

### 1.3.3 Methodology - Parking Demand Estimation

Following the same methodology outlined for the trip generation, the parking demand for a development can be determined. This is calculated by multiplying the appropriate independent variable by the parking demand rates provided in the parking demand table. Depending on the Land use Class, separate parking demand rates have been provided for the three different users of a development. These include:

- Car – Employees/residents: This is the parking rate for employees or residents of a development. Examples could include residents in an apartment, employees in a private office building etc.
- Car – Visitors: This is the parking rate for visitors to a development. Examples could include visitors to a residential dwelling or government building etc.
- School/Company Bus/Trucks: This is the parking rate for larger or higher occupancy vehicles visiting a development. Examples could include a company bus travelling to an industrial building, a school bus visiting a school, a delivery vehicle serving a shopping mall etc.

#### Example Calculation

The following example considers a planned residential building in Al Ain CBD with a total of 100 apartments. Within the residential building, the breakdown of apartments is:

- 30 no. 1 bedroom apartments;
- 30 no. 2 bedroom apartments; and
- 40 no. 3 bedroom apartments.

The expected parking demand is estimated as follows:

**Step 1:** The residential development falls under the following Land use Classification:

Land use Group:	Residential (300)
Land use Category:	Apartments (310)
Land use Class:	1 bedroom, 2 bedrooms and 3 or more bedrooms (311, 312 and 313)

**Step 2:** the proposed development is located in the Al Ain CBD area, thus the sub-classifications for 1 bedroom apartments, 2 bedroom apartments and 3 bedroom apartments will be 311C, 312C and 313C respectively.

**Step 3:** the independent variable used for these Land use Classes is 'number of Units'.