General

690.1.00 Car parking shall be provided, either on-site or immediately adjacent to the site.

690.2.00 The following guidelines are intended for use in the absence of a relevant Local Council car parking code. The parking requirements stated in this document should be regarded as an absolute minimum. A parking study is desirable to determine the site-specific rates of parking provision.

Car Parking Requirements

690.3.00 The following car parking requirements are based on the results of surveys in a number of hospitals. The formulae for calculating the required number of parking spaces are based on a premise that different types of car park users at hospitals have peak demands at different times. These requirements do not include car parking for emergency facilities.

690.4.00 The car parking requirements shall be taken as a maximum result from the two formulae (one for morning and one for afternoon conditions).

690.5.00 City conditions:

\[
Pm = 0.8 \times Cpt \times Sm + 0.6 \times Ssm + 0.1 \times Bp + 0.2 \times Bm + 0.2 \times Bd + 1.3 \times DSo
\]

\[
Pa = 0.8 \times Cpt \times Sa + 0.6 \times Ssa + 0.2 \times Bp + 0.3 \times Bm + 0.15 \times Bd + 1.0 \times Dso
\]

690.6.00 Suburban and country conditions:

\[
Pm = 0.9 \times Sm + 0.7 \times Ssm + 0.2 \times Bp + 0.3 \times Bm + 0.4 \times Bd + 1.5 \times DSo
\]

\[
Pa = 0.9 \times Sa + 0.7 \times Ssa + 0.3 \times Bp + 0.4 \times Bm + 0.25 \times Bd + 1.5 \times Dso
\]

690.7.00 Explanation of Codes:

\begin{itemize}
  \item \textbf{Pm} - required number of parking spaces during the morning peak
  \item \textbf{Pa} - required number of parking spaces during the afternoon peak
  \item \textbf{Sm} - number of staff during the morning peak (typically between 10.00 am and 11.00 am), including visiting doctors
  \item \textbf{Sa} - number of staff during the afternoon peak (such as during the nursing shift changeover, both morning and afternoon nursing shifts counted), including visiting doctors and medical research staff
  \item \textbf{Ssm and Ssa} - number of medical and nursing students present during the morning and afternoon peaks respectively
  \item \textbf{Cpt} - coefficient of public transport provision - 0.9 if a public transport node such as a bus/rail interchange is located within 250 m from the facility boundary, otherwise 1.0
  \item \textbf{Bp} - number of beds, all patients except maternity patients and children patients
  \item \textbf{Bm} - number of maternity and children beds
  \item \textbf{Bd} - number of beds or recliners for day patients
  \item \textbf{Dso} - number of effective full time doctors and specialists treating Outpatients including Community and Allied Health, Physiotherapy and Imaging.
\end{itemize}

690.8.00 In restrained conditions, it is possible to provide lower standard overflow parking (such as on a surface such as gravel) for the short period of nurses
shift changeover. The number of these spaces may be calculated as 0.8 (Sa-Sm) for city conditions and 0.9 (Sa-Sm) for suburban and country conditions.

690.9.00 In addition to the above requirements, a time restricted set down / pick up area is to be provided near the facility entry. The recommended number of spaces is:

\[ P_{sp} = 0.01 \times (B_p + B_m) + 0.5 \times B_d \]

* (Bp+Bm) rounded up to the nearest hundred of beds

It is desirable that the drop off/pick-up area be protected from bad weather conditions.

**Emergency Access and Parking**

690.10.00 A drop off/pick-up area shall be provided near the entry to the Emergency Unit. Emergency parking should be separated from the staff, patient and visitor car parking areas and be as close as practicable to the Emergency Unit. The number of parking spaces shall be determined based on the likely throughput.

**Bicycle and Motorcycle Parking**

690.11.00 Bicycle parking spaces shall be provided at a rate of one space per five car parking spaces for the first 100 car parking spaces or part thereof, plus two additional bicycle parking spaces for each additional 100 car parking spaces or part thereof.

Motorcycle parking spaces shall be provided at a rate of one space per 15 car parking spaces for the first 100 car parking spaces or part thereof plus one additional motorcycle parking space for each additional 100 parking spaces or part thereof.

**Design Issues**

690.12.00 Due to a difference in the parking demand patterns between hospital staff, patients and visitors and in order to benefit from their overlapping demand, a single parking area is preferred to a number of parking areas. Design of car parking areas shall conform with the requirements of the Australian Standard 2890.1.

690.13.00 Clear and conspicuous signposting shall be erected on approaches to the facility so as to direct incoming traffic to appropriate parking areas. Directional signs and linemarkings within the site shall serve to minimise the number of internal movements and to ensure pedestrian and vehicle safety. A plan of traffic management shall be prepared by a qualified traffic engineer.

**Servicing, Loading and Unloading**

690.14.00 At least three loading bays shall be provided for the first 50 beds or part thereof plus 1 loading bay for each additional 100 beds or part thereof. The design of loading areas shall satisfy the requirements of Australian Standard 2890.2. Fifty per cent of loading bays shall be suitable for a Heavy Rigid Vehicle as defined in the Australian Standard and the remaining bays shall be suitable for a Small Rigid Vehicle. Access to servicing and delivery areas shall be separated from access to parking areas and from emergency and ambulance access.

**Ambulance Access and Parking**

690.15.00 It is recommended that access for ambulance vehicles should be separated
from access to staff and visitor parking areas.

690.16.00 Manoeuvring areas and parking spaces for ambulance vehicles shall be designed to allow ambulance vehicles to enter and exit in a forward direction and/or allow the largest ambulance vehicle using the facility to turn around. Turning templates for an ambulance vehicle are contained in Annexure X.

Short term ambulance spaces shall be long enough for an ambulance vehicle with an additional five metre long clear area at the rear for unloading stretchers.

Manoeuvring areas and parking spaces for ambulance vehicles shall be designed to permit entry and exit in a forward direction and/or turning around of a largest ambulance vehicle using the facility. Currently, the largest common ambulance vehicle is Mercedes Benz 4WD 312D "Sprinter". The length of short term ambulance spaces shall allow for an ambulance vehicle with an additional 5 metre long clear area at the rear to permit stretcher unloading.

Public Transport

690.17.00 A Hospital Facility shall be located where it will allow patients, staff and visitors reasonable access to public transportation, where it is available. When public transport is not available, representations should be made to the appropriate transport authority early in the planning stages for the provision of public transport to and from the site.

Note: It is not necessary to guarantee the success of such representations.