for forward planning with respect to a set of access standards that is informed by regular review and updating;
- A yardstick for comparing towns and districts with respect to facility equity and for measuring progress on service delivery;
- A starting premise for negotiation with developers and various local, provincial and government departments about land allocation and budgets;
- A set of commonly acceptable rules for allocation of resources within the community/district;
- A guideline for facility types that can be clustered or shared to achieve space saving and other accrued benefits; and,
- An input parameter/target for measuring the accessibility of people to a range of facilities.

What guidelines (these as well as others) should not be used as:

- Recipes for detailed planning of a district without consideration of local needs, the context and applicable policies;



- Exact standards to be applied irrespective of context or proper planning processes and consultation; nor,
- A blue-print for development.

In summary, the guidelines are applicable with respect to four planning components:

- **Forward planning** – providing an equitable basis for allocation of resources for distributing various types of facilities and public spaces;
- **Land use management** – standards provide guidance on the type of facilities required and their population threshold provision/capacity/size. (By using the information provided, backlogs as well as the number of facilities typically required can be determined based on the total population and the current supply of facilities).
- **Plan implementation** – providing a yardstick to measure sufficiency of facilities on a broad scale, for under- and over-provision; and,
- **Improving quality of life** – ensuring that a full range of facilities and open spaces are accessible to

all communities, thus contributing significantly to improving the quality of life in communities.

2.2 Hierarchy of town types to serve as social facility delivery centres

A key focus for government in its service delivery strategy is the notion of intergovernmental service delivery, which includes the sharing of service delivery points by a multitude of government departments at key nodes within cities, regions and provinces.

Why do we need a hierarchy of provision?

To provide an effective distribution network for a range of social services it is essential that facilities be clustered at central locations. Most facilities by their very nature have a range of sizes and thus population threshold levels (the size of the population for which they are provided). For most of the facility types, the threshold size increases with the level of specialisation provided by the facility, as not all issues need to be dealt with by specialists. Thus, a system of referral from lower-order facilities to the higher-order facilities may be used and accordingly incremental increases in the size of

the facilities occurs along with longer acceptable access distances.

In addition, facilities frequently visited by many community members would be provided at a lower population threshold than those used more infrequently. Thus, those facilities used almost daily should ideally be sited in close proximity to their users to reduce the average travel time and cost to access these local facilities. By implication, there are higher costs associated with visiting higher-order, more distant facilities, albeit infrequently.

The hierarchical nature of social service delivery thus ideally relates to a hierarchy of social facility delivery centres (different settlement types or level of nodal developments within a settlement, see Section 3.4). This facilitates and promotes clustering in line with government policy to create service delivery precincts or zones (see Section 3.3).

It should also be accepted that, notwithstanding a right to basic services, not all citizens (especially those living in remote areas) are able to enjoy the same levels of access to all services. The economies of scale and inefficiencies of providing remote

services need to be acknowledged and special measures applied in these cases, i.e. the use of periodic and mobile service provision to meet basic needs.

Establishing a hierarchy assists in allocating facilities of various types to their most appropriate locations based on the facility threshold and the appropriate number of people required within the distance catchment of that facility. By implication, government services which have a similar level of importance and alignment in provision, i.e. the departments of Home Affairs, Social Development and of Justice and Constitutional Development are likely to have, or should have, similar standards relating to access distances and thresholds and should consequently be located at the same level within a town/settlement hierarchy. These facilities should mostly form the nuclei of Thusong Centres as envisaged by government's integrated service delivery concept.

A hierarchy streamlines location decisions regarding provision and facilitates alignment across different government sectors and service providers. Likewise, municipal facilities with large thresholds such as stadiums require many more people within their catchment than, for example, a community hall, to operate viably. Large towns will thus be able to afford

and support a larger range of facilities as well as those of a higher-order. Not all towns can support or afford to maintain all higher-order facilities.

2.3 Dealing with exceptions: Cases where smaller settlements may be provided with higher-order facilities than warranted by their population numbers

Some of the towns or smaller settlement types may need to be provided with higher-order facilities than their population threshold demand initially entitles them to. These facilities will of necessity be smaller in scale than those provided in larger settlements, albeit with the same range of services. This is warranted where smaller settlements play an important role as a service provider to other settlements in their hinterland, in addition to serving those in their own immediate vicinity.

A settlement may "bat above itself in the order" (as described) if:

- It is a district or local municipality capital and/or it plays a major role in regional service delivery in the area;
- It is an isolated community of some significance (e.g. 5 000 people who are more than 150 km from the nearest town);
- There is a historical provision of service, i.e. a cluster of schools or a

university town which thus requires a greater level of service than the permanent population may require; or,

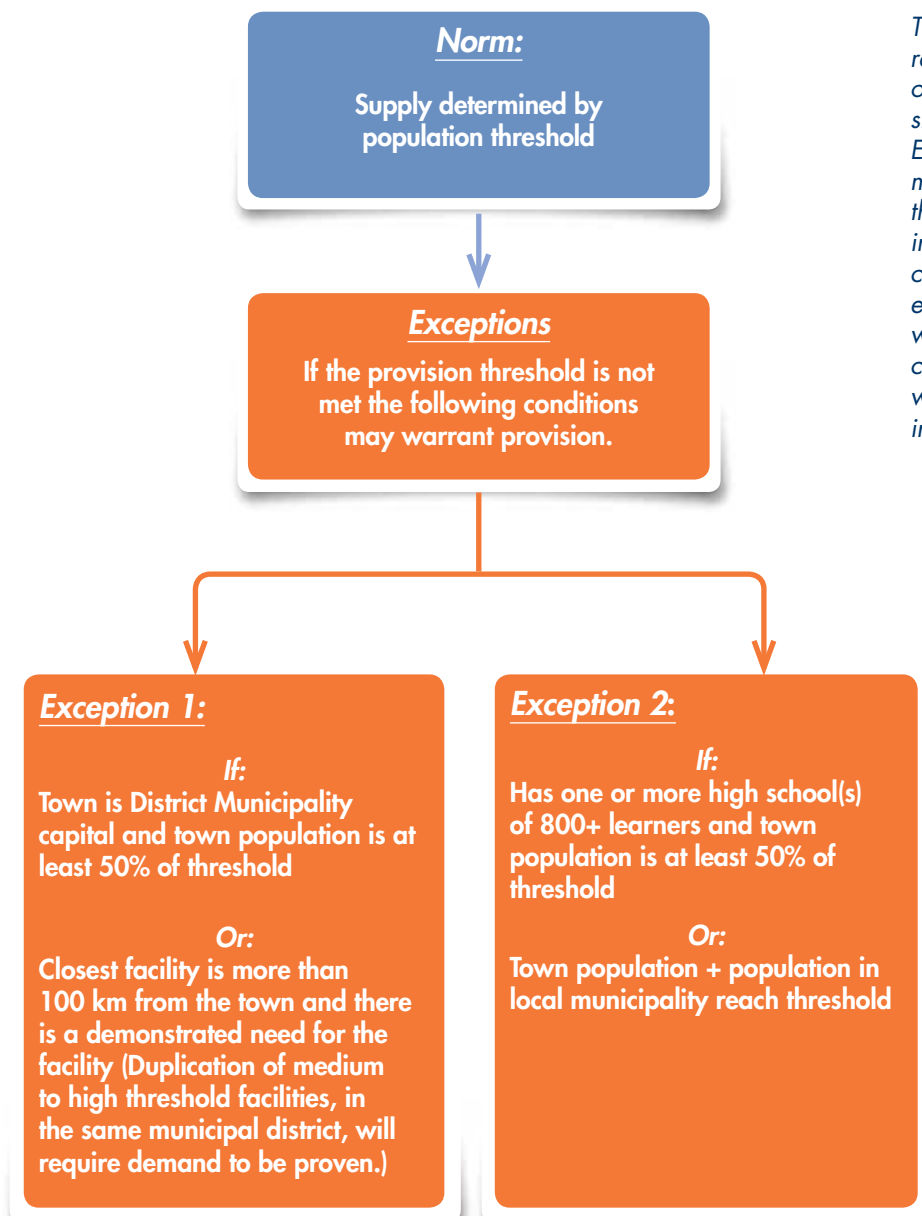
- Its population profiles are different from the norm and thus require a greater/different level of service.

Facility planning of most government services should largely cater to the permanent population and should focus strongly on providing local services to those with limited mobility. Affluent communities have the means to travel to higher-order facilities or access private facilities. In towns with a large retired community the local demand needs to be adjusted for the type of facilities required, i.e. fewer schools and more emphasis on leisure and health. In terms of differing population profiles, some towns attract many retired people, while others are niche towns of craft people and artists or may be coastal towns with fluctuating populations – all of which require adjustments to facility provision.

Table 2 provides an example of how these exceptions may be applied in terms of the provision for sports facilities.



Table 2: Example of rules that can be put in place for managing exceptions in small and medium provincial towns – sport focus



3 A Recommended Process for Managing Social Facility Provision



3.1 Introduction to the process of managing social facility provision

Irrespective of the overarching facility norms applied to allocate scarce land and capital resources or eradicate/measure facility backlogs, when undertaking the detailed planning of neighbourhoods, planners need to also consult other sources which supply the necessary context in which social facilities should be provided as well as information on facility design. Such documents include the "Guidelines for Human Settlement Planning and Design" also referred to as 'The Red Book' (available online at www.csir.co.za/Built_environment/RedBook/) or the applicable line department documents that take into consideration local population demand profiles and other contextual factors that impact on the quality, location and scale of facilities. It is key to firstly audit (count, locate and record capacity) the current provision of facilities and evaluate current usage and then compare this to the provision standards before taking any decisions to increase or reduce the supply of social facilities.

To facilitate the application of the normative standards as set out in this publication, a tool called the SPACE PLANNER can also be used. It calculates the total requirements of facilities and provides information on the land requirements for the facility types – for the purpose of land and capital budgeting of facilities. The tool, although specifically designed for new extensions/developments in a city, can also be applied usefully to a *de facto* development or town to calculate the optimum number of facilities for such an area. More information on using the SPACE PLANNER has been included at the end of this section.

The SPACE PLANNER is a useful, free web-based tool developed by the CSIR for use by experienced town/facility planners. The tool can be used to determine which social facilities are required in a settlement, particularly in the case of new developments where a multitude of social facilities of various types must be planned for at one time. Some basic instructions are given in the following section on how to use the SPACE PLANNER in managing the provision of social facilities in terms of population thresholds. (Core sets of facility guidelines are available within the SPACE PLANNER to use as a starting point for inputting your own standards).

The sets of social facilities to be provided for each of the settlement types are given in Section 4. The threshold and access guidelines given for each facility type are shown as typical values (with some sets of upper and lower limits where applicable) and encompass:

- The average threshold at which a facility would be provided (number of people who would be served by that type of facility);
- The acceptable travel distance (in km) to access that facility; and,
- The provision criteria for providing that facility (i.e. compulsory, discretionary, recommended, not recommended) to a particular settlement.



In most cases, the facility type's population thresholds are given in terms of the number of people who should reach a facility within a defined distance. Thus the entire area within reach of the facility is defined as its catchment area and the population as its target market area (service area polygon). As the guideline definition by implication defines a spatial extent and a population threshold; the guidelines thus automatically account for variations in density (total population divided by area). In areas with higher than average densities, bigger facilities must be built if the spacing (access distance) is to stay the same or the facility size can remain constant and shorter access distances can be achieved.

In cases of parks and sports facilities, the provision guideline is given in terms of land area per 1 000 population, thus again accounting for density rather than using a park demand based on a percentage of the total area which does not account for density. In deciding how to distribute the land allocations (ha per population size) amongst the different sporting codes and park types, it is extremely important to first determine community participation rates for

each sport and preferences for park usage. Some threshold values are provided for guidance purpose only. The land will also need to be clustered or distributed within a settlement based on the principles of equitable distribution or access. (The table in Section 5: Sports and Recreation illustrates how the total land for sports – at a standard of 0.56 ha per 1 000 population – could be divided among different sports facilities for a community of 60 000 people.)

3.2 Threshold and density illustrations

There is a direct link between the density of the residential development and the potential to ensure facilities are provided as close as possible to residents, and in some cases to even achieve walking access. Higher densities also imply that larger facilities are required as long as the maximum size for the facility type is not exceeded. Larger facilities often mean higher-order, more specialist services are provided or that a better level of service can be delivered. The following graph and table of varying thresholds and densities illustrate the interrelationship between the area being served (by means of access

distances) with the other aspects of the provision, namely threshold and population density levels.

Within the given provision guidelines for each facility, the graph and table can be used to determine a likely facility threshold (that relates to size), relative to a selected population density and travel distance. For example, at a density of 18 persons per hectare and an access distance to the facility of 2 km, the likely threshold population would be 30 000 persons. If a 3 km access distance is acceptable and the density remains constant, a population threshold of approximately 60 000 persons could be achieved.

The graph and table cannot be applied to the education sector (including preschools), where a limit is placed on the number of learners accommodated at any one school and where learners should preferably reside within the catchment area of the school they attend.

Figure 1: Facility threshold size and distance parameters for differing density contexts for application to clinics, police stations, libraries, swimming pools and sports stadiums

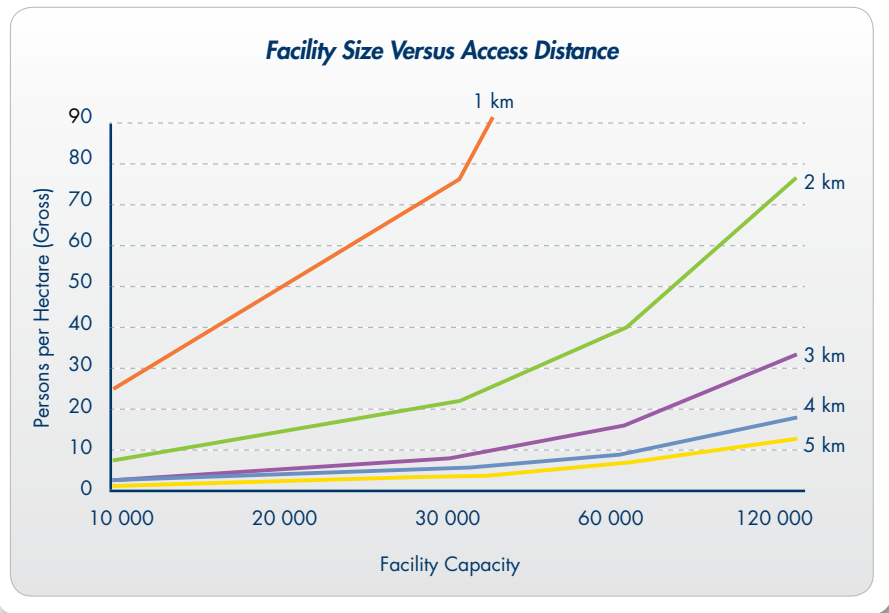


Table 3: Approximate travel distance (straight routes) and density in relation to facility threshold size

GROSS DENSITY	POPULATION DENSITY (PPHA @ 3.5 PPHH)*	TRAVEL DISTANCE / CATCHMENT RADIUS				
		500 M	1 KM	2 KM	3 KM	4 KM
DENSITY		TYPICAL FACILITY THRESHOLD VALUES VIABLE				
5	18		8 000	30 000	60 000	120 000
10	35		15 000	60 000	120 000	
15	53		20 000	90 000		
25	88	8 000	35 000	120 000		
40	140	15 000	60 000			
50	175	18 000	70 000			
75	263	25 000	100 000			
100	350	35 000	120 000+			

*Person Per Hectare at 3.5 Persons Per Household

3.3 Facility clustering and multi-use of buildings

National government promotes the sharing and clustering of facilities, through Thusong Centres. Similarly the sharing of halls, sports fields and other facilities by different stakeholders should be encouraged where possible in all towns and villages.

The clustering of facilities creates opportunities for facility multi-use, sharing, etc. and should result in land savings and trip reductions. Also important is the contribution that this type of investment can make to creating islands of development and structure for city/town building. The successful sharing between departments/multi-use of buildings is largely dependent on excellence in design and management and also requires cooperation and joint financial planning between the departments that form part of the multi-purpose centre/cluster and may therefore share buildings. If this is achieved within all towns, particularly within the higher-order towns where a larger range of facilities are being provided, it can contribute positively to service delivery and to financial sustainability. Tables listing the local facility types that can be successfully clustered together and the multiple uses of social facilities are given at the end of the publication (Appendices A and B). Thusong centres should ideally comprise services for the departments of Home Affairs, and of Labour and Social Development (including SASSA), as a minimum requirement, but have the potential to incorporate a range of other national and local services.

It is stressed that in providing for a set of social facilities, good design – together with the sharing and multi-use of facilities – can lead to space saving for almost all facility types. However, land budgets/site sizes in this publication are all provided for single-use buildings only, since there are limited examples which can be used to illustrate optimal site sizes of good multi-use buildings. Please consult www.cmda.org.za for examples of some multi-use facilities that form part of the Cato Manor Development Project.

Table 4: Suggested clustering of social facilities

CENTRAL FACILITIES AT CORE NODES/IN CBD		LOCAL/ NEIGHBOURHOOD FACILITIES
FACILITIES TO BE SITUATED WITHIN A CORE ZONE NOT FURTHER THAN 1 KM FROM EACH OTHER	FACILITIES SITUATED NEAR TO CORE ZONE	LOCAL PROVISION AT NEIGHBOURHOOD NODES
Home Affairs Offices	Community Halls	Community Halls
SASSA Offices	Primary Health Clinics	Social grant pay points
Labour Offices	Sports complexes	Children's Homes
Municipal Offices	Libraries	Homes for the Aged
Magistrate's Courts	Police Stations	Sports fields
National Youth Development Centres	Post Offices	Parks
		Schools

(Irrespective of thresholds, some measure of the above social services (i.e. a periodic mobile service at minimum) needs to be provided in all towns where there is no alternative supply that can be reached by residents within 40 km or in the case of the Northern Cape – 100 km)

3.4 Setting up a nodal hierarchy to assist in clustering

To provide an effective distribution network for a range of social services it is essential that facilities be clustered at central locations as indicated earlier. Due to their nature facilities have a range of threshold values that increases with their level of specialisation. The hierarchical nature of social service delivery can thus ideally relate to a hierarchy of social facility delivery centres.

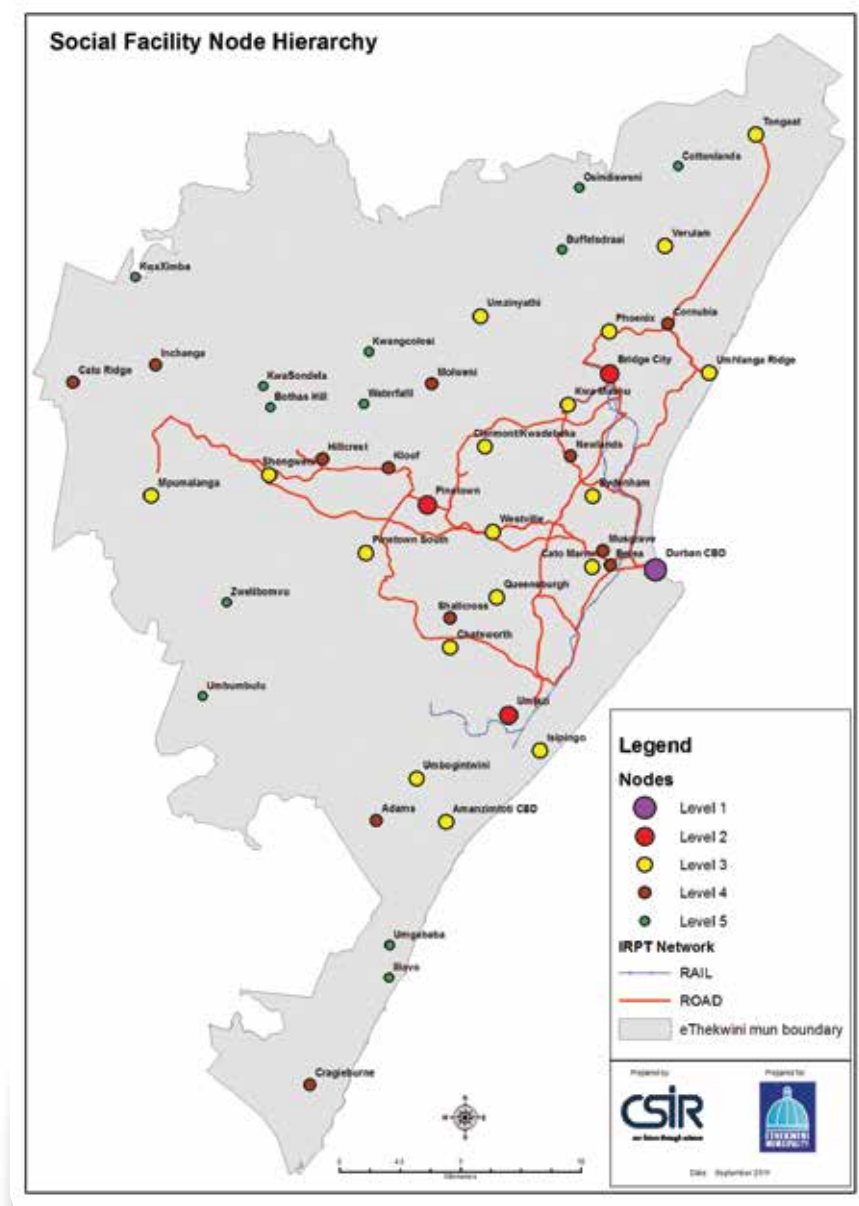
Establishing a hierarchy assists in allocating facilities of various types to their most appropriate locations, based on the facility threshold and the appropriate number of people required within the catchment of that facility.

While clustering creates opportunities for facility multi-use, sharing and land savings, cooperation and joint financial planning between the departments enables development of multi-purpose clusters and sharing of buildings. If this is achieved within nodes (and particularly within the higher-order nodes where a larger range of facilities are provided) it can contribute positively to service delivery, city structure and financial sustainability.

To inform the geographic location of facilities into identified urban nodes that will contribute significantly to the urban form, a selection of nodes were analysed for eThekweni Municipality (based on the Spatial Development Framework nodes). In this way a hierarchy was established based on the number of people within the catchment of each node, as well as the travel-reach of the nodes. Figure 2 shows the resultant hierarchy of social facility nodes that should be used to guide the location of new facilities in eThekweni; both for reducing backlogs and for serving new areas of metropolitan residential growth.

Figure 2: Social facility node hierarchy for eThekwi Municipality

Establishing a hierarchy assists in allocating facilities of various types to their most appropriate locations, based on the facility threshold and the appropriate number of people required within the catchment of that facility.



3.5 How to integrate the guidelines into the planning process

An example of how the guidelines can be used in the need identification/planning of social facilities for different types of settlements is provided here in the form of a stepwise process. This example is not the only way in which the standards may be applied. However, this planning process takes into consideration extremely important factors such as community needs and contextual factors without which the provision of social facilities may prove inadequate or otherwise imprudent.

Irrespective of the standards or apparent backlogs in the provision of social facilities, facilities that are not essential (i.e. those that are not indicated as compulsory in the guidelines and do not provide services that are guaranteed rights, e.g. Home Affairs) should be provided only in cases where the community has expressed its support for these facilities and where there is adequate operational funding and other support structures to ensure their viability in the long term. For example, a community's expressed desire for a swimming pool may not be practical if the area suffers from frequent water shortages. The process shown may be used in planning for the provision of one facility or a multitude of facility types.

Figure 3: Stepwise process for using the guidelines to identify the supply of social facilities for different settlement types

Steps

- 1** ESTABLISH THE SETTLEMENT TYPE
 Determine the population of the settlement (population catchment within 15 or 25 km of the settlement centre) and thus establish the basic population demand which determines what social facilities should be provided for that settlement. Agree on the settlement type related to population and settlement role (see Table 1).
- 2** IDENTIFY WHICH SOCIAL FACILITIES SHOULD BE PROVIDED
 Consult guidelines for facilities to be provided for the particular settlement type; the provision criteria for facilities have been categorised as: Compulsory; Recommended; Discretionary in the schedule. The SPACE PLANNER can be used within this process to assist in determining the global demand for social facilities or for new extensions to a settlement.
- 3** AUDIT OF CURRENT FACILITIES
 Undertake an audit/review of the inventory of current facilities. Locate and record facility locations on a spreadsheet or GIS format. Record name, address, ownership, capacity (basic size or potential use throughput of population per year).
 Note should be taken of both the condition and service capacity of the current facilities as well as how they are currently being used.
- 4** DEMOGRAPHIC PROFILE OF POPULATION
 Establish the profile of the population (e.g. age bands, income levels, employment rates) to determine the need for facilities where demographic profile impacts provision, i.e. schools. Use StatsSA or the CSIR GAP profile data for this purpose.
- 5** EVALUATE NEED AGAINST CURRENT PROVISION LEVELS TO DETERMINE ANY BACKLOGS
 Compare present levels of provision of facilities in the settlement (data from audit in Step 3) with that proposed in the guidelines (Step 2) to establish any variance. Determine whether new or upgraded facilities are required. Calculate the backlog (if any) in provision in relation to facility demand. Do this by calculating the difference in supply versus the suggested demand, i.e. from guidelines, based on the population numbers. Check access criteria such as availability of public transport to reach facilities as well as distances to such facilities.
- 6** COMMUNITY CONSULTATION/INTERACTION TO DETERMINE ITS DESIRE FOR A PARTICULAR FACILITY
 Most facilities (excluding compulsory government services) should be provided only if the community has expressed the desire for such a facility or if there is a 'business case' for the facility (e.g. in terms of IDP projects, government intervention programmes).
 Special cases: Some settlements may become special cases such that they require facilities of a higher-order than those given in the guidelines. For example, if the settlement acts as the local or district municipality capital, if it provides services to a large rural hinterland, or if there are other special circumstances (see Section 2.3). In these cases the provision must be adjusted such that higher-order facilities are provided.
- 7** (OPTIONAL) ASCERTAIN NEED FOR NON-COMPULSORY FACILITIES
 a – Review DEMOGRAPHIC PROFILE OF POPULATION
 Establish whether the profile of the population indicates the need for any non-compulsory facilities;
 b – COMMUNITY INTERACTION TO DETERMINE ITS DESIRE FOR A PARTICULAR FACILITY
 Consult with the community regarding any non-compulsory facility that can be provided and establish if the facility can be built, operated and maintained in the future. Such facilities should be provided only if the community has expressed the desire for such a facility and funding can be secured or a 'business case' for the facility can be established (e.g. community arts programmes, museums).
- 8** IDENTIFY FUNDING FOR NEW FACILITIES OR THEIR UPGRADING AND IDENTIFY FUTURE INCOME STREAMS FOR OPERATIONAL AND MAINTENANCE COSTS ASSOCIATED WITH THE FACILITIES
- 9** SECURE FUNDING AND BUY-IN BY ENSURING THE PROJECT IS ON THE BUDGET/LIST OF IDP PROJECTS
- 10** IDENTIFY LAND AND START PROCUREMENT PROCESSES

3.6 Using the SPACE PLANNER

The CSIR has developed the SPACE PLANNER, a free, web-based tool for calculating the social facility demand and associated land use requirements for a given development. It takes into consideration factors such as land availability, housing densities and family sizes. It can be used to calculate requirements for new developments or used post-development to determine the variance of the de facto supply to the facility supply standards. It should be used only as an indication of possible land requirements to be supported by other specific planning activities.

To make use of this free tool, logon to <http://spaceplanner.csir.co.za> and create your own login name and password.

Caution:

Before implementing any results based on the SPACE PLANNER please ensure that you have read and understood the online disclaimers and this publication. Also, make full use of the online assistance [Help] to input the correct variables and data to achieve the most reliable output.

Purpose

The SPACE PLANNER tool is intended to be used to calculate:

- A social facility demand for a city, suburb or designated development area. This is calculated in terms of population numbers, density and land area for those facilities that are included in a named and designated standards table entered/selected;
- The land required to house a set number of people at a given density and the associated land requirement for social facilities;
- The number of people/dwellings (and their associated social needs) that can be accommodated in a predetermined land area, given assumptions regarding family size and development density; and,
- The developer's contribution with respect to the land area equivalent of social facilities – if policies regarding this are in place.

Further data and model changes to the SPACE PLANNER are needed before a rough estimate of the land required for commercial and employment purposes can be calculated.

Calculation types

Three basic calculation approaches can be used.

Type 1: For a residential-only area with a given land area, density and family size – calculate what additional land will be necessary to create a fully serviced settlement. This refers only to land for social facilities and excludes land for commercial and employment generation.

Type 2: In the case of land being available that must accommodate both housing and associated facilities, one can calculate the area needed for housing and that for social facilities. You may test the impact of a range of densities and facility standards on the social facility land requirement.

Type 3: For a predetermined target population calculate the land requirement for both housing and social facilities.

The results are highly dependent on the social facility standards applied. The onus rests with the user to verify with the relevant local authority that the standards with respect to population thresholds, capacity and land use requirement are valid and up to date.

To promote ongoing research on the most used or appropriate standards, the CSIR will be able to view the standards you use, but these will not be published or linked to individual projects. This will contribute to the national research effort regarding standardisation of social facility provision. It is the researchers' hypothesis that differentiation across varying development contexts is required for certain facility types while for others 'one size may fit all'.

The SPACE PLANNER is not a spatial tool in that it does not evaluate the location of these facilities in relation to the density of, or travel distance to, their target population. To evaluate the relationship between facility location, size, target market and travel distance, a more sophisticated approach is required. For more details on this follow the link www.csir.co.za/Built_environment/Planning_support_systems/docs/poster55_lowres.pdf.



Using the **SPACE PLANNER**

to establish the global demand for social facilities in a town (or for new extensions to a town)

Use the SPACE PLANNER to calculate the demand for facilities of a set size/capacity (the total number of facilities required) for the settlement. Use this (the maximum number of facilities required) as a control total for the overall demand.



Optional: Using the future population for the settlement, calculate the total number of facilities required in future.



Export the total demand for facilities to an excel spreadsheet. Add a column for all current facilities (obtained from facility audit undertaken). Compare the current supply with the total demand for facilities to establish how many and which types of new facilities are still to be planned and built. (Adjust facility sizes to suit local conditions – combine or split if required).



Keep a running log of current supply, demand and new facilities built as well as new residential development to track backlogs and to ensure communities are sufficiently provided with respect to listed facilities.



4 Social Facility Provision Guidelines for Access Norms and Thresholds for a Range of Settlement Types



Guidelines are provided mainly in terms of demand thresholds, access and service level targets (defined as travel time or distance), and provide a framework for negotiating appropriate facility sizes within a range of contexts.

Sets of access distance norms and population threshold provision values for a range of settlement types have been summarised in the guidelines that follow. The values are based on the spatial provision and development of social facilities and public open spaces at different scales, with some variation in contexts. Guidelines are provided mainly in terms of demand thresholds, access and service level targets (defined as travel time or distance), and provide a framework for negotiating appropriate facility sizes within a range of contexts. More detail on each individual social facility type is given in Section 5.

The provision criteria on the guidelines tables are indicated by the following keys:

PROVISION CRITERIA

C = Compulsory (basic essential service)

D = Discretionary (non-essential provision based on under supply/unserved need, distance or other factors including funding availability)

R = Recommended (valuable services that are unfunded or non-essential)

The guidelines for recreation provision – sports facilities and parks – are provided in terms of an overall ratio of land provision per population (ha/1 000 people) and the thresholds provided are approximate. The community should have input into how this land is developed. An example of the typical provision of sports facilities for a population of 60 000, in terms of a land budget to population ratio of 0.56 ha per 1 000 people, is given in Section 5, Public Open Space: Sports and Recreation.



A. Social Facilities required for Metropolitan Cities/Regions (Catchment size: > 1 000 000)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
HEALTH AND EMERGENCY SERVICES				
Tertiary Hospital L3	2 400 000	Variable	D	
Regional Hospital L2	1 770 000	See comment	C/D	Compulsory above 1.5 million threshold but may be required in cities with a lower threshold such as 900 000+ if access distances are greater than 200 km to a comparable facility elsewhere
District Hospital L1	300 000 - 900 000	30 km	C	Not required if residents can reach (within 30 km) any higher-order hospital that is not overburdened
Community Health Centre	100 000 - 140 000	90% of population served within 5 km*	C	*National Department of Health target
Primary Health Clinic	24 000 - 70 000	90% of population served within 5 km*	C	*National Department of Health target
Fire Station	60 000 - 100 000	8 - 23 minutes (response time)^	C	Area coverage and reach versus people/land use in the specific area will have to be evaluated; ^SABS standard
Police Station	60 000 - 100 000	8 km metro; 15 km peri-urban 24 km other	C	Central location is critical but demand factors and access of population will dictate location and size. SAPS Contact Points are used in areas not warranting a fully-fledged station but which are beyond the SAPS distance criteria of 24 km

A. Social Facilities required for Metropolitan Cities/Regions (cont)

(Catchment size: > 1 000 000)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
SOCIAL AND CULTURAL (PUBLIC SERVICE FACILITIES)				
Performing Arts Centre – major	Variable	100 km	C/D	Site or purpose specific
Community Performing Arts Centre	50 000	10 - 15 km	R	Unfunded and demand-driven
Museum – large	500 000	30 km	D	
Museum – medium/small	Variable	Variable	D	Site-specific demand
Regional Library – Reference	450 000	50 km	C	
Regional Library	200 000	15 km	C	
Local Library	20 000 - 70 000	8 km - 10 km	C	Discretionary provision if regional library is within 5 km
Mobile Library	Variable	Variable	D	Needs-based for isolated or special categories, i.e. homes for the aged or people with disabilities
CIVIC				
Major Public Event Venue	1 000 000+	60 km	C	Central location critical. Sports stadium can be used as an alternative
Home Affairs – large office	400 000	15 km preferred; 25 km maximum to at least one facility type	C	Central location important; linked to Thusong Centres. Mixture of facility sizes to meet maximum population
Home Affairs – medium office	160 000		C	
Home Affairs – small office	40 000		D	
Thusong Centre (community-based “one-stop” development centres)	1 per Local Municipality	15 km; maximum 25 km	C	Development of government precincts zones can be used as an alternative, i.e. a grouping of Home Affairs, SASSA, Labour (zone of not more than 1 km radius)
Labour Office	Variable	15 km urban; 25 km peri-urban	C	Linked to Thusong Centres
Magistrate’s Court	Variable	Undetermined at this stage	C	Minimum of 1 Regional Court per District Municipality; 1 or more District Courts per Local Municipality
Municipal Office	1 per Local Municipality	30 km	C	May be divided among administrative regions of the metro
Prison and Place of Safety	n/a	Variable	C	Regional scale provision
Solid Waste Disposal Site and Recycling Depot	n/a	Variable	C	Municipal/Sub-municipal provision
SOCIAL SERVICES				
Community Hall – large	60 000	10 km	C	
Community Hall – medium/small (fringe areas)	10 000 - 15 000	15 km	D	Where others not within reach
Children’s Home	Variable	n/a	R	Require access to schools, sports and health facilities
Home for the Aged	Variable	n/a	R	Peripheral location on public transport routes with access to shops, libraries and medical facilities

A. Social Facilities required for Metropolitan Cities/Regions (cont) (Catchment size: > 1 000 000)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
SOCIAL SERVICES (CONT)				
ICT Access Point	10 000+	5 km	C	Located within libraries, Postal Agency, Thusongs, etc.
Post Office/Agency with post boxes	10 000 - 20 000	5 km - 10 km	C	Central location critical
Post Boxes	See comment	2 km	R	Should be provided in addition to a Post Office where there is no home postal delivery
SASSA Office (Social Service Office)	Variable	15 km urban; 20 km peri-urban	C	Services should be offered from fixed points for five days a week from infrastructure such as Thusong Centres, community halls or one-stop development centres
Social Grant Pay Point	40 000	5 km	C	Multiple points within nodal area. If beneficiaries are within 5 km of banks, post offices, Thusong Centres then these services should be used instead. Mobiles may be used for special cases on a fixed day in the month
Cemetery (large)	17.2 ha/100 000 (can be distributed)	30 km	C	Assumes annual death rate of 1.6% and 90% of the dead are buried, recycling of graves (40% of graves after 10 years and 30% after 20 years)
Crematorium	200 000+	30 km	C	
EDUCATION				
University/University of Technology	1 000 000+	Variable	D	
Post-matric Skills Training (i.e. nursing teaching, etc.)	400 000	20 km	C	
ABET/Skill Training	Variable	25 km	R	Variety of institutions mostly with no sports facilities and of limited spatial extent. Centrally located
Special Education	Still to be determined	20 km	R	Range of alternate types required. Special school transport may be necessary
Secondary School	12 500	5 km	C	With or without sports facilities; new schools to use communal sports facilities if available
Primary School	7 000	5 km	C	With or without sports facilities; new schools to use communal sports facilities if available
Grade R Class at Primary School	1 000	2 km (preferred) - 5 km	C	Linked to Primary School
Small Crèche/Early Childhood Development Centre	2 400 - 3 000	2 km	C	Supports working parents so can be located close to employment centres as well as to residential areas; location close to parks is recommended
ECD Resource Hub and Care Centre	20 000	5 km	C	Located to support a number of schools; i.e. 1 hub per 6 - 10 crèches

A. Social Facilities required for Metropolitan Cities/Regions (cont)

(Catchment size: > 1 000 000)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
RECREATION PROVISION (SPORTS AND PARKS)				
Total provision for facilities below is approx 0.3 ha/1 000 people. This provision should be consolidated at the metro level to develop facility complexes. Thresholds are approximate and access distances illustrative.				
International Sports Complex	1 500 000	50 km	R	
Indoor Sports Hall (medium/large)	250 000 - 500 000	10 km - 30 km	C	Public transport access essential. Clustered with other sports facilities
Regional Sports Stadium	200 000 - 300 000	15 km	C	Public transport access essential. Clustered with other sports facilities
Sports Complex with 9 - 12 court sports hall, etc.	200 000	15 km	C	
Total provision for all facilities below is approx 0.56 ha/1 000 people. Thresholds are approximate and access distances illustrative. Facilities should be consolidated to develop facility complexes. Approximately 20% of this allocation is for regional facilities and 40% each for community and neighbourhood facilities. Where possible open space and parks should be linked to reduce maintenance costs and increase the extent of "green lungs"				
Grassed surface (2 football fields equivalent)	15 000	3 km	Compulsory provision of facilities in terms of the land per people ratio but the provision of specific types of facilities should be based on community needs and budgetary concerns	Adjust number of playing surface types to local preferences. Only required for local residents if no other higher-order facilities are provided within reach. Sharing of facilities between schools and the wider community recommended
Sports Complex (Grouping of fields and/or sports complexes)	60 000	10 km		
Grassed field (2 football fields equivalent) with 500-seat stand	30 000	5 km		
Cricket Oval	60 000	10 km		Well located in terms of road network and spatial plan of region; cluster with other sports if possible
Athletics/Cricket Stadium (grassed field and athletics track and stand – 3 000+ seats)	60 000	10 km		Public transport access essential. Clustered with other sports facilities
Combi-court surface (x2)	15 000	3 km		
Combi-court surface (x4)	60 000	10 km		
Multi-purpose Sports Hall (2 court)	100 000	10 km		Public transport access essential. Clustered with other sports facilities
Multi-purpose Sports Hall (4 court)	160 000	15 km		Public transport access essential. Clustered with other sports facilities
Swimming Pool Complex (25 m to 33 m pool)	80 000	5 km - 10 km		Public transport access essential. Clustered with other sports facilities. Discretionary provision if within 15 km of 50 m pool
Swimming Pool (50 m pool)	500 000 - 1 000 000	Variable		Public transport access essential. Clustered with other regional type facilities

A. Social Facilities required for Metropolitan Cities/Regions (cont)

(Catchment size: > 1 000 000)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
RECREATION PROVISION (SPORTS AND PARKS) (CONT)				
Total provision for all facilities below is approx 0.5 ha/1 000 (ongoing research is being conducted on the desirability of reducing this; current indications are that for users quality is more important than quantity). The land should be consolidated in developing the facilities below. Thresholds are approximate. Approximately 40% of this allocation is for strategic (regional) and district facilities and 60% for community, urban and neighbourhoods parks, play lots, etc.				
Strategic Park	500 000 - 1 000 000	50 km	C/D	Site-specific location
District Park	60 000 - 100 000	10 km	C	Recommended that hard all-weather surfaces be provided within parks for ball games, skateboarding, kick-about spaces, etc. and for ease of maintenance
Community Park with play equipment	60 000	5 km	C	
Urban Park	Variable	1 km	C	Central location in areas of high activity/employment/retail
Local/Neighbourhood Park (includes play equipment)	3 000 - 15 000	1 km	C	May be redundant if district/community park located within reach. Recommended that hard all-weather surfaces be provided within parks for ball games, skateboarding, kick-about spaces, etc. and for ease of maintenance
Play Equipment at other facilities	Variable	Variable	D	Only provided where are no parks; placed at e.g. clinics, libraries

KEY NOTES:

Most facilities should be on public transport routes/nodes unless otherwise stated

Mobile and satellite services only to be used in isolated situations where there is no alternative and access times would prove excessive otherwise

Alternative fire-fighting equipment deployment where widely spread, low-density development makes conventional services unsuitable

B: Social Facilities required for Large Cities/Small Metros (Catchment size: 350 000 - 1 000 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
HEALTH AND EMERGENCY SERVICES				
Regional Hospital L2	1 770 000 (See comment)	See comment	D	May be required in cities with a lower threshold – 900 000+ if access distances are greater than 200 km to a comparable facility elsewhere
District Hospital L1	300 000 - 900 000	30 km	C	Not required if residents can reach (within 30 km) any higher-order hospital that is not overburdened
Community Health Centre	100 000 - 140 000	90% of population served within 5 km*	C	*National Department of Health target
Primary Health Clinic	24 000 - 70 000	90% of population served within 5 km*	C	*National Department of Health target
Fire Station	60 000 - 100 000	8 - 23 minutes (response time)*	C	Area coverage and reach versus people/land use in the specific area will have to be evaluated; *SABS standard
Police Station	60 000 - 100 000	8 km metro; 15 km peri-urban 24 km other	C	Central location critical but demand factors and access of population will dictate location and size. SAPS Contact Points are used in areas not warranting a fully-fledged station but which are beyond the SAPS distance criteria of 24 km
SOCIAL AND CULTURAL (PUBLIC SERVICE FACILITIES)				
Performing Arts Centre – major	Variable	100 km	D	Site or purpose specific
Community Performing Arts Centre	50 000	10 - 15 km	R	Unfunded and demand-driven
Museum – medium/small	Variable	Variable	D	Site-specific demand
Regional Library – Reference	450 000	50 km	C	
Regional Library	200 000	15 km	C	
Local Library	20 000 - 70 000	8 km - 10 km	C	Discretionary provision if regional library is within 5 km
Mobile Library	Variable	Variable	D	Needs-based for isolated or special categories, i.e. homes for the aged or people with disabilities
CIVIC				
Major Public Event Venue	1 000 000+	60 km	C	Central location critical. Sports stadium can be used as an alternative
Home Affairs – large office	400 000	15 km to at least one facility type	C	Central location important; linked to Thusong Centres. Mixture of facility sizes to meet maximum population
Home Affairs – medium office	160 000		C	
Home Affairs – small office	40 000		D	
Thusong Centre (community-based “one-stop” development centres)	1 per Local Municipality	15 km; maximum 25 km	C	Development of government precincts/zones can be used as an alternative, i.e. a grouping of Home Affairs, SASSA, Labour (zone of not more than 1 km radius)

B: Social Facilities required for Large Cities/Small Metros (cont)

(Catchment size: 350 000 - 1 000 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
CIVIC (CONT)				
Labour Office	Variable	15 km urban; 25 km peri-urban	C	Linked to Thusong Centres
Magistrate's Court	Variable	Undetermined at this stage	C	Minimum of 1 Regional Court per District Municipality; 1 or more District Courts per Local Municipality
Municipal Office	1 per Local Municipality	30 km	C	May be divided among administrative regions of the metro
Prison and Place of Safety	n/a	Variable	C	Regional scale provision
Solid Waste Disposal Site and Recycling Depot	n/a	Variable	C	Municipal/Sub-municipal provision
SOCIAL SERVICES				
Community Hall – large	60 000	10 km	C	
Community Hall – medium/small (fringe areas)	10 000 - 15 000	15 km	D	
Children's Home	Variable	n/a	R	Require access to schools, sports and health facilities
Home for the Aged	Variable	n/a	R	Peripheral location on public transport routes with access to shops, libraries and medical facilities
ICT Access Point	10 000+	5 km	C	Located within Libraries, Postal Agency, Thusongs, etc.
Post Office/Agency with post boxes	10 000 - 20 000	5 km - 10 km	C	Central location critical
Post Boxes	See comment	2 km	R	Should be provided in addition to a Post Office where there is no home postal delivery
SASSA Office (Social Service Office)	Variable	15 km urban; 20 km peri-urban	C	Services should be offered from fixed points for five days per week from infrastructure such as Thusong Centres, community halls or one-stop development centres while mobile offices serve generally rural areas/outlying pockets in city as special cases
Social Grant Pay Point	40 000	5 km	C	Multiple points within nodal area. If beneficiaries within 5 km of banks, Post Offices, Thusong Centres then these services should be used instead. Mobiles may be used for special cases on a fixed day in the month
Cemetery (large)	17.2 ha/100 000 (can be distributed)	30 km	C	Assumes annual death rate of 1.6% and 90% of the dead are buried, recycling of graves (40% of graves after 10 years and 30% after 20 years)
Crematorium	200 000+	30 km	C	

B: Social Facilities required for Large Cities/Small Metros (cont)

(Catchment size: 350 000 - 1 000 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
EDUCATION				
University/University of Technology	1 000 000+	up to 500 km	D	Historical provision is the most likely determinant at this scale
Post-matric Skills Training (i.e. nursing teaching, etc)	400 000	20 km	C	Public transport access required
ABET/Skills Training	Variable	25 km	R	Variety of institutions mostly with no sports facilities and of limited spatial extent. Centrally located
Special Education	Still to be determined	20 km	R	Range of alternate types required. Special school transport may be necessary
Secondary School	12 500	5 km	C	With or without sports facilities; new schools to use communal sports facilities
Primary School	7 000	5 km	C	With or without sports facilities; new schools to use communal sports facilities
Grade R Class at Primary School	1 000	2 km (preferred) - 5 km	C	Linked to Primary School
Small Crèche/Early Childhood Development Centre	2 400 - 3 000	2 km	C	Supports working parents so can be located close to employment centres as well as to residential areas. Location close to parks preferred.
ECD Resource Hub and Care Centre	20 000	5 km	C	Located to support a number of schools; i.e. 1 hub per 6 - 10 crèches
RECREATION PROVISION (SPORTS AND PARKS)				
Total provision for facilities below is approx 0.3 ha/1 000 people. This provision should be consolidated at the metro level to develop facility complexes. Thresholds are approximate and access distances illustrative.				
International Sports Complex	1 500 000	50 km	R	
Indoor Sports Hall (medium/large)	250 000 - 500 000	10 km - 30 km	C	Public transport access essential. Clustered with other sports facilities
Regional Sports Stadium	200 000 - 300 000	15 km	C	Public transport access essential. Clustered with other sports facilities
Sports Complex with 9 - 12 court sports hall, etc.	200 000	15 km	C	
Total provision for all facilities below is approx 0.56 ha/1 000 people. Thresholds are approximate and access distances illustrative. Facilities should be consolidated to develop facility complexes. Approximately 20% of this allocation is for regional facilities and 40% each for community and neighbourhood facilities. Where possible open space and parks should be linked to reduce maintenance costs and increase the extent of "green lungs".				
Grassed surface (2 football fields equivalent)	15 000	3 km		Compulsory provision of facilities in terms of the land per people ratio but the provision of specific types of facilities should be based on community needs and budgetary concerns Adjust number of playing surfaces to local demand. Only required for local residents if no other higher-order facilities are provided within reach. Sharing of facilities between schools and the wider community recommended, particularly in smaller settlements

B: Social Facilities required for Large Cities/Small Metros (cont)

(Catchment size: 350 000 - 1 000 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
RECREATION PROVISION (SPORTS AND PARKS) (CONT)				
Sports Complex (grouping of fields and/or sports complexes)	60 000	10 km	Compulsory provision of facilities in terms of the land per people ratio but the provision of specific types of facilities should be based on community needs and budgetary concerns	
Grassed field (2 football fields equivalent) with 500-seat stand	30 000	5 km		
Cricket Oval	60 000	10 km		Well located in terms of road network and spatial plan of region
Athletics/Cricket Stadium (grassed field and athletics track and stand – 3000+ seats)	60 000	10 km		Public transport access essential. Clustered with other sports facilities
Combi-court surface (x2)	15 000	3 km		
Combi-court surface (x4)	60 000	10 km		
Multi-purpose Sports Hall (2 court)	100 000	10 km		Public transport access essential. Clustered with other sports facilities
Multi-purpose Sports Hall (4 court)	160 000	15 km		Public transport access essential. Clustered with other sports facilities
Swimming Pool Complex (25 to 33 m pool)	80 000	5 km -10 km		Public transport access essential. Clustered with other sports facilities. Discretionary provision if within 15 km of 50 m pool
Swimming Pool (50 m pool)	500 000 - 1 000 000	Variable		
Total provision for all facilities below is approx 0.5 ha/1 000 (Ongoing research is being conducted on the desirability of reducing this; current indications are that for users quality is more important than quantity). The land should be consolidated in developing the facilities below. Thresholds are approximate. Approximately 40% of this allocation is for strategic (regional) and district facilities and 60% for community, urban and neighbourhoods parks, play lots, etc.				
Strategic Park	500 000 - 1 000 000	50 km	C	Site-specific location
District Park	60 000 - 100 000	10 km	C	
Community Park with play equipment	60 000	5 km	C	
Urban Park	Variable	1 km	C	Central location in areas of high activity/employment/retail
Local/Neighbourhood Park (includes play equipment)	3 000 - 15 000	1 km	C	May be redundant if district/community park located within reach
Play Equipment at other facilities	Variable	Variable	D	Only provided where no parks; placed at e.g. Clinics, Libraries

KEY NOTES:

Most facilities should be on public transport routes/nodes unless otherwise stated

Mobile and satellite services only to be used in isolated situations where there is no alternative and access times would prove excessive otherwise

Alternative fire-fighting equipment deployment where widely spread, low-density development makes conventional services unsuitable

C: Social Facilities required for Large Towns/Regional Service Centres (Catchment size: 100 000 - 350 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
HEALTH AND EMERGENCY SERVICES				
District Hospital L1	300 000 - 900 000	30 km	C	Not required if residents can reach (within 30 km) any higher-order hospital that is not overburdened
Community Health Centre	100 000 - 140 000	90% of population served within 5 km*	C	*National Department of Health target
Primary Health Clinic	24 000 - 70 000	90% of population served within 5 km*	C	*National Department of Health target
Fire Station	60 000 - 100 000	8 - 23 minutes (response time)^	C	Area coverage and reach versus people/land use in the specific area will have to be evaluated; ^SABS standard
Police Station	60 000 - 100 000	8 km urban; 16 km peri-urban 24 km other	C	Central location critical but demand factors and access of population will dictate location and size. SAPS Contact Points are used in areas not warranting a fully-fledged station but which are beyond the SAPS distance criteria of 24 km
SOCIAL AND CULTURAL (PUBLIC SERVICE FACILITIES)				
Community Performing Arts Centre	50 000	10 km - 15 km	R	Unfunded and demand-driven
Museum – medium/small	Variable	Variable	D	Site-specific demand
Regional Library – Reference	450 000	50 km	D	Adjust capacity to local and hinterland demand or combine with regional library
Regional Library	200 000	15 km	C	
Local Library	20 000 - 70 000	8 km - 10 km	C	Discretionary provision if regional Library is within 5 km
Mobile Library	Variable	Variable	D	Needs-based for isolated or special categories, i.e. homes for the aged and people with disabilities
CIVIC				
Home Affairs – large office	400 000	15 km to at least one facility type (urban); 25 km for rural hinterland	D	Central location important; linked to Thusong Centres. Mixture of facility sizes to meet maximum population
Home Affairs – medium office	160 000		C	
Home Affairs – small office	40 000		C	
Thusong Centre (community-based “one-stop” development centres)	1 per Local Municipality	15 km urban; max 25 km	C	Development of government precincts can be used as an alternative, i.e. a grouping of Home Affairs, SASSA, Justice (zone of not more than 1 km radius)
Labour Office	Variable	15 km urban; 25 km peri-urban	C	Linked to Thusong Centres
Magistrate’s Court	Variable	undetermined at this stage	C	Minimum of 1 Regional Court per District Municipality; 1 or more District Courts per Local Municipality

C: Social Facilities required for Large Towns/Regional Service Centres (cont) (Catchment size: 100 000 - 350 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
CIVIC (CONT)				
Municipal Office	1 per Local Municipality	30 km	C	May be divided among administrative regions of the town
Prison and Place of Safety	n/a	Variable	D	Regional scale provision
Solid Waste Disposal Site and Recycling Depot	n/a	Variable	C	Municipal/Sub-municipal provision
SOCIAL SERVICES				
Community Hall – large	60 000	10 km	C	
Community Hall – medium/small (fringe areas)	10 000 - 15 000	15 km	D	
Children's Home	Variable	n/a	R	Require access to schools, sports and health facilities
Home for the Aged	Variable	n/a	R	Peripheral location on public transport routes with access to shops and medical facilities
ICT Access Point	10 000+	5 km	C	Located within libraries, Postal Agency, Thusongs, etc.
Post Office/Agency with post boxes	10 000 - 20 000	5 km - 10 km	C	Central location critical
Post Boxes	See comment	2 km	R	Should be provided in addition to a Post Office where there is no home postal delivery
SASSA Office (Social Service Office)	Variable	15 km urban; 20 km peri-urban; 40 km rural	C	Services should be offered from fixed points for five days per week from infrastructure such as Thusong Centres, community halls or one-stop development centres while mobile offices serve generally rural areas/ outlying pockets as special cases and can be limited to one or two days a week
Social Grant Pay Point	40 000	5 km	C	Multiple points within nodal area, on fixed days of the month. Mobile may be used for special cases; if beneficiaries within 5 km of banks, Post Offices, Thusong Centres then these services should be used instead
Cemetery (medium)	8.8 ha/50 000	15 km	D	Assumes annual death rate of 1.6% and 90% of the dead are buried, recycling of graves (40% of graves after 10 years and 30% after 20 years); mixture of facility sizes to meet maximum population
Cemetery (large)	17.2 ha/100 000	30 km	C	
Crematorium	200 000+	30 km	C	

C: Social Facilities required for Large Towns/Regional Service Centres (cont) (Catchment size: 100 000 - 350 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
EDUCATION				
ABET/Skill Training	Variable	25 km	R	Variety of institutions mostly with no sports facilities and of limited spatial extent. Centrally located
Special Education	Still to be determined	20 km	R	Range of alternate types required. Special school transport may be necessary
Secondary School	12 500	5 km	C	With or without sports facilities; new schools to use communal sports facilities if possible
Primary School	7 000	5 km	C	With or without sports facilities; new schools to use communal sports facilities if possible
Grade R Class at Primary School	1 000	2 km (preferred) - 5 km	C	Linked to Primary School
Small Crèche/Early Childhood Development Centre	2 400 - 3 000	2 km	C	Supports working parents so can be located close to employment centres as well as to residential areas. Preferably located near parks
ECD Resource Hub and Care Centre	20 000	5 km	C	Located to support a number of schools; i.e. 1 hub per 6 - 8 crèches
RECREATION PROVISION (SPORTS AND PARKS)				
Total provision for facilities below is approx 0.3 ha/1 000 people. This provision should be consolidated at the metro level to develop facility complexes. Thresholds are approximate and access distances illustrative.				
Indoor Sports Hall (medium/large)	250 000 - 500 000	10 km - 30 km	C	Public transport access essential. Clustered with other sports facilities
Regional Sports Stadium	200 000 - 300 000	15 km	C	Public transport access essential. Clustered with other sports facilities
Sports Complex with 9 - 12 court sports hall, etc.	200 000	15 km	C	
Total provision for all facilities below is approx 0.56 ha/1 000 people. Thresholds are approximate and access distances illustrative. Facilities should be consolidated to develop facility complexes. Approximately 20% of this allocation is for regional facilities and 40% each for community and neighbourhood facilities. Where possible open space and parks should be linked to reduce maintenance costs and increase the extent of "green lungs".				
Grassed surface (2 football fields equivalent)	15 000	3 km	Compulsory provision of facilities in terms of the land per people ratio but the provision of specific types of facilities should be based on community needs and budgetary concerns	Adjust number of playing surfaces to local demand. Only required for local residents if no other higher-order facilities are provided within reach. Sharing of facilities between schools and the wider community recommended, particularly in smaller settlements
Sports Complex (grouping of fields and/or sports complexes)	60 000	10 km		
Grassed field (2 football fields equivalent) with 500-seat stand	30 000	5 km		

C: Social Facilities required for **Large Towns/Regional Service Centres** (cont) (Catchment size: 100 000 - 350 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS	
RECREATION PROVISION (SPORTS AND PARKS) (CONT)					
Cricket Oval	60 000	10 km		Well located in terms of road network and spatial plan of region	
Athletics/Cricket Stadium (grassed field and athletics track and stand – 3 000+ seats)	60 000	10 km		Public transport access essential. Clustered with other sports facilities	
Combi-court surface (x 2)	15 000	3 km	Compulsory provision of facilities in terms of the land per people ratio but the provision of specific types of facilities should be based on community needs and budgetary concerns		
Combi-court surface (x 4)	60 000	10 km			
Multi-purpose Sports Hall (2 court)	100 000	10 km		Public transport access essential. Clustered with other sports facilities	
Multi-purpose Sports Hall (4 court)	160 000	15 km		Public transport access essential. Clustered with other sports facilities	
Swimming Pool Complex (25 m to 33 m pool)	80 000	5 km - 10 km		Public transport access essential. Clustered with other sports facilities. Discretionary provision if within 15 km of 50 m pool	
Swimming Pool (50 m pool)	500 000 - 1 000 000	Variable			
Total provision for all facilities below is approx 0.5 ha/1 000 (Ongoing research is being conducted on the desirability of reducing this; current indications are that for users quality is more important than quantity). The land should be consolidated in developing the facilities below. Thresholds are approximate. Approximately 40% of this allocation is for strategic (regional) and district facilities and 60% for community, urban and neighbourhoods parks, play lots, etc.					
District Park	60 000 - 100 000	10 km		C	
Community Park with play equipment	60 000	5 km	C		
Urban Park	Variable	1 km	C	Central location in areas of high activity/employment/retail	
Local/Neighbourhood Park (includes play equipment)	3 000 - 15 000	1 km	C	May be redundant if district/community park located within reach	
Play Equipment at other facilities	Variable	Variable	D	Only provided where no parks; placed at e.g. Clinics, Libraries	

KEY NOTES:

Most facilities should be on public transport routes/nodes unless otherwise stated

Mobile and satellite services only to be used in isolated situations where there is no alternative and access times would prove excessive otherwise

Alternative fire-fighting equipment deployment where widely spread, low-density development makes conventional services unsuitable

D: Social Facilities required for **Small-Medium Towns/Regional Service Centres** (Catchment size: 60 000 - 100 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
HEALTH AND EMERGENCY SERVICES				
Community Health Centre	60 000 - 100 000	90% of population served within 5 km*	C	*National Department of Health target
Primary Health Clinic	24 000 - 70 000	90% of population served within 5 km*	C	*National Department of Health target
Fire Station	60 000 - 100 000	8-23 minutes (response time)^	C	Area coverage and reach versus people/land use in the specific area will have to be evaluated; ^SABS standard
Police Station	60 000 - 100 000	8 km urban; 16 km peri-urban, 24 km rural populations	C	Central location critical but demand factors and access of population will dictate location and size. SAPS Contact Points are used in areas not warranting a fully-fledged station but which are beyond the SAPS distance criteria of 24 km
SOCIAL AND CULTURAL (PUBLIC SERVICE FACILITIES)				
Community Performing Arts Centre	50 000	10 km - 15 km	R	Unfunded and demand-driven
Museum – medium/small	Variable	Variable	D	Site-specific demand
Local Library	20 000 - 70 000	8 km - 10 km	C	Discretionary provision if regional Library is within 5 km
Mobile Library	Variable	Variable	D	Needs-based for isolated or special categories, i.e. home for the aged and for people with disabilities
CIVIC				
Home Affairs – medium office	160 000	15 km to at least one facility type (urban); 25 km for surrounding rural population	D	Central location important; linked to Thusong Centres. Mixture of facility sizes to meet maximum population
Home Affairs – small office	40 000		C	
Thusong Centre (community-based “one-stop” development centres)	1 per Local Municipality	15 km urban; 25 km rural	C	
Labour office	Variable	15 km urban; 25 km rural	C	Linked to Thusong Centres
Magistrate’s Court	Variable	Undetermined at this stage	C	Minimum of 1 Regional Court per District Municipality; 1 or more District Courts per Local Municipality
Municipal Office	1 per Local Municipality	30 km	C	May be divided among administrative regions of the town
Prison and Place of Safety	n/a	Variable	D	Regional scale provision
Solid Waste Disposal Site and Recycling Depot	n/a	Variable	C	Municipal/Sub-municipal provision
SOCIAL SERVICES				
Community Hall – large	60 000	10 km	C	Mixture of facility sizes to meet maximum population
Community Hall – medium/small (fringe areas)	10 000 - 15 000	15 km	D	

D: Social Facilities required for **Small-Medium Towns/Regional Service Centres** (cont) (Catchment size: 60 000 - 100 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
SOCIAL SERVICES (CONT)				
Children's Home	Variable	n/a	R	Require access to schools, sports and health facilities
Home for the Aged	Variable	n/a	R	Peripheral location on public transport routes with access to shops and medical facilities
ICT Access Point	10 000+	5 km	C	Located within Libraries, Postal Agency, Thusongs, etc.
Post Office/Agency with post boxes	10 000 - 20 000	5 km - 10 km	C	Central location critical
Post Boxes	See comment	2 km	R	Should be provided in addition to a Post Office where there is no home postal delivery
SASSA Office (Social Service Office)	Variable	15 km urban; 20 km peri-urban 40 km rural	C	Local/service offices may be at fixed point or satellite or mobile services. Services are offered from fixed points on one or more days per week from infrastructure such as Thusong Centres, community halls or one-stop development centres while mobile offices generally serve rural areas
Social Grant Pay Point	40 000	5 km	C	Multiple points within nodal area, on fixed days of the month. Mobile may be used for special cases; if beneficiaries within 5 km of banks, Post Offices, Thusong Centres then these services should be used instead
Cemetery (medium)	8.8 ha/50 000 (can be distributed)	15 km - 30 km	D	Assumes annual death rate of 1.6% and 90% of dead are buried, recycling of graves (40% of graves after 10 years and 30% after 20 years)
EDUCATION				
ABET/Skill Training	Variable	25 km	R	Variety of institutions mostly with no sports facilities and of limited spatial extent. Centrally located
Special Education	Still to be determined	20 km	R	Range of alternate types required. Special school transport may be necessary
Secondary School	12 500	5 km	C	With or without sports facilities; new schools to use communal sports facilities if possible
Primary School	7 000	5 km	C	With or without sports facilities; new schools to use communal sports facilities if possible
Grade R Class at Primary School	1 000	2 km (preferred) - 5 km	C	Linked to Primary School
Small Crèche/Early Childhood Development Centre	2 400 - 3 000	2 km	C	Supports working parents so can be located close to employment centres as well as to residential areas. Preferably located near parks
ECD Resource Hub and Care Centre	20 000	5 km	C	Located to support a number of schools; i.e. 1 hub per several crèches

D: Social Facilities required for Small-Medium Towns/Regional Service Centres (cont) (Catchment size: 60 000 - 100 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
RECREATION PROVISION (SPORTS AND PARKS)				
Total provision for all facilities below is approx 0.56 ha/1 000 people. Thresholds are approximate and access distances illustrative. Facilities should be consolidated to develop facility complexes. Approximately 20% of this allocation is for regional facilities and 40% each for community and neighbourhood facilities. Where possible open space and parks should be linked to reduce maintenance costs and increase the extent of "green lungs".				
Grassed surface (2 football fields equivalent)	15 000	3 km	Compulsory provision of facilities in terms of the land per people ratio but the provision of specific types of facilities should be based on community needs and budgetary concerns	Adjust number of playing surfaces to local demand. Only required for local residents if no other higher-order facilities are provided within reach. Sharing of facilities between schools and the wider community recommended, particularly in smaller settlements
Sports Complex (grouping of fields and/or sports complexes)	60 000	10 km		
Grassed field (2 football fields equivalent) with 500-seat stand	30 000	5 km		
Cricket Oval	60 000	10 km		Well located in terms of road network and spatial plan of region
Athletics/Cricket Stadium (grassed field and athletics track and stand – 3 000+ seats)	60 000	10 km		Public transport access essential. Clustered with other sports facilities
Combi-court surface (x2)	15 000	3 km		
Combi-court surface (x4)	60 000	10 km		
Multi-purpose Sports Hall (2 court)	100 000	10 km		Public transport access essential. Clustered with other sports facilities
Multi-purpose Sports Hall (4 court)	160 000	15 km		Public transport access essential. Clustered with other sports facilities
Swimming Pool Complex (25 m to 33 m pool)	80 000	15 km		Public transport access essential. Clustered with other sports facilities. Discretionary provision if within 25 km of 50 m pool. Must be able to fill and maintain Pool
Total provision for all facilities below is approx 0.5 ha/1 000 (ongoing research is being conducted on the desirability of reducing this; current indications are that for users quality is more important than quantity). The land should be consolidated in developing the facilities below. Thresholds are approximate. Approximately 40% of this allocation is for strategic (regional) and district facilities and 60% for community, urban and neighbourhoods parks, play lots, etc.				
District Park	60 000 - 100 000	10 km	C	
Community Park with play equipment	60 000	5 km	C	
Urban Park	Variable	1 km	C	Central location in areas of high activity/employment/retail
Local/Neighbourhood Park (includes play equipment)	3 000 - 15 000	1 km	C	May be redundant if district/community park located within reach
Play Equipment at other facilities	Variable	Variable	D	Only provided where no parks; placed at e.g. clinics, libraries

KEY NOTES:

Most facilities should be on public transport routes/nodes unless otherwise stated

Mobile and satellite services only to be used in isolated situations where there is no alternative and access times would prove excessive otherwise

Alternative fire-fighting equipment deployment where widely spread, low-density development makes conventional services unsuitable

E: Social Facilities required for Small Towns/Isolated Regional Service Centres (Catchment size: 25 000 - 60 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
HEALTH AND EMERGENCY SERVICES				
Community Health Centre	60 000	90% of population served within 5 km*	C	*National Department of Health target
Primary Health Clinic	24 000 - 70 000	90% of population served within 5 km*	C	*National Department of Health target
Fire Station	60 000 - 100 000	8 - 23 minutes (response time)^	C	Area coverage and reach versus people/land use in the specific area will have to be evaluated; ^SABS standard
Fire bakkie pump deployment point	Variable	Variable	D	Only for use in low-density areas where conventional deployment is not warranted or affordable
Police Station	60 000 - 100 000	Up to 24 km	C	Central location critical but demand factors and access of population will dictate location and size. SAPS Contact Points are used in areas not warranting a fully-fledged station but which are beyond the SAPS distance criteria of 24 km
SOCIAL AND CULTURAL (PUBLIC SERVICE FACILITIES)				
Community Performing Arts Centre	50 000	20 km	R	Unfunded and demand-driven
Museum – medium/small	Variable	Variable	D	Site-specific demand
Local Library	20 000 - 70 000	8 - 10 km urban; 25 km rural	C	Discretionary provision if regional library is within 5 km
Mobile Library	Variable	Variable	D	Needs-based for isolated or special categories, i.e. home for the aged and for people with disabilities
CIVIC				
Home Affairs – small office	40 000	25 km	C	Central location important; linked to Thusong Centres. Mobile/Periodic Home Affairs Offices if below threshold
Thusong Centre (community-based "one-stop" development centres)	1 per Local Municipality	25 km	C	
Labour Office	Variable	25 km	C	Linked to Thusong Centres.
Magistrate's Court	Variable	Undetermined at this stage	C	Minimum of 1 Regional Court per District Municipality; 1 or more District Courts per Local Municipality
Municipal Office	1 per Local Municipality	30 km	D	May be divided among administrative regions of the town
Prison and Place of Safety	n/a	Variable	D	Regional scale provision
Solid Waste Disposal Site and Recycling Depot	n/a	Variable	C	Municipal/Sub-municipal provision
SOCIAL SERVICES				
Community Hall – large	60 000	8 - 10 km	C	Mixture of facility sizes to meet maximum population
Community Hall – medium/small (fringe areas)	10 000 - 15 000	15 km	D	
Children's Home	Variable	n/a	R	Require access to schools, sports and health facilities

E: Social Facilities required for **Small Towns/Isolated Regional Service Centres** (cont) (Catchment size: 25 000 - 60 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
SOCIAL SERVICES (CONT)				
Home for the Aged	Variable	n/a	R	Peripheral location on public transport routes with access to shops and medical facilities
ICT Access Point	10 000+	5 km	C	Located within Libraries, Postal Agency, Thusongs, etc.
Post Office/Agency with post boxes	10 000 - 20 000	25 km	C	Central location critical
Post Boxes	See comment	25 km	R	Should be provided in addition to a Post Office where there is no home postal delivery
SASSA Office (Social Service Office)	Variable	40 km	C	Local/service offices may be at fixed point or satellite or mobile services. Services are offered from fixed points on one or more days per week from infrastructure such as Thusong Centres, Community Halls or one-stop development centres while mobile offices serve generally rural areas
Social Grant Pay Point	40 000	5 km	C	Multiple points within nodal area; on fixed days in the month. Mobile may be used for special cases; if beneficiaries within 5 km of banks, Post Offices, Thusong Centres then these services should be used instead
Cemetery (medium)	8.8 ha/50 000 (or portion thereof)	15 km	D	Assumes annual death rate of 1.6% and 90% of the dead are buried, recycling of graves (40% of graves after 10 years and 30% after 20 years)
EDUCATION				
ABET/Skill Training	Variable	25 km	R	Variety of institutions mostly with no sports facilities and of limited spatial extent. Centrally located
Special Education	Still to be determined	25 km	R	Range of alternate types required. Special school transport may be necessary
Secondary School	12 500	5 km	C	With or without sports facilities; new schools to use communal sports facilities
Primary School	7 000	5 km	C	With or without sports facilities; new schools to use communal sports facilities
Grade R Class at Primary School	1 000	2 km (preferred) - 5 km	C	Linked to Primary School
Small Crèche/Early Childhood Development Centre	2 400 - 3 000	2 km	C	Supports working parents so can be located close to employment centres as well as to residential areas and nearby parks

E: Social Facilities required for **Small Towns/Isolated Regional Service Centres** (cont) (Catchment size: 25 000 - 60 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
ECD Resource Hub and Care Centre	20 000	5 km	C	Located to support a number of schools; i.e. 1 hub per several crèches

RECREATION PROVISION (SPORTS AND PARKS)

Total provision for all facilities below is approx 0.56 ha/1 000 people. Thresholds are approximate. Facilities should be consolidated to develop facility complexes. Approximately 20% of this allocation is for regional facilities and 40% each for community and neighbourhood facilities. Must have resources to maintain grassed surfaces.

Grassed surface (2 football fields equivalent)	15 000	3 km	Compulsory provision of facilities in terms of the land per people ratio but the provision of specific types of facilities should be based on community needs and budgetary concerns	Adjust number of playing surfaces to local demand. Only required for local residents if no other higher-order facilities are provided within reach. Sharing of facilities between schools and the wider community recommended, particularly in smaller settlements
Sports Complex (grouping of fields and/or sports complexes)	60 000	10 km		
Grassed field (2 football fields equivalent) with 500-seat stand	30 000	5 km		
Cricket Oval	60 000	10 km		Well located in terms of road network and spatial plan of region
Athletics/Cricket Stadium (grassed field and athletics track and stand – 3 000+ seats)	60 000	10 km		Public transport access essential. Clustered with other sports facilities
Combi-court surface (x 2)	15 000	3 km		
Combi-court surface (x 4)	60 000	10 km		
Community Pool	10 000	5 km		
Swimming Pool (25 m to 33 m pool)	30 000 - 50 000	25 km		Public transport access essential. Clustered with other sports facilities. Must be able to fill and maintain pool

Total provision for all facilities below is approx 0.5 ha/1 000 (ongoing research is being conducted on the desirability of reducing this; current indications are that for users quality is more important than quantity). The land should be consolidated in developing the facilities below. Thresholds are approximate. Approximately 40% of this allocation is for strategic (regional) and district facilities and 60% for community, urban and neighbourhoods parks, play lots, etc.

District Park	60 000 - 100 000	10 km	D	
Community Park with play equipment	60 000	5 km	C	
Urban Park	Variable	1 km	C	Central location in areas of high activity/employment/retail
Local/Neighbourhood Park (includes play equipment)	3 000 - 15 000	1 km	C	May be redundant if district/community park located within reach
Play Equipment at other facilities	Variable	Variable	D	Only provided where no parks; placed at e.g. Clinics, Libraries

KEY NOTES:

Most facilities should be on public transport routes/nodes unless otherwise stated

Mobile and satellite services only to be used in isolated situations where there is no alternative and access times would prove excessive otherwise

Alternative fire-fighting equipment deployment where widely spread, low-density development makes conventional services unsuitable

F: Social Facilities required for **Dense Dispersed Settlements** (Catchment size: 10 000 - 100 000 people; continuous development with 12 or more persons per ha over 10 km²)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
HEALTH AND EMERGENCY SERVICES				
Community Health Centre	100 000 - 140 000	90% of population served within 5 km*	D	*National Department of Health target
Primary Health Clinic	5 000 - 7 000	90% of population served within 5 km [#]	C/ D	Provided on selected days of the week. [#] Ref.: NDoH Strategic Planning Cluster, March 2006 (updated Nov 2009) Service Transformation Plan Framework – Outline of the Service Transformation Plans for 2010-2025
Mobile/Periodic Health Clinic	Variable	Variable	D	Provided in areas where no fixed services are viable
Police Station	Subject to SAPS work study and requirements of the area		C	
SAPS Contact Points	Variable	24 km	C (if no SAPS station)	SAPS Contact Points for use in areas not warranting a fully-fledged station but which are beyond the distance criteria for a fully-fledged Police Station
Fire bakkie pump deployment point	Variable	Variable	D	Only for use in low-density areas where conventional deployment is not warranted or affordable
SOCIAL AND CULTURAL (PUBLIC SERVICE FACILITIES)				
Community Performing Arts Centre	50 000	25 km	R	Unfunded and demand-driven
Museum – medium/small	Variable	Variable	D	Site-specific demand
Local Library	20 000 - 70 000	8 km - 10 km	C	Discretionary provision if regional library is within 10 km
Mobile Library	Variable	Variable	D	Needs-based for isolated or special categories, i.e. home for the aged and for people with disabilities
CIVIC				
Home Affairs – small office	40 000	25 km	C	Central location important
Mobile/Periodic Home Affairs Office	Variable	20 km - 25 km Variable	D	Mobile and periodic services.
Mobile/eGov Integrated Service	2 000	5 km if more than 2 000 people within this catchment/ alternatively 25 km	C	Government is advocating a single mobile service for all departments but this not yet achieved
Labour Office	Variable	25 km Urban; 35 km - 50 km Rural; 100 km Sparse	C	May form part of above
Solid Waste Disposal Site and Recycling Depot	n/a	Variable	C	Unless clear guidelines for individual disposal are agreed upon

F: Social Facilities required for **Dense Dispersed Settlements** (cont)
 (Catchment size: 10 000 - 100 000 people;
 continuous development with 12 or more persons per ha over 10 km²)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
SOCIAL SERVICES				
Community Hall – large	60 000	8 km - 10 km	C	Mixture of facility sizes to meet maximum population
Community Hall – medium/small (fringe areas)	10 000 - 15 000	15 km	D	
Children's Home	Variable	n/a	R	Require access to schools, sports and health facilities
Home for the Aged	Variable	n/a	R	Peripheral location on public transport routes with access to shops and medical facilities
ICT Access point	10 000+	5 km	C	Located within Libraries, Postal Agency, Thusongs, etc.
Post Office/Agency with post boxes	10 000 - 20 000	25 km	C	Central location critical
Post Boxes	See comment	25 km	R	Should be provided in addition to a Post Office where there is no home postal delivery
SASSA Office (Social Service Office)	Variable	40 km	C	Local/service offices may be at fixed point, satellite or periodic mobile services. Services are offered from fixed points on one or more days per week from infrastructure such as Thusong Centres, community halls or one-stop development centres while mobile offices generally serve rural areas
Social Grant Pay Point	40 000	5 km	C	Multiple points within nodal area; on fixed days of the month. Mobile may be used for special cases; if beneficiaries within 5 km of banks, post offices, Thusong Centres then these services should be used instead
Cemetery	8.8 ha/50 000 (medium) 17.2 ha/100 000 (large)	25 km	C	Assumes annual death rate of 1.6% and 90% of the dead are buried, recycling of graves (40% of graves after 10 years and 30% after 20 years)
EDUCATION				
ABET/Skill Training	Variable	25 km	R	Variety of institutions mostly with no sports facilities and of limited spatial extent. Centrally located
Special Education	Still to be determined	20 km	R	Range of alternate types required. Special school transport may be necessary
Secondary School	12 500	5 km	C	With or without sports facilities; new schools to use communal sports facilities
Primary School	7 000	5 km	C	With or without sports facilities; new schools to use communal sports facilities
Grade R Class at Primary School	1 000	2 km (preferred) - 5 km	C	Linked to Primary School
Small Crèche/Early Childhood Development Centre	2 400 - 3 000	2 km	D	Supports working parents so can be located close to employment centres as well as to residential areas and nearby parks

F: Social Facilities required for **Dense Dispersed Settlements** (cont)

(Catchment size: 10 000 - 100 000 people;
continuous development with 12 or more persons per ha over 10 km²)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
RECREATION PROVISION (SPORTS AND PARKS)				
Total provision for all facilities below is approx 0.56 ha/1 000 people. Thresholds are approximate. Facilities should be consolidated to develop facility complexes. Approximately 20% of this allocation is for regional facilities and 40% each for community and neighbourhood facilities. Must have resources to maintain grassed surfaces.				
Level surface playing fields	3 000	3 km	Compulsory provision of facilities in terms of the land per people ratio but the provision of specific types of facilities should be based on community needs and budgetary concerns	Adjust number of playing surfaces to local demand. Only required for local residents if no other higher-order facilities are provided within reach. Sharing of facilities between schools and the wider community recommended, particularly in smaller settlements
Gravel/grassed surface (2 football fields equivalent)	15 000	3 km		
Sport Complex (grouping of fields and/or sports complexes)	60 000	10 km		
Grassed field (2 football fields equivalent) with 500-seat stand	30 000	5 km		
Athletics/Cricket Stadium (grassed field and athletics track and stand – 3 000+ seats)	60 000	10 km		Public transport access essential. Clustered with other sports facilities
Combi-court surface (x 2)	15 000	3 km		
Combi-court surface (x 4)	60 000	10 km		
Multi-purpose Sports Hall (2 court)	100 000	10 km		Public transport access essential. Clustered with other sports facilities
Community Pool	50 000	Variable		Centrally situated, preferably near schools. Must be able to fill and maintain
Total provision for all facilities below is approx 0.5 ha/1 000 (ongoing research is being conducted on the desirability of reducing this; current indications are that for users quality is more important than quantity). The land should be consolidated in developing the facilities below. Thresholds are approximate. Approximately 40% of this allocation is for strategic (regional) and district facilities and 60% for community, urban and neighbourhoods parks, play lots, etc.				
Community Park with play equipment	60 000	5 km	D	
Local/Neighbourhood Park (includes play equipment)	3 000 - 15 000	1.5 km	D	May be redundant if district/community park located within reach
Play Equipment at other facilities	Variable	Variable	C	Only provided where no parks; placed at e.g. Clinics, Libraries

KEY NOTES:

Most facilities should be on public transport routes/nodes unless otherwise stated

Mobile and satellite services only to be used in isolated situations where there is no alternative and access times would prove excessive otherwise. There should ideally be a central point or structure which is shared by all mobile/periodic services (could be a private or government building)

Alternative fire-fighting equipment deployment where widely spread, low-density development makes conventional services unsuitable

G: Social Facilities required for Villages (Catchment size: 5 000 - 25 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
HEALTH AND EMERGENCY SERVICES				
Primary Health Clinic	5 000 - 7 000	90% of population served within 5 km [#]	C/ D	May be limited to certain days of the week. [#] Ref.: NDoH Strategic Planning Cluster, March 2006 (updated Nov 2009) Service Transformation Plan Framework – Outline of the Service Transformation Plans for 2010-2025
Mobile/Periodic Health Clinic	Variable	Variable	D	Fixed service preferred to a mobile service; limited days per week
Police Station	Subject to SAPS work study and requirements of the area		D	
SAPS Contact Point	Variable	24 km	C (if no SAPS station)	SAPS Contact Points for use in areas not warranting a fully-fledged station but which are beyond the distance criteria for a fully-fledged Police Station
Fire bakkie pump deployment point	Variable	Variable	D	If no conventional fire-fighting service within reach (20 minutes)
SOCIAL AND CULTURAL (PUBLIC SERVICE FACILITIES)				
Museum – small	Variable	Variable	D	Site-specific demand
Local Library	5 000 - 20 000	25 km	C	Discretionary provision if regional Library is within 25 km
Mobile/Periodic Library	Variable	Variable	D	Needs-based for isolated or special categories; may be linked to schools in the area
CIVIC				
Mobile/Periodic Home Affairs Office	Variable	20 km - 25 km Variable	D	Mobile and periodic services. Government is advocating a single mobile service for all departments but this not yet achieved
Mobile/eGov Integrated Service	2 000	5 km if more 2 000 people within this catchment/ alternatively 25 km	C	
Labour Office	Variable	25 km Urban; 35 - 50 km Rural; 100 km Sparse	C	May form part of above
Solid Waste Disposal Site and Recycling Depot	n/a	Variable	C	Unless clear guidelines for individual disposal are agreed upon
SOCIAL SERVICES				
Community Hall – medium/small (fringe areas)	10 000 - 15 000	25 km	D	
Children's Home	Variable	n/a	R	Need dependent. Require access to schools, sports and health facilities
Home for the Aged	Variable	n/a	R	Need dependent. Central location with access to shops, Libraries and medical facilities
ICT Access Point	10 000+	5 km	C	Located within Libraries, Postal Agency, Thusongs, etc.
Post Office/Agency with post boxes	10 000 - 20 000	25 km	C	Central location critical
Post Boxes	See comment	25 km	R	Should be provided in addition to a Post Office where there is no home postal delivery

G: Social Facilities required for Villages (cont) (Catchment size: 5 000 - 25 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
SOCIAL SERVICES (CONT)				
SASSA Office (Social Service Office)	Variable	40 km	C	Local/Service offices may be at fixed point or satellite or mobile services (eGovernment). Services offered on one or more days per week from infrastructure such as Thusong Centres, community halls or one-stop development centres while mobile offices generally serve rural areas less frequently
Social Grant Pay Point	40 000	5 km	C	Multiple points within nodal area. Mobile may be used for special cases; if beneficiaries within 5 km of banks, Post Offices, Thusong Centres then these services should be used instead
Cemetery	Very small - 0.88 ha/5 000	25 km	C	Assumes annual death rate of 1.6% and 90% of the dead are buried, recycling of graves (40% of graves after 10 years and 30% after 20 years)
	Small - 4.4 ha/25 000			
EDUCATION				
ABET/Skill Training	Variable	25 km	R	Variety of institutions mostly with no sports facilities and of limited spatial extent. Centrally located
Special Education	Still to be determined	20 km	D	Range of alternate types required. Special school transport may be necessary
Secondary School	12 500	5 km	C	With or without sports facilities; new schools to use communal sports facilities
Primary School	7 000	5 km	C	With or without sports facilities; new schools to use communal sports facilities
Grade R Class at Primary School	1 000	2 km (preferred) - 5 km	C	Linked to Primary School
Small Crèche/Early Childhood Development Centre	2 400 - 3 000	2 km	C	Supports working parents so can be located close to employment centres as well as to residential areas. Preferably located near parks
RECREATION PROVISION (SPORTS AND PARKS)				
Total provision for all facilities below is approx 0.56 ha/1 000 people. Thresholds are approximate. Facilities should be consolidated to develop facility complexes. Approximately 20% of this allocation is for regional facilities and 40% each for community and neighbourhood facilities. Must have resources to maintain grassed surfaces.				
Level surface playing field	3 000	2 km	Compulsory provision of facilities in terms of the land per people ratio but the provision of specific types of facilities should be based on community needs and budgetary concerns	Adjust number of playing surfaces to local demand. Only required for local residents if no other higher-order facilities are provided within reach. Sharing of facilities between schools and the wider community recommended, particularly in smaller settlements
Grassed surface (2 football fields equivalent)	15 000	3 km		
Grassed field (2 football fields equivalent) with 500-seat stand	30 000	5 km		
Single hard surface court	3 000	5 km		
Combi-court surface (x2)	15 000	3 km		
Community Pool	10 000	Variable		

G: Social Facilities required for **Villages** (cont) (Catchment size: 5 000 - 25 000 people)

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
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RECREATION PROVISION (SPORTS AND PARKS) (CONT)

Total provision for all facilities below is approx 0.5 ha/1 000 (ongoing research is being conducted on the desirability of reducing this; current indications are that for users quality is more important than quantity). The land should be consolidated in developing the facilities below. Thresholds are approximate. Approximately 40% of this allocation is for strategic (regional) and district facilities and 60% for community, urban and neighbourhoods parks, play lots, etc.

Local/Neighbourhood Park (includes play equipment)	Total provision for these facilities approximately 0.5 ha/1 000 people	Variable	C	
Play Equipment at other facilities	Optional	Variable	D	Only provided where no parks; placed at e.g. Health Clinics

KEY NOTES:

Most facilities should be on public transport routes/nodes unless otherwise stated

Mobile and satellite services only to be used in isolated situations where there is no alternative and access times would prove excessive otherwise. There should ideally be a central point or structure which is shared by all mobile/periodic services (could be a private or government building)

Alternative fire-fighting equipment deployment where widely spread, low-density development makes conventional services unsuitable

H: Social Facilities required for **Remote Villages** (Catchment size: 500 - 5 000 people), i.e. villages that are more than 20 km from larger settlements

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
HEALTH AND EMERGENCY SERVICES				
Primary Health Clinic	5 000 - 7 000	90% of population served within 5 km [#]	C/ D	May be limited to certain days of the week. [#] Ref.: NDoH Strategic Planning Cluster, March 2006 (updated Nov 2009) Service Transformation Plan Framework – Outline of the Service Transformation Plans for 2010-2025
Mobile/Periodic Health Clinic	Variable	Variable	D	Fixed service preferred to a mobile service; limited days per week
Police Station	Subject to SAPS work study and requirements of the area		D	
SAPS Contact Point	Variable	24 km	C (if no SAPS station)	SAPS Contact Points for use in areas not warranting a fully-fledged station but which are beyond the distance criteria for a fully-fledged police station
Fire bakkie pump deployment point	Variable	Variable	D	If no conventional fire-fighting service within reach (20 minutes)
SOCIAL AND CULTURAL (PUBLIC SERVICE FACILITIES)				
Museums – small	Variable	Variable	D	Site-specific demand
Mobile/Periodic Library	Variable	Variable	D	Needs-based for isolated or special categories; may be linked to schools in the area
CIVIC				
Mobile/Periodic Home Affairs Office	Variable	20 km - 25 km Variable	D	
Mobile/eGov Integrated Service	2 000	5 km if more than 2 000 people within this catchment/alternatively 25 km	C	Mobile and periodic services. Government is advocating a single mobile service for all departments but this not yet achieved
Labour Office	Variable	25 km Urban; 35 km - 50 km Rural; 100 km Sparse	C	May form part of above
Solid Waste Disposal Site and Recycling Depot	n/a	Variable	C	Unless clear guidelines for individual disposal are agreed upon
SOCIAL SERVICES				
ICT Access Point	5 000 - 10 000	At central point	C	Located within schools or at central service point
Post Office/Agency with post boxes	Variable	Variable	D	Central location critical
Post Boxes	Where access required	Variable	R	Only in isolated locations/can be provided in addition to a Post Office where there is no home postal delivery
SASSA Office (Social Service Office)	5 000	40 km (up to 100 km in low-density areas, e.g. Northern Cape)	C	Local/Service offices may be at fixed point or satellite or mobile services. Services are offered from fixed points on one or more days per week from infrastructure such as schools, Thusong Centres, community halls or one-stop development centres
Social Grant Pay Point	40 000	5 km	C	Multiple points within nodal area on fixed day in the month. Mobile may be used for special cases; if beneficiaries within 5 km of banks, Post Offices, Thusong Centres then these services should be used instead
Cemetery (very small)	0.25 ha/1 000	15 km	C	Provide if no alternative facility within 40 km; geographical studies required; assumes no reburials over 30 year period, an annual death rate of 1.6% and that 100% of the dead are buried

H: Social Facilities required for **Remote Villages** (cont)
(Catchment size: 500 - 5 000 people),
i.e. villages that are more than 20 km from larger settlements

FACILITIES	AVERAGE THRESHOLD (POPULATION)	ACCEPTABLE TRAVEL DISTANCE (KM)	PROVISION CRITERIA	COMMENTS
EDUCATION				
Secondary School	2 500	10 km	C	Threshold corresponds to recommended minimum school size of 200 learners; school sports fields can be combined with municipal provision
Primary School	1 000	10 km	C	Threshold corresponds to recommended minimum school size of 135 learners; school sports fields can be combined with municipal provision
Grade R Class at Primary School	1 000	2 km (preferred) - 5 km	D	Linked to Primary School
Small Crèche/Early Childhood Development Centre	Variable	Variable	D	
RECREATION PROVISION (SPORTS AND PARKS) [COMBINATION OF SPORTS FACILITIES AND PARKS SHOULD BE PROMOTED]				
Level surface playing field	Total provision for these facilities approx. 0.56 ha/1 000 people		C	Sharing of facilities between schools and the wider community recommended; preferably sited at or near schools
Single hard surface court			D	
Local/Neighbourhood Park (includes play equipment)	Total provision for these facilities approx. 0.5 ha/1 000 people	Variable	D	
Play Equipment at other facilities	Optional	Variable	C	Only provided where no parks; placed at e.g. Health Clinics

KEY NOTES:

Most facilities should be on public transport routes/nodes unless otherwise stated

Mobile and satellite services only to be used in isolated situations where there is no alternative and access times would prove excessive otherwise; There should ideally be a central point or structure which is shared by all mobile/periodic services (could be a private or government building)

Alternative fire-fighting equipment deployment where widely spread, low-density development makes conventional services unsuitable

It is recommended that where several remote villages fall within a distance catchment area that does not exceed the acceptable travel distance to a particular facility type, a larger facility is shared among these villages. This may be more optimal from an operational and efficiency perspective than providing each village with a smaller facility.

5 Individual Social Facility Provision Guidelines (Access, Thresholds and Site Sizes)



Each of the facility types covered by these guidelines has been given an individual sheet which summarises the information on the guidelines that are applicable to it. For ease of reference the facility types are listed below with the page numbers on which they can be found.

These refer to the overall provision within a settlement and should not be confused with the provision criteria at specific nodes.

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health and emergency services

Tertiary Hospital (L3)

PLANNING

Provincial Department
of Health

IMPLEMENTATION

Provincial Department
of Public Works

POPULATION THRESHOLD	2 400 000 people
ACCESS DISTANCE	Location on key access routes within the metro area is more important
SITE SIZE	Up to 35 ha; design dependent

Description

Provides specialist and sub-specialist care as defined for level 3 services; receives referrals from and provides sub-specialist support to regional hospitals; public sector definition depends on the range of specialities provided (e.g. Nkosi Albert Luthuli Central and King Edward VIII Hospitals).

Threshold Issues

Generally planned for on a national or provincial scale – planning should be aligned through District Municipality IDP or Provincial Spatial Development Framework.

Specialist Health Facilities

These will need to be motivated based on disease statistics and teaching requirements as and when the need is determined. The Department of Health documents appear to indicate that facilities, existing or planned, would be upgraded, expanded or otherwise adapted to meet the need of such specialist requirements. These facilities have a high threshold and long travel distances and may serve patients throughout the province or country, e.g. the Red Cross Children's Hospital or the Groote Schuur heart unit.

health and emergency services

Regional Hospital (L2)

POPULATION THRESHOLD	1 770 000 people
ACCESS DISTANCE	Variable
SITE SIZE	Up to 7 ha; design dependent

PLANNING

Provincial Department of Health

IMPLEMENTATION

Provincial Department of Public Works

Description

Receives referrals from and provides specialist support to a district hospital and provides a specialist service plus diagnostic radiology and anaesthetics (e.g. Prince Mshiyeni Memorial Hospital).

Threshold Issues

Regional scale – planning should be aligned to support the National Department of Health's hierarchy of service provision.

May be required in cities with a lower threshold (900 000+) if access distances are greater than 200 km to a comparable facility elsewhere.

health and emergency services

District Hospital (L1)

PLANNING

Provincial Department
of Health

IMPLEMENTATION

Provincial Department
of Public Works

POPULATION THRESHOLD RANGE	300 000 - 900 000 people
ACCESS DISTANCE	30 km
SITE SIZE	Up to 5 ha; design dependent

Description

Offers range of outpatient and inpatient services and operating theatre/s; receives referrals from and provides generalist support to clinics and community health centres (e.g. Osindisweni Hospital).

Threshold Issues

Provision on a district level – planning should be aligned through District Municipality IDP, or in terms of the Provincial Spatial Development Framework in areas with low population thresholds.

Sharing and clustering – recommended

An L1 Hospital may be clustered with:

- a cemetery/crematorium;
- a primary health care centre;
- a fire station.



health and emergency services

Community Health Centre

Population threshold range	60 000 - 140 000 people
Access distance	90% of population served within 5 km*
Site size	1.5 ha minimum

(*National Department of Health target)

PLANNING

Provincial Department
of Health

IMPLEMENTATION

Provincial Department
of Public Works

Description

Open 24 hours a day, 7 days a week, offering a broad range of primary health care services including observation beds, accident and emergency services, midwifery services, but not surgery under general anaesthesia.

Minimum Requirements

Space for an ARV Clinic has been included. Ratio of one Community Health Centre to eight Primary Health Clinics preferred.

health and emergency services

Primary Health Clinic

PLANNING

Provincial Department
of Health

IMPLEMENTATION

Provincial Department
of Public Works

See table below for site sizes of different clinic prototypes and populations served

POPULATION THRESHOLD RANGE	optimal 40 000 people (range 5 000 - 70 000 people, largely for those not privately insured)
----------------------------	---

ACCESS DISTANCE	90% of population served within 5 km *
-----------------	--

SITE SIZE	0.5 ha (range 0.2 ha - 1.0 ha)
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(*National Department of Health target)

Note: Mobile and Satellite Clinics may be used when the demand is too low or too dispersed for a permanently stationed facility that operates for more than 32 hours per week.

Description

An appropriately equipped permanent facility (government or private) at which a range of primary health care services are provided for at least 8 hours per day and 4 days per week.

Mobile and satellite clinics may supplement these static clinics in areas where the threshold is less than 5 000 people as a temporary measure but their space/land requirements are more flexible and are thus not dealt with here.

Public Clinic Prototypes

CLINIC TYPE	MINIMUM SITE SIZE (HA)	CATCHMENT POPULATION
Small to medium-sized clinic	0.2	5 000 – 20 000
Large clinic (with or without maternity)	0.5	30 000 – 50 000
Extra large clinic (with or without maternity)	1.0	60 000 – 70 000

(National Department of Health 2007)

health and emergency services

Primary Health Clinic

Threshold Issues

Primary health clinics cater largely for the uninsured population (those without medical aid membership or health insurance), thus the socio-economic class of an area and its disease profile will impact on usage rates and demand. Those in the high income bracket or those who have medical insurance mainly make use of private doctors who deliver a similar service to that of a clinic.

In metro areas with high development densities mega-clinics serving a catchment area of 100 000 or more people may be required or may be suitable.

Sharing and clustering — recommended

A primary health clinic may be clustered with:

- a library;
- a primary school;
- a secondary school;
- tertiary education/trade schools;
- a community hall;
- an indoor sports hall;
- neighbourhood and district parks;
- urban agriculture;
- L1 hospital.

Site Requirements

For private facilities – permitted use regulations apply.



health and emergency services

Fire Station

PLANNING

Municipality

IMPLEMENTATION

Municipality

POPULATION THRESHOLD RANGE	100 000 people (indicative only, overriding factor is reach and density)*
ACCESS DISTANCE	8 - 23 minutes response times. Response times and area risk classifications are major considerations for location of fire station (see details overleaf)
SITE SIZE	0.3 ha suburban station 1.2 ha regional headquarters

**In low-density areas the provision of fire-fighting equipment and personnel is often different to that of high density areas, for instance bakkie pumps and part-time volunteers rather than fixed fire stations may be provided, and the particular circumstances in a specific low-density area would determine service provision rather than fixed standards.*

Description

Structure or area for storing fire-fighting apparatus (vehicles and other equipment), and where fire-fighters are stationed. May include limited dormitory facilities and work areas such as meeting rooms, workshop, practical training areas, gymnasium, etc.

Location Factors

Good access to major transport routes – without local traffic congestion to allow for rapid response, i.e. outside the core development area but still nearby. Requires proximity to utilities (power, water, waste reticulation, etc.). Possible co-location with other similar services.

Site Requirements

To be situated on flat land as far as possible or on land that requires minimal reconstructive work, e.g. backfilling, levelling.



health and emergency services

Fire Station

RISK CATEGORIES AND THEIR RESPONSE TIMES		
RISK CATEGORY	BROAD LAND USE / DEVELOPMENT TYPE	REQUIRED RESPONSE TIME
A – High	CBD; extensive commercial and industry	Within 8 minutes
B – Moderate	Limited CBD; smaller commercial or industry	Within 10 minutes
C – Low	Residential (of conventional type)	Within 13 minutes
D – Rural	Vegetation and limited buildings in remote areas	Within 23 minutes
E – Special	Various, including noxious industries, squatter areas, large shopping centres	Must be reached within time associated with development type, but are generally high risk – thus 8 minutes

The above required response times include the provision of 3 minutes for the capturing of the call and mobilising a resource to deal with the reported emergency.

Area Coverage of Fire Station

The table below gives the average area that a fire station can effectively reach based on the average travelling speeds on a road network and a single land use (risk category) for the area being considered. One should always use the criteria for the highest risk category found in the area for calculation purposes.

Risk Category	HECTARES COVERED PER STATION AT AVERAGE SPEEDS OF:		
	Hectare @ 25 km/hour	Hectare @ 35 km/hour	Hectare @ 50 km/hour
A – High	800	1 500	3 000
B – Moderate	1 500	3 000	6 000
C – Low	3 000	6 000	12 000
D – Rural	12 000	24 000	48 000
E – Special	800	1 500	3 000

Source: Based on SABS 10090:2003 Edition 3. Extracted and converted to hectare equivalents from Table 3 – Examples of station areas. Average road-based travel speeds.

Facility Sharing and Clustering – recommended

A fire station may be clustered with:

- a cemetery;
- an L1 hospital;
- a police station.

health and emergency services

Police Station

PLANNING

Municipality

South African
Police Services

IMPLEMENTATION

Municipality

South African
Police Services

POPULATION THRESHOLD	60 000 - 100 000 people
ACCESS DISTANCE	8 km urban/metro; 15 km peri-urban; 24 km rural and settlement type E; settlement types F, G and H subject to SAPS work study and requirements of the area
SITE SIZE	0.1 ha - 1 ha

Description

A building which accommodates police officers and other members of staff of SAPS or the Metro police. Often contains offices, temporary holding cells and interview rooms and may provide living quarters for personnel on-site.

Threshold Issues

To improve visible policing and response times, the provision of one station per 30 000 people is considered desirable by city planners. Current averages are approximately in line with 1:60 000 as proposed by Behrens and Watson (1996) and others.

Location Factors

Good access to community being served. Where areas are beyond 24 km a SAPS Contact Point may be established.

Density and Development Context

Threshold may be reduced in areas of high crime.

Facility Sharing and Clustering – Recommended

A police station may be clustered with:

- a cemetery;
- a fire station.

Other information sources:

Behrens, R. and Watson, V. 1996. Making urban places: Principles and guidelines for layout planning. Cape Town: UCT Press.



social and cultural (public service)

Performing Arts Centre

POPULATION THRESHOLD	50 000 people
ACCESS DISTANCE	10 km - 15 km
SITE SIZE	Site and purpose-specific

Description

Centres providing training for the performing arts and including facilities for performing shows and exhibition of art works at the local level.

Major performing arts centres may be provided on a sub-regional level on a discretionary basis.

Location Factors

Location is very important as the performing arts centres should provide a sense of place to a community and provide a focal point for attracting other activities such as tourism services. Should also be placed so that access by the local community is facilitated.

Key Issue

Possibility of using community halls or converting them to accommodate this function – particularly if they are being underutilised.

PLANNING

Municipality

Provincial Department of
Arts, Culture & Tourism

IMPLEMENTATION

Municipality

Provincial Department of
Arts, Culture & Tourism



social and cultural (public service)

Museum

PLANNING

Municipality

Provincial Department of
Arts, Culture & Tourism

IMPLEMENTATION

Municipality

Provincial Department of
Arts, Culture & Tourism

POPULATION THRESHOLD	Small/medium museum: variable; Large museum (main collections): 500 000 people
ACCESS DISTANCE	Small/medium museum: variable; Large museum (main collections): 30 km
SITE SIZE	Site and purpose-specific

Description

Centres for conservation, study and reflection on heritage and culture, which generally provide visual displays of artefacts and artwork to the public and may have interactive and interpretive exhibits often concentrating on area specific collections.

Location Factors

Location very important as museums often provide a sense of place to a community and provide a focal point for attracting other activities such as tourism services, places of entertainment, etc.

Can be located at libraries and civic centres unless located in a purpose built or historical building or site.

Key Issue

Require an inventory of heritage and cultural sites for their future preservation and development.



social and cultural (public service)

Library

POPULATION THRESHOLD RANGES	Local: 5 000 - 70 000 people; Regional: 200 000 people; Regional (Reference): 450 000
ACCESS DISTANCE	Local: 8 km - 10 km; Regional: 1.5 km; Regional (Reference): 50 km
SITE SIZE – EXAMPLES	0.05 ha (minimum 0.03 ha) Varies depending on facilities provided and if stand-alone building

PLANNING

Municipality

Provincial Department of Arts, Culture & Tourism

IMPLEMENTATION

Municipality

Provincial Department of Arts, Culture & Tourism

Description

Public Libraries provide resources and services in a variety of media to meet the needs of the general public for education, information and personal development. They generally house fiction and non-fiction books for lending and reference purposes as well as having facilities such as study areas, meeting rooms, and may provide the public with access to computers and the internet.

Mobile libraries and container libraries may be used in areas of dispersed demand or to supplement existing services when required. Their space/land requirements are more flexible and are thus not dealt with here. Also, school libraries may be used as outreach points.

Threshold Issues

It is preferable that not more than 70 000 people should be served by a local-type library. Large regional libraries may have thresholds as high as 450 000 people and there would possibly be one or two per metro.

LIBRARY THRESHOLDS	SITE SIZE EXAMPLES
20 000	0.05 ha
40 000	0.1 ha
60 000	0.2 ha
100 000*	0.56 ha

**Libraries of a higher-order such as those housing large reference collections have a threshold of about 100 000 persons and would require 0.56 ha*

(UNESCO - Department Arts and Culture).

See table below for site sizes catering to different population thresholds

social and cultural (public service)

Library

Facility Sharing and Clustering – recommended

A library may be clustered with:

- a primary school;
- a secondary school;
- tertiary education/trade school;
- a community hall;
- a neighbourhood park;
- a primary health care centre;
- a worship centre.

Other information sources:

Department of Arts and Culture, August 2007, Norms and Standards - Phase 3 of 3.



civic services

Civic Centre/City Hall

POPULATION THRESHOLD	500 000 people
ACCESS DISTANCE	Variable
SITE SIZE	1 ha - 2 ha (for example)

PLANNING

Municipality

IMPLEMENTATION

Municipality

Description

Main civic or municipal centre – usually includes a reception area, offices, canteen, ablutions, town hall, meeting rooms and Council Chamber. Could be combined with municipal offices in one complex.

Site Requirements

Depends on the size of the municipality or district being served and whether the offices are a component of a multi-purpose centre.

civic services

Major Public Event Venue

PLANNING

Private

Municipality

IMPLEMENTATION

Private

Municipality

POPULATION THRESHOLD	1 000 000+ people
ACCESS DISTANCE	60 km
SITE SIZE	2 ha - 4 ha (for example)

Description

Large scale public venue capable of hosting international and national events (mainly non-sporting) as well as local exhibitions, conferences, expositions, concerts, etc.

Minimum Requirements

Site and demand-specific — business plan required.

Threshold Issues

Provincial and national demand is also considered for certain events.

Location Factors

Key factor is location on main roads served by public transport routes.



civic services

Home Affairs Office

POPULATION THRESHOLD RANGE	40 000 – 400 000 people
ACCESS DISTANCE	1.5 km or less preferred; 2.5 km maximum to at least one facility category
SITE SIZE	0.006 ha (office space as part of Thusong Centre – PPDC 2008); 0.02 ha or larger if stand-alone building.

[Mobile/periodic Home Affairs Offices to be used if threshold not met]

PLANNING

National Department of Home Affairs

IMPLEMENTATION

Provincial Department of Public Works

See table below for different office prototypes and populations served

Description

Providing a service-delivery point where the public can access Home Affairs services, information and/or transact services.

Home Affairs Office prototypes

HOME AFFAIRS OFFICE TYPE	MINIMUM POPULATION SERVED	MAXIMUM POPULATION SERVED
Regional Office – large	-	200 000
Regional Office – average	-	140 000
District Office – average	80 000	140 000
District Office – small	40 000	80 000
Permanent service point	20 000	40 000
Thusong Service Centre	20 000	40 000

(National Department of Home Affairs, 2009)



civic services

Thusong Centre

PLANNING
Municipality
Provincial Departments
National Government
IMPLEMENTATION
Municipality
Provincial Departments
National Government

Population threshold	1 per Local Municipality (see below for other service centres)
Access distance	1.5 km; maximum 2.5 km
Site size	Varies depending on range of services offered and facilities provided (see overleaf for site size examples); Thusong – minimum floor area of 0.06 ha translates into site area of approximately 0.16 ha - 0.2 ha (PPDC 2008).

Description

Thusong Centres provide information and services to communities in an integrated way. They form a hub within communities at which a multitude of government services and other community services can be accessed. Key anchor services include departments of Home Affairs, of Labour and of Social Development and specifically SASSA Service Offices.

Threshold Issues and Service Hierarchy

Policy regarding Thusongs is currently under review. Expected that a range of centres will be defined for different types of settlements ranging from cities to small towns. Basic access times and service offerings are expected to remain the same. Largely anticipated that a range of staff capacities and building sizes will emerge. Should be linked to different access distances based on how remote the locations are.

Location Factors

Each centre is unique (depending on community needs) and may be located either in a single building or as part of a cluster of buildings. If facilities cannot be provided on one site they should be within a 1 km radius of each other.

It is recommended that pension and other welfare pay points are not provided in stand-alone facilities but are clustered within centres such as these and/or use existing public facilities such as post offices for security purposes. In less-densely populated, low density areas mobile pay points may need to be provided in accessible locations. It is of benefit to users if several services are provided on the same day at the stopping points of these mobile services.

civic services

Thusong Centre

POSSIBLE OFFICE SIZES – INTERNAL FLOOR AREAS ONLY (PPDC 2008)

GOVERNMENT INSTITUTION	OFFICE SIZES
Home Affairs	62 m ²
Social Welfare	42 m ²
Labour	42 m ²
Health	42 m ²
Vehicle Licensing	42 m ²
GCIS Office	42 m ²
Computer Centre	60 m ²
South African Police Services	42 m ²

EXAMPLE OF POSSIBLE SERVICES THAT CAN BE PROVIDED AT A THUSONG CENTRE

THE ARCHIE GUMEDE THUSONG CENTRE KWAZULU-NATAL (EXAMPLE)

Home Affairs	Metro Police
Social Development	Education and Training : Elangeni College
Health	Clinic
GCIS	Post Office (across the road from Centre)
Justice Department	Municipal services
Pension Payout Point	Community Hall
Soup Kitchen	Parliamentary Constituency office
Siyabathanda Special School	TeleCentre
Library	General Services Counter

(Source: www.pmg.org.za/node/19409, Accessed: 2/3/2010)



civic services

Thusong Centre

What are Thusong Service Centres?

Thusong Service Centres are one-stop centres where local, provincial and national government, as well as other sector service-providers, offer services and developmental information to local communities. These centres operate within a framework of Batho Pele principles and values. This means communities around Thusong Service Centres identify services offered by the centre based on their needs. Each centre is different and can either be located in a single building, or be part of a cluster of buildings. The infrastructure is influenced by the services offered, population size and distances between access points in an area. This results in the establishment of hub centres which offer permanent services including, government, economic, community and private sector services, education and skills development, telecommunication, communication and information. Satellite centres and mobiles which are extensions of the hub centre, offer some of the above services according to demand.

What Services are rendered by Thusong Service Centres?

Government departments and others sectors offer information and services at the Thusong Service Centres. However, these differ from centre to centre according to community needs. The types of services you can find include:

- Government Services such as applications for identity documents, passports, death and birth certificates, pensions, welfare grants, unemployment insurance, information on issues such as health, government structures and organisations, labour issues, citizen rights, education, and contact information.
- Telecommunication Services such as: gateway portals, computers, internet, e-mail, information terminals (PITs). This helps communities to use technology to better their lives.
- Education and Skills Development Training Services such as computer training, Adult Basic Education Training (ABET), opening a business, sewing and art.
- Partnership Services such as commercial and community services which include community banking, craft shops, women's clubs and food production programmes.
- Two-way communication between government and citizens. The community can share their views on government programmes, policies and activities. They can make their needs known through izimbizo, community meetings and workshops, youth forums, women's groups, disabled persons' meetings, and meetings of senior citizens.
- Local Economic Development Activities including meetings, workshops, community and commercial businesses in the centres.

Thusong Service Centres are one-stop centres where local, provincial and national government, as well as other sector service-providers, offer services and developmental information to local communities.

Source: www.thusong.gov.za accessed on 2 March 2010



civic services

Labour Office

POPULATION THRESHOLD	Variable
ACCESS DISTANCE	15 km urban; 25 km peri-urban/rural; For Settlement Types F, G and H – 25 km urban, 35 km - 50 km rural and 100 km sparse
SITE SIZE	42 m ² and more

PLANNING

*National Department
of Labour*

IMPLEMENTATION

*Provincial Department
of Labour*

Description

Labour offices are provided to meet the needs of the employed, school leavers and job seekers.

Threshold Issues

Planning is undertaken on a national/provincial basis by government. A range of services and facility sizes is provided.

Location Factors

Locations at central points (preferably within Thusong Centres) and at major public transport interchanges preferred.

civic services

Magistrate's Court

PLANNING

National Department of Justice & Constitutional Development

IMPLEMENTATION

National Department of Justice & Constitutional Development

POPULATION THRESHOLD	Department of Justice considers proximity to users, political issues, case loads of courts and crime hot spots
ACCESS DISTANCE	1.5 km upwards
SITE SIZE	Site size not specified. Locations should be aligned in terms of municipal (currently Magistrate) boundaries;
	Minimum of 1 Regional Court per District Municipality; 1 or more District Courts per Local Municipality

Description

These are the lower courts and the courts of first instance and are at present divided into main seats, branch and periodic courts (2012).

Threshold Issues

Planning is undertaken on a national or provincial basis by government. The departments are currently reviewing the court structure and are in the process of upgrading selected branch and periodic courts to become main seats thus phasing out branch and periodic courts. A process of alignment of the magistrate boundaries with the current municipal boundaries has also been launched.



civic services

Municipal Office

POPULATION THRESHOLD	1 per Local Municipality
ACCESS DISTANCE	Centrally situated within sub-region; 30 km
SITE SIZE	0.3 ha - 1 ha (for example)

PLANNING

Municipality

IMPLEMENTATION

Municipality

Description

Regional offices of municipalities dealing with daily operational issues and needs. In large municipal areas there may often be satellite offices too.



civic services

Prison and Place of Safety

PLANNING
National Department of Correctional Services

IMPLEMENTATION
National Department of Correctional Services

POPULATION THRESHOLD	Highly dependent on criminal profile of communities and workings of justice system
ACCESS DISTANCE	Proximity to Courts important in terms of awaiting-trial prisoners
SITE SIZE	2 ha - 5 ha depending on demand

Description

Places for the detention and imprisonment of convicted criminals and inmates awaiting trial.

Threshold Issues

Planning is undertaken on a national and provincial basis by government. Limited need for general inclusion in planning requirements – developed as required, on the basis of a motivation report but will need to be accommodated on request.

Location Factors

Generally prison facilities are built on a large scale, requiring extensive tracts of land. Due to the sensitivity of communities around the issues of prisons being located nearby or within residential areas, prisons are often located outside high density areas in remote locations.



civic services

Solid Waste Disposal Site and Recycling Depot

POPULATION THRESHOLD

ACCESS DISTANCE

SITE SIZE

Determined by demand and site-specific factors; solid waste disposal sites usually of regional nature

PLANNING

Municipality

IMPLEMENTATION

Municipality

Description

Solid waste disposal sites are usually space intensive. A landfill site with a 20-year lifespan covers approximately 100 ha and should have an 800 m buffer around it.

Can be incorporated within the open space system with careful design (e.g. Mariannhill Landfill Site declared a conservancy).

Landfill sites are essential facilities that must be planned for within the Municipality's Integrated Development Plan.

Require professional engineering advice and environmental impact assessment.
(Source: PPDC 2008)

Recycling Depots — currently only in certain areas and being accommodated through existing structures, for instance at schools, shopping centres, etc. This service is currently dependent on demand and support from the public.

Location Factors

Locating landfill sites is often constrained due to environmental impact and social acceptability.

social services

Community Hall

PLANNING

Municipality

IMPLEMENTATION

Municipality

POPULATION THRESHOLD RANGE	10 000 - 60 000 people
ACCESS DISTANCE	10 km - 15 km; 25 km for Settlement Type G
SITE SIZE	0.2 ha - 0.5 ha

Description

Centre or hall for holding public meetings, training, entertainment and other functions and having a variety of facilities such as a kitchen, toilets, storage space, etc. which should be provided at nominal rates for hire, with rentals tied to socio-economic status of area to provide affordable service.

Community Centres/Halls are generally graded depending on their size and the facilities they offer as A, B, C, D or E-grade community centres. E-grade community centres are the smallest and besides hall space do not offer any additional facilities such as toilets and kitchen, while A-grade community centres are the largest, offering many facilities and may form part of a civic centre. Capacities (people served) for the community centres can vary:

A-grade = 60 000; B-grade=30 000; C-grade = 20 000; D-grade = 15 000; E-grade = 10 000 people.

Alternatively: halls can be divided into two basic categories of 30 000 or 15 000 threshold capacity.

A, B and C-grade halls have kitchens and seating and are thus suitably equipped to host a wide range of events (training, social gatherings, entertainment, etc). D and E-grade halls are less well-equipped and because of limited functionality are being phased out in favour of the higher-order halls.

Higher-order halls could with careful planning have a dual function providing indoor sports facilities and/or be shared with an adjoining school. Depending on the availability of land in an area, the land for community halls may come from the open space land-provision budget.

Threshold Issues

In areas of lower density smaller halls (but with most facilities) could be provided at lower thresholds (i.e. 15 000 to 20 000) so that travel time does not exceed 30 minutes. In higher income areas, although there may be access to private facilities, there is still a need for halls to be provided either at a library or other community facility particularly for domestic workers in the area, etc. who require an affordable venue.

social services

Community Hall

Key Issues

Community halls should as far as possible be built and operated to allow for multi-use of the facilities, for instance not simply meeting rooms but have facilities for training, the performance arts, etc. and be used as venues for periodic pay points for pensions and other welfare payments.

Sharing and clustering — recommended

A community hall may be clustered with:

- a library;
- a primary school;
- a secondary school;
- tertiary education/trade schools;
- an indoor sports hall;
- a sports stadium;
- a local sports field;
- neighbourhood, district and regional parks;
- a swimming pool;
- a primary health care centre;
- a fire station;
- a worship centre.



social services

Children's Home

PLANNING

Private or NGO

IMPLEMENTATION

Private or NGO

POPULATION THRESHOLD

Variable

SITE SIZE

Varied: demand-driven; site-specific
(1 ha – example)

Description

Provides housing for children who have been orphaned, abandoned or placed in care by the government and their caretakers. Such centres are considered homes of last resort – foster care is the preferred vehicle for the care of homeless children.

Threshold Issues

Provision in terms of the development framework and statistics regarding homeless children or children placed in care.

Location Factors and Site Requirements

Generally, smaller homes that house fewer children in a setting that is more like that of a residential family home and clustered to form a homestead is recommended. It is important that the homes are situated within the children's communities rather than in isolated locations.

Planning Issues

Planning for this takes place in terms of permitted use and any planning and motivation are required to be area-specific. Land is often provided from the allocation that is set aside for public housing but should preferably be sourced from a pool of land set aside for civic and social facilities. Building costs in particular are found to be problematic for the service provider. Additional subsidies may be required on top of the normal government grants for operational purposes.

social services

Home for the Aged

POPULATION THRESHOLD

Variable

SITE SIZE

Varied: demand-driven; site-specific
(2 ha – example)

PLANNING

Private or NGO

IMPLEMENTATION

Private or NGO

Description

Provides housing for the aged and may incorporate frail care and nursing facilities.

Government no longer provides funding for establishing facilities but private operators (such as churches or NGOs) may apply for government subsidisation.

Threshold Issues

Provision in terms of the development framework and population statistics regarding the aged. There may be an increasing demand in future and greater intervention required by government as the aged cannot afford private facilities and may receive less support from their families because of the impact of HIV/Aids.

Location Factors

Within residential areas so that residents remain part of their community and are close to shops and other amenities if possible.

Site Requirements

Preferably flat land so as to ensure independent access with wheelchairs, walkers and other mobility aids.



social services

Hospice and Health Centre

PLANNING

Private or NGO

IMPLEMENTATION

Private or NGO

POPULATION THRESHOLD	50 000 people (no current norms, suggested threshold for investigation)
SITE SIZE	Varied: demand-driven; site-specific (0.5 ha – example)

Description

Provides preventive and palliative care outside the normal government-provided health care services.

Threshold Issues

Provision in terms of the development framework and population statistics regarding disease statistics. There may be increasing demand in future and greater intervention required by government because of the impact of HIV/Aids.

Location Factors

Within residential areas so that those requiring treatment have easy access and remain part of their community.

social services

ICT Access Points

POPULATION THRESHOLD RANGE	10 000+ people; 5 000 for Settlement Type H
ACCESS DISTANCE	5 km
SITE SIZE	Suggest incorporation into Libraries, Thusong Centres and Postal Agencies amongst others rather than stand-alone facilities

Description

Provision of access to information and communication technologies (ICT), including internet access, computers and telephones.

PLANNING

Municipality

Provincial Departments

National Government

IMPLEMENTATION

Municipality

Provincial Departments

National Government

social services

Post Office/Agency and Post Boxes

PLANNING

South African
Postal Services

IMPLEMENTATION

South African
Postal Services

POPULATION
THRESHOLD RANGE

10 000 – 20 000 people

ACCESS DISTANCE

5 km - 10 km;

25 km for Settlement Types H and G

SITE SIZE

0.01 ha office space/0.03 ha land

Post Boxes should be provided in addition to a Post Office where there is no home postal delivery; access distance of 2 km.

Description

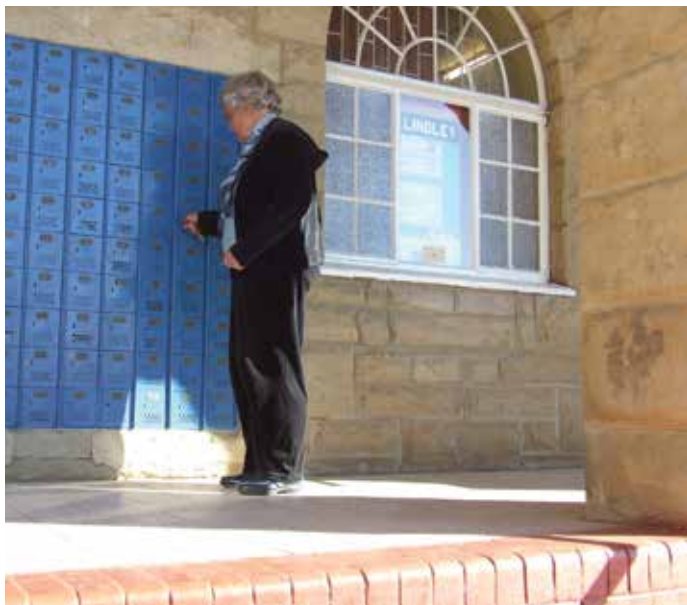
Providing a service delivery point where the public can access Post Office services, information and/or transact services.

Site Requirements

Generally being moved into shopping centres so rentals are becoming a determining factor for size.

Location Factors

Central location critical.



social services

South African Social Security Agency (SASSA) Office and Social Grant Pay Point

POPULATION THRESHOLD	Variable
ACCESS DISTANCE: SASSA	15 km urban; 20 km peri-urban; 40 km rural; up to 100 km in low-density areas (e.g. Northern Cape); 40 km for Settlement Types E, F, G and H
PAY POINTS	5 km
SITE SIZE	Variable, 42 m ² plus for office space or more. Pay Points may need a large area for queuing and/or waiting

PLANNING

South African Social Security Agency

IMPLEMENTATION

South African Social Security Agency

Description

South African Social Security Agency (SASSA) offices and delivery networks that provide a one-stop social grant service through regional, district and local offices around South Africa. SASSA local offices and service points provide the public with facilities for social grants applications. Social Grant Pay Points are those locations at which cash payments of various forms of social grants are made to grant recipients

Site Requirements

Buildings with a predefined set of facilities available on site, such as toilets, drinking water and telephone connections. Offices are mostly rented and vary from church halls, community halls and government buildings but there are cases where payments are made at vacant lots, which is not desirable.

Location Factors

SASSA services should be offered from fixed points for five days per week from infrastructure such as Thusong Centres, community halls or one-stop development centres while mobile offices generally serve rural areas/outlying pockets in cities as special cases.

social services

Cemetery and Crematorium

PLANNING

Private

Municipality

IMPLEMENTATION

Private

Municipality

POPULATION PROVISION AND SITE SIZE FOR CEMETERIES*	Large: 17.2 ha/100 000 people; Medium: 8.8 ha/50 000 people; Small: 4.4 ha/25 000 people; Very small: 0.88 ha/5 000 people
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ACCESS DISTANCE FOR CEMETERIES	Large: 30 km; Medium: 15 km - 30 km; Small and very small: 25 km
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POPULATION PROVISION FOR CREMATORIUMS	200 000+ people
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ACCESS DISTANCE FOR CREMATORIUMS	30 km
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** Assumes that most of the site allows for burials, an annual death rate of 1.6%, gross area per grave of 5.33 m², 40% recycling of graves after 10 years and 30% of recycling of graves after 20 years, and that 90% of the dead are buried. IF recycling of graves is highly efficient the land requirement could be lowered.*

Description

Land zoned "Public Open Space" falling under the jurisdiction of City Parks and set aside specifically for burial purposes, e.g. cemeteries, crematoria, mausoleums.

Site Size

Highly dependent on cultural practices (for instance the acceptability of cremation) and other factors such as the incidence of HIV/Aids. The site selection of suitable land for burials is critical and requires prior geological studies. Careful consideration needs to be given for allowing multi-purpose use of the land such as use as parkland and grazing — if acceptable to community.

Sharing and clustering — recommended

A cemetery may be clustered with:

- a police station;
- a fire station;
- nature conservation;
- an L1 hospital.

social services

Formulae to calculate cemetery size

Step 1 $E = A \times B / 1\,000;$

Step 2 $X = B1 \times C \times D1;$

Step 3 $Y = B2 \times C \times D2;$

Step 4 $Z = X + Y$

[E = Total deaths

A = Total population for which cemetery is planned

B = Average amount of deaths per 1 000 of population per year

B1 = 40% of E = total deaths of children

B2 = 60% of E = total deaths of people over 10 years of age

C = a minimum of 30 years

D1 = 2,37m² being gross area of graves for children

D2 = 5,33m² being gross area of graves for adults

X = need for graves of children

Y = need for graves for adults

Z = total area needed for cemetery]

Gross areas, including pathways and surrounds: 2.37 m² for child's grave; 5.33 m² for adult's grave. eThekweni Municipality uses 2.4 m² x 1.1 m² as a standard grave site size. (Source: PPDC 2008)

NB: The above formulae need to be adapted to take into account the recycling practices of the authority.



social services

Informal Urban Agriculture

PLANNING

Municipality assisted by
Department Agriculture
& Environmental Affairs

IMPLEMENTATION

Private

POPULATION THRESHOLD	Varied: needs-driven
ACCESS DISTANCE	Food gardens should preferably be within walking distance of residential areas that require them
SITE SIZE	Varied: demand-driven, site-specific

Description

Land used for agricultural purposes such as food gardens and livestock farming and typically farmed by urban residents within or close to high density areas.

Key Issues

It is important that there is alignment with national initiatives and that institutional support (training and infrastructure) is provided.

Site Requirements

Should be managed as part of the open space system of a city. It is recommended that an inventory of parcels of suitable vacant or underutilised land be kept. Not all vacant land will prove productive in terms of urban agriculture.

The Department of Education requires land within school sites to be used by the school or community for cultivation of produce; a minimum of 0.3 m² per full-time learner in primary and secondary schools (KwaZulu-Natal Department of Education 2009).

Example of Abalimi Bezekhaya Cape Town: Local township groups consisting of three to eight farmers typically farm plots the size of an average classroom, with each group working between four and 20 plots. Schools were found to provide the ideal marketplace for the selling of surplus produce (Harvest of Hope, 2010).



social services

Informal Urban Agriculture

An example of an agricultural hub which includes a training garden/farm, repair workshop, fresh produce depot, resource centre and offices would require approximately 0.6 ha - 2 ha (PPDC 2008).

A 68 ha site, with 40 ha grazing of which 30 ha is established grazing and 8 ha of kraal facilities (16 holding pens, cattle handling kraal, slaughter house and ablution block) would support 80 cattle and 480 sheep/goats. However, the economic feasibility of such a venture has been questioned, as even if land is provided without cost to participants, it is likely that their operating costs will have to be subsidised (Tshukudu 2003).

Location Factors

May be in intra-urban or peri-urban areas; on the homestead (on-plot) or on land away from the residence (off-plot), on private land (owned or leased) or on public land (parks, along roads, streams and railways) or on semi-public land (grounds of schools and hospitals) (RUAF Foundation, 2010).

Sharing and clustering — recommended

Informal urban agriculture may be clustered with:

- a primary school;
- a secondary school;
- tertiary education/trade schools;
- a community hall;
- neighbourhood, district and regional parks;
- a primary health care centre;
- nature conservation.



social services

Local Market

PLANNING

Private

Municipality

IMPLEMENTATION

Private

Municipality

POPULATION THRESHOLD	5 000 people
ACCESS DISTANCE	Variable
SITE SIZE	Varied: demand-driven, site-specific; 0.02 ha - 4 ha

Description

Accommodates the informal sector and fresh produce sector. Includes a roof, washing areas, lock-up storage for traders, ablution facilities, and refuse area. Some include permanent trading stalls.

Site Requirements

Depends on demand – space required for loading and off-loading; aisles wide enough for delivery carts.

Threshold Issues

Demand depends on socio-economic profile of community (higher demand from lower income but higher income communities also use these). Traders prefer areas with higher thresholds and accessibility.

Location Factors

Planning should include research that confirms a reasonable economic basis for a market. Markets should be strongly connected to outside pedestrian flows to encourage people to walk through the area.

social services

Worship Centre

POPULATION THRESHOLD	3 000 - 6 000 people
ACCESS DISTANCE	Varies depending on demand; 2 km typical maximum
SITE SIZE	0.15 ha - 1 ha

PLANNING

Private or NGO

IMPLEMENTATION

Private or NGO

Description

Formal places of worship.

Threshold Issues

Varies with demand and cultural practices.

Location Factors

Sharing of parking space with other facilities such as schools is a major 'space saver'. Hall space can also be shared.

Sharing and clustering — recommended

A worship centre may be clustered with:

- a library;
- a primary school;
- a secondary school;
- a community hall;
- a neighbourhood park.

Site Requirements

Varies according to specific requirements of denomination and use of buildings, for instance a far larger site is required if there is a religious school attached. A guide is approximately 1 m² to be provided per person.

Development Context

In lower income areas, use is often made of sites or buildings with other uses so that there is no requirement to reserve land unless high land prices would preclude access to land.

No specific site needs to be provided — can convert as required although larger denominations do require large plots which may be difficult to find in developed areas.



education services

Further Education and Tertiary Institutions

PLANNING

Private

National Department of Higher Education

IMPLEMENTATION

Private

Provincial Department of Public Works

National Department of Higher Education

POPULATION THRESHOLD RANGE

ABET and skills training: variable;
 Large tertiary institutions that are not universities: 400 000 people;
 Universities: 1 000 000+ people

ACCESS DISTANCE

ABET and skills training: 25 km;
 Large tertiary institutions that are not universities: 20 km;
 Universities: up to 500 km

SITE SIZE

Very little documented information: site and facility sizes relate to demand, below are merely indicative

FACILITY SIZE

Tertiary institutions that are not universities: 1 ha
 Universities: 8 ha

Description

Higher education – mainly publically funded universities offering traditional, technological or comprehensive training (responsibility of national government); Further Education and Training (FET) Colleges (responsibility of provincial government) and Adult learning centres, Adult Basic Education and Training (ABET), also private sector involvement.



education services

Further Education and Tertiary Institutions

Facility Sharing and Clustering – recommended

A tertiary education institution may be clustered with:

- a library;
- a secondary school;
- a community hall;
- an indoor sports hall;
- a sports stadium;
- local sports fields;
- district and regional parks;
- a swimming pool;
- urban agriculture;
- a primary health care centre.

Threshold Issues

Given the high threshold for higher-level education provision, the distribution and quantity of facilities are generally provincially or nationally determined. A needs analysis for such facility development and a motivation report would be required. Most higher education facilities currently experience pressure to admit greater numbers of students.

Trade and specialist training facilities are likely requirements, which cannot at this stage be quantified. The only guideline that was sourced is 1 facility/30 000 people (Cacadu). Similar parameters for development as outlined for special needs schools are likely to apply.

Other information sources:

Cacadu District Municipality: Spatial Development framework (2007) [Online], available at: www.plett.gov.za [Accessed: February 2007].



education services

Special Education

PLANNING
Private
Provincial Department of Education
National Department of Basic Education
IMPLEMENTATION
Private
Provincial Department of Education
National Department of Basic Education

POPULATION THRESHOLD	Regional demand – needs-driven; World Health Organization estimates between 2.2% to 2.6% of learners disabled or impaired
ACCESS DISTANCE	Variable, preferably 20 km - 25 km
SITE SIZE	
SCHOOL SIZE (MINIMUM AND MAXIMUM CAPACITY)	Site sizes are larger than conventional schools to increase accessibility of the facility and the demand often for residential facilities

Description

Catering for special needs education for the physically and mentally challenged.

Threshold Issues

This type of facility is generally provided on a regional level and use is often made of an existing site zoned for education (out of the subset of total sites required). Educational policy is to accommodate disabled learners in mainstream schooling wherever possible, but for children who require highly specialised care the provision of special needs schools is still supported. As it is proposed by the Department of Basic Education that these special needs schools would become part of district support services to become a resource for all schools in the area, locating special schools near other schools is likely to become increasingly important.

Site and Location Issues

The site is developed to suit the needs of the target group. The key variant is that larger sites are generally needed to develop single-storey buildings that accommodate the needs of the users, and that on-site residential accommodation may be required. Given lower levels of demand, longer travel access times are inevitable because of sparse distribution. Specialist transport is usually provided to one, or more, sites within a city or region.

Other information sources:

Education White Paper 6, July 2001, Special Needs Education: Building an Inclusive Education and Training System, Elsen Directorate Department of Education, Pretoria.

education services

Secondary School

POPULATION THRESHOLD RANGE (OPTIMAL)	12 500 people (for large secondary school); 2 500 people for Settlement Type H
ACCESS DISTANCE	5 km; 10 km for Settlement Type H
SITE SIZE <i>(KwaZulu-Natal Department of Education, Feb 2009)</i>	
NB: Permission from the National Department of Basic Education is required if the site size is smaller than the minimum (see Minimum Requirements below)	Minimum 4.8 ha (including sports fields); If sharing community sports fields – 2.6 ha
SCHOOL SIZE	1 000 learners
CLASS SIZE	40 learners

PLANNING

Private

Provincial Department of Education

IMPLEMENTATION

Private

Provincial Department of Education

See table overleaf for site sizes of different school prototypes (proposed by National Department of Basic Education)

Description

Public and non-public schools offering Grades 8 - 12 (age group 13 - 17).

Minimum Requirements

Permission from the National Department of Basic Education is required if the site size is smaller than the stated minimum. The submission should ideally be supported by concept design plans showing how the minimum requirements of the Department are still being met on the lower site size.

No differences in the level of provision across high and low-density locations, although design standards may differ.

Proposed that land within school site be set aside for use by school or community for cultivation of produce; minimum 0.3 m² per full-time learner in primary and secondary schools (KwaZulu-Natal Department of Education, Feb 2009).

Facility Sharing and Clustering – recommended

Increasingly, the benefits of schools and communities sharing facilities such as sports fields, halls and other facilities are being recognised. Unless a secondary school can share nearby sports facilities (municipal provision) with the community, it should be provided with the basic minimum space for a soccer or rugby field and a space for netball or volley ball (0.9 ha). For effectiveness, this minimum should be doubled.

Sharing of sports fields between schools and with the community is strongly supported but ideally every school should have two sports fields of its own.

education services

Secondary School

A secondary school may be clustered with:

- a library;
- a primary school;
- another secondary school;
- tertiary education/trade schools;
- a community hall;
- a sports stadium;
- local sports fields;
- district and regional parks;
- a swimming pool;
- urban agriculture;
- a primary health care centre;
- a worship centre.

Threshold Issues

Of the total population, approximately 8% is currently likely to be both of secondary school-going age and to be attending secondary school. A population of 12 500 could therefore be served by 1 large secondary school, while an isolated population of 2 500 people may require a small secondary school, but this is not ideal.

In 2008, the then National Department of Education proposed specific minimum and maximum numbers of learners for certain school prototypes and associated with these certain minimum and maximum site sizes (see table below). It advocated 1 000 learners as the maximum number of learners for a secondary school. In the metro context, a secondary school of 1 000 learners is an effective size with respect to land use.

Secondary School Prototypes

SCHOOL TYPE	MINIMUM CAPACITY (no. of learners)	MAXIMUM CAPACITY (no. of learners)	NO. CLASSES per grade	MINIMUM SITE SIZE (ha) – includes sports fields of 0.9 ha	OPTIMUM SITE SIZE (ha) – includes sports fields of 1.8 ha
Small secondary school	200	400	2	2.6	3.9
Medium secondary school	401	600	4	3.2	4.6
Large secondary school	601	1 000	5	4.0	5.5

(National Department of Education 2008)

Small secondary schools would be suitable for areas with low development densities and for schools targeting a specialised, small target group. Medium-sized schools would be appropriate in medium-density areas while large schools are the more appropriate vehicle to manage the backlog of schools in high-density areas. Two-session schooling, while not ideal, may need to be considered.

education services

Secondary School

Density and Development Context

Residential densities are a critical factor in the provision of accessible facilities to communities. The following table provides illustrative values for a secondary school of 1 000 learners for a local community of 12 500 people (generally the secondary school population constitutes on average 8% of the total population and household sizes are assumed to be an average of four people).

Currently there is a dropout rate of approximately 30% of learners in the age group 16 to 18. Once areas achieve greater attendance in this age group, well located schools may need to expand to accommodate more learners and thus exceed the former National Department of Education norm.

Accessibility standards are indicative only since consumer choice and increasing levels of mobility result in people choosing to use facilities outside their local community. In addition, few areas have regular land use patterns and shapes and facilities that are evenly distributed.

TYPICAL RESIDENTIAL NEIGHBOURHOOD DENSITIES* REQUIRED TO ACHIEVE CERTAIN ACCESS DISTANCES FOR A 1 000-LEARNER SECONDARY SCHOOL

Persons per ha (ppha)/Dwelling units per ha (du/ha)	Distance (km)
125 ppha/31 du/ha	0.5
31 ppha/7 - 8 du/ha	1.0
3 ppha/3 - 4 du/ha	1.5

(*Number of residents per hectare within residential areas plus internal distribution roads, local shops, schools, service facilities, parks and open space serving only local needs)

Other information sources:

The 'Red Book' – Guidelines for Human Settlement Planning and Design. 2000. (Available free online at www.csir.co.za/Built_environment/RedBook/)

Government Gazette, 21 November 2008, Notice 1439 of 2008, Department of Education, South African Schools Act 84 of 1996, Calls for comments on national minimum uniform standards for school infrastructure.



education services

Primary School

PLANNING
Private
Provincial Department of Education
IMPLEMENTATION
Private
Provincial Department of Education

See table overleaf for site sizes of different school types (proposed by National Dept. of Education)

POPULATION THRESHOLD RANGE (OPTIMAL)	7 000 people (for large primary school); 1 000 people for Settlement Type H
ACCESS DISTANCE	5 km; 10 km for Settlement Type H
SITE SIZE <i>(KwaZulu-Natal Department of Education Feb 2009)</i>	Minimum 2.8 ha (including sports fields); If sharing community sports fields – 1.4 ha/two primary schools, each of 1.4 ha and sharing sports ground of 2.0 ha – 4.8 ha
SCHOOL SIZE	960 learners for a threshold of 7 000 people
CLASS SIZE	20 - 30 learners – Grade R 40 learners – other grades

Description

Public and non-public schools offering Grades R – 7 (age group 5 - 12).

Minimum Requirements

Smaller site sizes than the stated minimums may be desirable and achievable but permission from the National Department of Basic Education is then required. Such submissions for smaller site sizes should ideally be supported by concept design plans showing how the minimum requirements of the Department are still being met on the smaller site size.

No differences in the level of provision across high-density and low-density locations, although design standards may differ.



education services

Primary School

Proposed that land within the school site be set aside for use by school or community for cultivation of produce; minimum 0.3 m² per full-time learner in primary and secondary schools (*KwaZulu-Natal Department of Education, Feb 2009*).

Facility Sharing and Clustering – recommended

Increasingly, the benefits of schools and communities sharing facilities such as sports fields, halls and other facilities are being recognised. Unless a primary school can share nearby sports facilities with another primary school or with the community (municipal provision), it should be provided with the basic minimum space for a soccer or rugby field and space for netball or volley ball (0.9 ha). For effectiveness, this minimum should be doubled. Sharing of sports fields between schools and with the community is strongly supported, but ideally every school should have two sports fields of its own.

Locating primary and high schools in close proximity to each other is not acceptable to all communities.

A primary school may be clustered with:

- a library;
- another primary school;
- a secondary school;
- a community hall;
- local sports fields;
- neighbourhood and district parks;
- a swimming pool;
- urban agriculture;
- a primary health care centre;
- a worship centre.

Threshold Issues

Of the total population, about 14% is of primary school-going age; therefore a large-sized primary school of about 960 learners would serve a population of 7 000. A population of 4 000 to 4 500 would support a medium-sized school of 600 learners.

The then National Department of Education proposed specific minimum and maximum numbers of learners for certain school prototypes and associated with these certain minimum and maximum site sizes (see table overleaf). It advocates 620 learners as an optimal primary school size.



education services

Primary School

Proposed National Primary School Types

SCHOOL PROTOTYPES	MINIMUM CAPACITY (no. of learners)	MAXIMUM CAPACITY (no. of learners)	NO. CLASSES per grade	MINIMUM SITE SIZE (ha) – includes sports fields of 0.9 ha	OPTIMUM SITE SIZE (ha) – includes sports fields of 1.8 ha
Small primary school	135	310	1	1.9	3.2
Medium primary school	311	620	2	2.8	4.4
Large primary school	621	930	3	3.5	6.2

(National Department of Education, 2008)

With respect to the above, the small primary schools would be suitable for areas with low development densities and for schools targeting a specialised small target group. Medium-sized schools would be appropriate in medium-density areas while large schools are the more appropriate vehicle to manage the backlog of schools in high-density areas. In the metro context, a primary school of approximately 960 learners is a more effective size with respect to land use and distribution.

Two-session schooling, while not ideal, may need to be considered.

Density and Development Context

Residential densities are a critical factor in the provision of accessible facilities to communities. The following table provides illustrative access distances for a primary school of 960 learners serving a local community of 7 000 people (generally primary school population constitutes an average of 14% of the total population and household sizes are assumed to be an average of four people).

Accessibility standards are indicative only since consumer choice and increasing levels of mobility result in people choosing to use facilities outside their local community. In addition few areas have regular land use patterns and shapes and facilities that are evenly distributed.

TYPICAL RESIDENTIAL NEIGHBOURHOOD DENSITIES* REQUIRED TO ACHIEVE CERTAIN ACCESS DISTANCES FOR A 960-LEARNER PRIMARY SCHOOL

PERSONS PER HA (PPHA)/ DWELLING UNITS PER HA (DU/HA)	DISTANCE (KM)
65 ppha/16 du/ha	0.5
16 ppha/4 du/ha	1.0
7 ppha/1.8 du/ha	1.5

*The residents per hectare within residential areas plus internal distribution roads, local shops, schools, service facilities, parks and open space serving only local needs

Other information sources:

The 'Red Book' – Guidelines for Human Settlement Planning and Design. 2000. (available free online at www.csir.co.za/Built_environment/RedBook/)

Government Gazette, 21 November 2008, Notice 1439 of 2008, Department of Education, South African Schools Act 84 of 1996, Calls for comments on national minimum uniform standards for school infrastructure

education services

Grade R Early Childhood Development (ECD)

GRADE R
Class of 20 children (5 - 6 years old) preferably as part of a primary school

POPULATION THRESHOLD 1 class per 1 000 people

ACCESS DISTANCE 2 km preferred; 5 km

SITE SIZE See National Department of Education guidelines for Primary Schools

FACILITY SIZE See National Department of Education guidelines for Primary Schools

PLANNING

Private

Provincial Department of Education

IMPLEMENTATION

Private

Provincial Department of Education

Description

Grade R is a compulsory pre-school year for learners aged 5 - 6 years and critically prepares children for Grade 1 and ensures school readiness.

Threshold Issues

Demand is influenced by the age profile of the community.

Location Factors

Same as for Primary Schools. Important considerations include avoiding high levels of traffic and socially unacceptable behaviours (such as from bars or taverns) in the near vicinity.

Other information sources:

The 'Red Book' – Guidelines for Human Settlement Planning and Design. 2000. (available free online at www.csir.co.za/Built_environment/RedBook/)

Department of Social Development and UNICEF. May 2009. Guidelines for early childhood development services [Online], available at: www.info.gov.za/view/DownloadFileAction?id=70066 [Accessed on: 12 March 2010].

Government Gazette, 21 November 2008, Notice 1439 of 2008, Department of Education, South Africa Schools Act 84 of 1996, Calls for comments on national minimum uniform standards for school infrastructure.



education services

Crèche Early Childhood Development (ECD)

PLANNING

Private

IMPLEMENTATION

Private

CRÈCHE

Small (capacity: 35 children younger than 5 years)
Large (capacity: 35 - 150 children younger than 5 years)

POPULATION THRESHOLD

(demand highly dependent on age structure of community and usage rates) 2 400 - 3 000 people
Higher income areas may require fewer facilities

ACCESS DISTANCE

2 km

SITE SIZE

Varies but a minimum of 0.02 ha could accommodate 100 children;

No special allocation of land required, requires registration and permitted use permission

FACILITY SIZE

(National Department of Social Development)

Indoor play area – at least 1.5 m² per child;

Outdoor play area – 2 m² per child; If there is no outside space, 1 m² per child must be added to indoor area;

Where crèches have small play area, they should preferably be in close proximity to open play areas/parks;

If over 50 children enrolled full day then separate office, sickbays and staffroom required

Description

Provides a programme for the care of more than six young children - can include day-care centre, crèche, nursery school, play school and after-care.

Threshold Issues

Demand is very dependent on social structures within communities and may vary widely.

Location Factors

Important considerations include avoiding high levels of traffic and socially unacceptable behaviours (such as from bars or taverns) in the near vicinity. Clustering in a community precinct is advisable. Where land is scarce, explore options of having crèche on nearest school premises with Department of Education.

Other information sources:

The 'Red Book' – Guidelines for Human Settlement Planning and Design. 2000. (available free online at www.csir.co.za/Built_environment/RedBook/)

Department of Social Development and UNICEF. May 2009. Guidelines for early childhood development services [Online], available at: www.info.gov.za/view/DownloadFileAction?id=70066 [Accessed on: 12 March 2010].

Draft Policy on Early Childhood Development, City of Cape Town 2010.

education services

Resource Hub and Care Centre Early Childhood Development (ECD)

RESOURCE CENTRE

A facility catering for 250 - 400 children

POPULATION THRESHOLD

20 000 people

(demand highly dependent on age structure of community and usage rates)

ACCESS DISTANCE

5 km

In addition to a resource centre, 6 - 8 small crèches are required to cater for an additional 300 children to fully provide for 20 000 people.

If 400 children per facility cannot be achieved for any reason, may need to increase the number of small crèches in the vicinity.

SITE SIZE

Approx 0.1 ha. Generally requires a minimum of 0.02 ha per 100 children

FACILITY SIZE

(National Department of Social Development)

Indoor play area – at least 1.5 m² per child;
Outdoor play area – 2 m² per child;
If no outside space, 1 m² per child must be added to indoor area

PLANNING

Municipality

IMPLEMENTATION

Municipality

Description

A facility equipped for the care and development of children less than five years of age. Such centres encompass care facilities, provide a centre for outreach services to the community and surrounding smaller crèches, and acts as a training and resource centre with respect to ECD in the community.

Threshold Issues

Demand is dependent on social structures within communities and may vary widely. This is a critical component to improving education in society and services should be more universally and affordably available.

Location Factors

Important considerations include avoiding high levels of traffic and socially unacceptable behaviours (such as from bars or taverns) in the near vicinity.

Other information sources:

The 'Red Book' – Guidelines for Human Settlement Planning and Design. 2000. (available free online at www.csir.co.za/Built_environment/RedBook/)

Department of Social Development and UNICEF. May 2009. Guidelines for early childhood development services [Online], available at: www.info.gov.za/view/DownloadFileAction?id=70066 [Accessed on: 12 March 2010].

Government Gazette, 21 November 2008, Notice 1439 of 2008, Department of Education, South Africa Schools Act 84 of 1996, Calls for comments on national minimum uniform standards for school infrastructure.

parks and recreation services

Public Open Space Types and Definitions

NB: In this report, standards have only been provided for the public open space components in respect of:

- Parks (District and Community including neighbourhood parks);
- Sports Fields and Facilities; and,
- Cemeteries (see facility sheet under Social Services Sector).

Definition of Open Space — Public open space that is provided for the benefit and use of the public. Provision of open space within housing complexes can, in addition to sports facilities and parks, also include cemeteries, detention ponds, nature reserves, river corridors, conservation areas, mountains and road reserves. Although providing visual relief, the latter group of uses is not included in the provision rates specified on the following pages for park space, i.e. this provision is over and above park space provision.

parks and recreation services

Parks

GENERAL PROVISION	0.5 ha* per 1 000 people		
	Three levels of provision	Allocation of total provision/1 000 people	Access distance
HIERARCHY OF PARK TYPES	Neighbourhood Parks	0.3 ha*	(1 km) or 20 minutes walk
	Community Parks		
	District/ Regional Parks	0.2 ha*	10 km or 15 minutes travel time by public transport

* See Key Issues below

In low-density areas formal park space may not be required as there are plentiful informal open space areas and there may be other more important demands on public funding.

PLANNING

Municipality

IMPLEMENTATION

Municipality

See table overleaf for site sizes of different park prototypes, possible thresholds and catchment areas

Descriptions

Parks — Landscaped open space with recreational facilities which serve the public. May include passive or active recreational areas but currently excludes sports fields.

Neighbourhood Parks (including pocket parks, public squares and urban parks) are smaller park spaces serving the immediate local community/neighbourhood (within walking distance); focused on informal recreation including play equipment and kick-about areas.

Community Parks are larger landscaped park spaces with informal and formal recreational facilities – generally multifunctional and serving several surrounding local communities or suburbs.

District/Regional Parks are large-scale multi-functional parks, meeting the wide ranging needs of the district/regional community and preserving unique and often extensive landscapes. Some may be considered to be Strategic Parks, such as botanical gardens.

Key Issues

The provision ratios provided in the table above (marked with *) could be lowered if parks are clustered with sports fields. The multi-use of parks also leads to increased levels of security and maintenance in general (Essenwood Park's Flea Market, eThekweni is a good example of this).

The rural community supports the provision of play equipment at other social facilities such as schools and libraries even if actual parks are not provided (CSIR Park Survey conducted in eThekweni in 2009).

The survey also indicated that if parks cannot be well-maintained and proper provision made for them, people would prefer to have access to fewer but larger parks that are better maintained and secure rather than being provided with many small parks that are unkept and that lack facilities.

parks and recreation services

Parks

Illustrative Provision of Parks for 60 000 People

POSSIBLE NUMBER OF NEIGHBOURHOOD AND COMMUNITY PARKS THAT CAN BE PROVIDED FOR 60 000 PEOPLE AT 0.3 HA PER 1 000 PEOPLE AT DIFFERENT LEVELS OF PROVISION

Park type	Threshold level at which provided	Ha/One facility (optimum size - ha)	Number of parks
Neighbourhood – small	3 000 people	1.0	10
Neighbourhood – large	15 000 people	1.5	3
Community Parks	60 000 people	3.5	1

At a district level, a further 12 ha can be provided for 60 000 people (based on the 0.2 ha/1 000 allocation).

Examples of Park Prototypes

PARK HIERARCHY	PARK TYPE	MINIMUM SITE SIZE (HA)	RANGE OF SITE SIZES (HA)	CATCHMENT AREA (KM)
Neighbourhood Parks	Play/pocket park	0.04	0.1	0.5
	Playground (including play equipment)	0.4	1.0	0.5
	Local/ neighbourhood	0.8	2.0	0.75
Community Parks		1.5	8 - 20	1.5 - 3
District/Regional Parks		2	40	>10

(Source: PPDC, the 'Red Book' and others)



parks and recreation services

Parks

Sharing and clustering — recommended

A neighbourhood park may be clustered with:

- a library;
- a primary school;
- a community hall;
- a local sports field;
- district and regional parks;
- urban agriculture;
- a primary health care centre;
- a fire station;
- a worship centre;
- a nature conservation area.

A district park may be clustered with:

- a primary school;
- a secondary school;
- tertiary education/trade schools;
- a community hall;
- an indoor sports hall;
- a sports stadium;
- a local sports field (including multi-purpose outdoor courts);

A regional park may be clustered with:

- a secondary school;
- tertiary education/trade schools;
- a community hall;
- an indoor sports hall;
- a sports stadium;
- a local sports field (including multi-purpose outdoor courts);
- a neighbourhood park;
- a swimming pool;
- urban agriculture;
- a fire station;
- a nature conservation area.



parks and recreation services

Sports and Recreation

Overall Allocations for Sports Fields and Facilities

PLANNING

Municipality

IMPLEMENTATION

Municipality

See table overleaf for typical facilities that can be provided for 60 000 people at this rate of provision

0.56 ha per 1 000 people
An additional 0.3 ha per 1 000 in metropolitan areas for higher-order facilities

GENERAL PROVISION

POSSIBLE HIERARCHY OF PROVISION – in certain contexts preferable to accumulate and provide higher-order facilities to greater population

(Source: CPA 1989 and CSIR 2007)

Scale and level of provision	Proportional allocation of total provision/ 1 000	Threshold (no. of people)
Neighbourhood	0.23 ha	3 000
Community/ Sub-district	0.21 ha	15 000
District/ Sub-regional	0.12 ha	60 000
Metro/Regional	0.3 ha - 0.4 ha	120 000

3 km - 10 km local facilities

ACCESS DISTANCE

10 km - 50 km regional facilities

Description

Active recreation areas including formally provided and maintained playing fields for soccer, rugby, hockey, etc.; playing courts; indoor sports halls and stadiums. May include ablution facilities, seating, parking, tuck shop and club house.

Sharing with Schools

The use of school facilities by the general public in areas where there is a shortage of sports and recreation facilities may alleviate shortages and improve maintenance and control issues. However, in these areas it is likely that schools will themselves be lacking their own sports fields and facilities and will require access to those provided to the general public. Newly built facilities such as multi-purpose sports halls and complexes that lie adjacent to, close to, or are part of school properties allow for cost and land savings.

Sports Facility Types

In a metropolitan area it is recommended that for each 120 000 persons, a cluster of various sports facility types should be upgraded to a regional facility, i.e. a major sports complex with floodlight facilities and an Olympic size swimming pool or, where appropriate, a water sports centre.

The table overleaf gives an example of the number of sports facilities of various scales that can be developed given a 0.56 ha/1 000 persons land allocation for sports and recreation for a total population of 60 000 people.

parks and recreation services

Sports and Recreation

Overall Allocations for Sports Fields and Facilities

This allocation excludes land provision for community halls, but could include sports halls and other small-scale covered facilities as part of the land allocation.

POSSIBLE NUMBER OF OUTDOOR SPORTS FACILITIES OR EQUIVALENTS* THAT CAN BE PROVIDED FOR 60 000 PEOPLE AT 0.56 HA PER 1 000 PEOPLE AT DIFFERENT LEVELS OF PROVISION

Sports facility types	Ha/ One facility	Number for neighbourhood	Number for community/ sub-district	Number for district/ sub-regional	Total number
Soccer practice fields	0.55	20	4	0	24
Soccer fields with 500-spectator pavilion	1.5	0	4	4	8
Stadium (soccer field, athletics track and pavilion for 3 000)	3.0	0	0	1	1
Tennis courts	0.065	10	8	2	20
Combi-court	0.065	20	16	0	36
1 cricket oval/1 baseball/2 softball fields	1.6	0	2	1	3
Netball fields	0.065	10	0	2	12
Swimming pools (12.5 m - 25 m)	0.18	0	0	1	1

(Source: CPA 1989 and adapted by CSIR 2007 and 2010)

* *Equivalents: the type of facilities provided would depend on community needs and participation patterns, thus these facility types are not prescriptive but simply demonstrative and any other equivalent facility types in terms of field sizes can be substituted depending on the development context. See below for formal sports field dimensions for common outdoor sports fields.*

Formal Sports Fields Dimensions for Common Outdoor Sports Fields

(Note – not strictly required for informal sporting activities)

SPORTING CODE	FORMAL FIELD DIMENSIONS
Soccer	65 m x 105 m (6 825m ²)
Rugby	69 m x 125 m (8 625m ²)
Cricket – oval	128 m x 128 m (16 384m ²)
Hockey	50 m x 87 m (4 350 m ²)
Volleyball	9 m x 18 m (162 m ²)
Basketball	14 m x 26 m (364 m ²)
Netball	15 m x 30 m (450 m ²)

(The 'Red Book' Chapter 5.4, p11)

parks and recreation services

Sports and Recreation

Overall Allocations for Sports Fields and Facilities

Specific Sport Infrastructure Types

TYPE OF SPORTS FACILITY	TYPICAL THRESHOLD (no. of people)	SITE SIZE (ha)	DESCRIPTION
<i>General facilities provided for from the 0.56 ha budget</i>			
Multi-purpose sports halls (see table below for details)	15 000	0.15	Hall for indoor sports, such as badminton, hockey, basketball, etc. and other recreational purposes
Swimming pools	60 000	0.18	Minimum for pool of dimensions 12.5 m x 25 m
Sports complexes	60 000	1.5 - 2.5	Grouping of fields and/or sports facilities
<i>Higher-order facilities provided for from the 0.3/0.4 ha accumulated budget</i>			
Sports stadiums	200 000	3.0	With athletics track and 3 000-spectator pavilion
Regional sports arenas (indoor sports halls)	250 000 - 500 000	0.5	Large-scale indoor arena, may also host non-sporting events
International sports complex	1 500 000	3.0	Capable of hosting national, international and special events



parks and recreation services

Sports and Recreation

Overall Allocations for Sports Fields and Facilities

Sharing and clustering – recommended

An indoor sports hall may be clustered with:

- tertiary education/trade schools;
- a community hall;
- a sports stadium;
- a local sports field (including multi-purpose outdoor courts);
- district and regional parks;
- a swimming pool;
- a primary health care centre.

A local sports field (including multi-purpose outdoor courts) may be clustered with:

- a primary school;
- a secondary school;
- tertiary education/trade schools;
- a community hall;
- an indoor sports hall;
- a sports stadium;
- neighbourhood, district and regional parks;
- a swimming pool.

A sports stadium may be clustered with:

- a secondary school;
- tertiary education/trade schools;
- a community hall;
- an indoor sports hall;
- a local sports field (including multi-purpose outdoor courts);
- district and regional parks;
- a swimming pool.

A swimming pool may be clustered with:

- a primary school;
- a secondary school;
- tertiary education/trade schools;
- a community hall;
- an indoor sports hall;
- a sports stadium;
- a local sports field (including multi-purpose outdoor courts);
- district and regional parks;
- a fire station.



parks and recreation services

Sports and Recreation

Overall Allocations for Sports Fields and Facilities

Multi-purpose Sports Halls – Building Sizes and Capacities

SPORTS HALL configuration*	TYPICAL THRESHOLD (no. of people)	MINIMUM HALL AREA (ha)	BUILDING SIZE (ha)**	DESCRIPTION
Single-court hall	<15 000	0.018	0.042 (no stage) 0.054 (with stage)	Not recommended – limited multi-purpose potential; audience capacity 180
Two-court hall	<15 000	0.036	0.072	Audience capacity >300
Three-court hall	–	0.0486		Not recommended unless site area restricted as four court hall is only 20% larger but far greater potential for range sports
Four-court hall	15 000 - 25 000 [^]	0.0594	0.094	Good size for range of sports [#] , sufficient size for school of 400 to 1 100 pupils
Six-court hall	25 000 - 50 000 [^]	0.0918		
Eight-court hall	50 000 - 65 000 [^]	0.1221		Increased ceiling height demands; for sports with limited space requirements (e.g. table tennis) allows for 1 000 seated spectators; often used for non-sports events
Nine-court hall		0.1377		More scope for indoor hockey, football (six-a-side), handball, athletics and gymnastics
Twelve-court hall		0.1782		Small regional arena and spectator venue for local competitions; over 700 seated spectators for e.g. handball, hockey but more for other sports and entertainment

* Conventionally configured in terms of badminton court dimensions as this is generally the most stringent code operating in these types of facilities

** Includes space for storage, ablution facilities, changing areas and stage

[#] Can house with alternative configurations: four badminton courts, one basketball court, four cricket nets, two gymnastic floors, one indoor hockey pitch, two judo floors, six trampolines, four table tennis tables, one volleyball court

[^] Typical threshold levels sourced from *The Government of the Hong Kong Special Administrative Region (2006)*

Source: *Sport England (2010)* and as followed by *National Department of Sport and Recreation, South Africa (2008)*

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6 Main References and Related Material



Several different sources were used in the compilation of this publication, but the main, and in the CSIR's view the most applicable and comprehensive, are:

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Appendix A

Matrix of cluster potential of mainly local facilities

	Compatible facilities										Compatible facilities									
Library	Primary school	Secondary school	Tertiary education/Trade schools	Community centre	Indoor sports hall	Sports stadium	Local sports field including multi-purpose outdoor courts	Parks: Neighbourhood	Parks: District	Parks: Regional	Swimming pool (25 m - 50 m)	Urban agriculture	Cemetery/Crematorium	Primary health care centre	L1 Hospital	Police station	Fire station	Worship centre	Nature conservation area	
Library																				Library
Primary school																				Primary school
Secondary school																				Secondary school
Tertiary education/Trade schools																				Tertiary education/trade schools
Community centre																				Community centre
Indoor sports hall																				Indoor sports hall
Sports stadium																				Sports stadium
Local sports field including multi-purpose outdoor courts																				Local sports field incl. multi-purpose outdoor courts
Parks: Neighbourhood																				Parks: Neighbourhood
Parks: District																				Parks: District
Parks: Regional																				Parks: Regional
Swimming pool (25 m - 50 m)																				Swimming pool (25 m - 50 m)
Urban agriculture																				Urban agriculture
Cemetery/Crematorium																				Cemetery/Crematorium
Primary health care centre																				Primary health care centre
L1 Hospital																				L1 Hospital
Police station																				Police station
Fire station																				Fire station
Worship centre																				Worship centre
Nature conservation area																				Nature conservation area

Appendix B

Matrix of functional potential for multiple-use of social facilities

Primary function of the facility	Potential secondary functions									
	Library	Community centre	Worship centre	School	Sports hall	Sports stadium	Local sports field	Multi-purpose outdoor court	Nature conservation	Primary health care centre
Place to study	●	●		●						
Meetings/social – small group	●	●	●	●					●	
Gatherings – large group		●	●		●	●				
Pension pay out	●	●								
Adult training facilities	●	●		●						
Counselling centre	●	●	●	●	●					
Municipal information sessions	●	●	●	●	●	●				
Religious services		●	●	●	●	●				
Prayer meetings	●	●	●	●						
Home Affairs (periodic)		●								
Social Welfare (periodic)	●	●								
Child Welfare (periodic)	●	●		●						
Feeding scheme	●	●	●	●						
Legal aid	●	●	●							
Overflow sports for schools				●	●	●	●			
Inter-school events				●	●	●	●			
Bazaars and fetes		●	●	●	●	●	●			
ICT access	●	●		●	●					
Play equipment	●	●		●						

Notes

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