# 8 Parking standards and travel plans

## 8.1 Introduction

**8.1.1** The purpose of this chapter is to provide guidance in relation to parking standards in new development, both car-parking and parking for motorcycles and cycles and guidance on travel plans. This guidance supports Policy CS28 (Local Transport Considerations) which requires development proposals to be assessed in relation to car parking standards set out in the Council's Parking Strategy and to actively promote green travel plans. This guidance also supports Policy CS34 (Planning Application Considerations) which requires development to meet the parking requirement arising from necessary car use. It also reflects national guidance in PPG13 (2001) which recognises the need to promote sustainable travel choices and PPS3 (2006) which requires local planning authorities to develop residential parking policies for their area which take account of expected levels of car ownership. This guidance updates the Council's existing Car Parking Strategy (2006 – 2011) and will inform the preparation of the next Parking Strategy.

## 8.2 Parking standards for new residential development

### Car parking

| Land Use | Maximum parking standard |
|---|---|
| Dwellings with 2 or more bedrooms | 2 spaces per dwelling |
| Dwellings with 1 bedroom | 1 space per dwelling |
| Houses in Multiple Occupation and purpose-built student accommodation | 1 space per 2 occupiers |

**Table 8.1 – Maximum car-parking standards for new residential development**

**8.2.1** These standards apply to all new residential development, including residential conversions. The aim of these maximum residential standards is to support the creation of high quality residential neighbourhoods by reducing the adverse impacts of inadequate residential parking such as excessive on-street parking or illegal parking.

**Example of residential car parking**

**8.2.2** They allow for increased levels of parking provision above previous Council standards. This reflects the latest government policy as set out in PPS3 which requires Local Planning Authorities,

together with stakeholders and communities, to develop residential parking policies for their area, taking account of expected levels of car ownership. The 2006 DCLG report *Delivering Planning Policy for Housing: PPG3 Implementation Study,* identified that it is more important to target car usage rather than ownership in order to promote sustainable transport. Research by CABE (cited in the Manual for Streets guidance) has also found that car parking remains a significant issue for residents and house buyers.

**8.2.3** Within the maximum parking standards developers will be expected:

- To provide adequate parking to accommodate parking arising from necessary car use in accordance with CS34
- To protect the surrounding areas from overspill parking and resulting problems on the highway.

**8.2.4** The burden of responsibility is on the developer to ensure that parking is managed within the site, or that measures are put in place such that resulting on-street parking does not:

- Impede other users of the highway, particularly pedestrians, cyclists, buses and emergency vehicles
- Compromise highway safety
- Impact on residential amenity
- Overspill into other areas.

**8.2.5** The level of parking provision should reflect the accessibility of the location by public transport. In exceptional circumstances off-site mitigation measures, including the introduction of a Controlled Parking Zone (CPZ), may be appropriate as part of an overall approach to management of parking on a development. See section 8.5 on CPZs for more information.

## Cycle parking

| Land Use | Minimum Cycle Parking Standard |
|---|---|
| Dwellings with 1 bedroom | 1 space per dwelling to be secure and under cover. |
| Flats | 1 space per 2 dwellings to be secure and under cover. |
| Houses in Multiple Occupation and purpose-built student accommodation | 1 space per 2 bedspaces to be secure and under cover. |

**Table 8.2 – Minimum cycle parking standards**

**8.2.6** Cycle parking should be incorporated into new residential developments, particularly where car parking levels have been reduced. Every effort should be made to ensure that cycle parking is well designed, under cover and secure.

**8.2.7** For developments of flats, communal stores should be provided. They should be well lit, fully covered, secure and contain cycle stands that allow individual cycle frames and wheels to be secured horizontally (i.e. both wheels on the ground) such as Sheffield stands.

**8.2.8** For all types of residential development visitor cycle parking should be considered. This should allow individual cycle frames and wheels to be secured horizontally and be provided where it will be overlooked by the properties.

### Motorcycle parking

**8.2.9** Provision of motorcycle parking should be considered within all developments but in particular flats, houses in multiple occupation and those with low levels of car parking.

**8.2.10** Where included, motorcycle parking should be well lit, covered and contain stands that allow the vehicles to be securely anchored.

## 8.3 Non-residential parking standards

### Car parking

**8.3.1** The Council's methodology for calculating the maximum car parking standard for non-residential development is based upon the overall accessibility of the site having regard to public transport, walking and cycling networks. The maximum standards include both operational and non-operational parking.

**Non-residential parking , East End Community Village**

**8.3.2** An assessment of parking provision will need to be undertaken, taking as its starting point the maximum parking standard for the type of development as set out in Table 8.3. The standard is then adjusted on the basis of how well located the development site is in accessibility terms. The methodology for this adjustment is set out in section 8.6.

| Land Use | Maximum Parking Standard |
|---|---|
| A1 Shops less than 370 $m^2$ | 1 space per 28 $m^2$ gross floorspace |
| A1 Medium non-food shops 370 - 999 $m^2$ | 1 space per 24 $m^2$ gross floorspace |
| A1 Large non-food shops more than 999 $m^2$ | 1 space per 20 $m^2$ gross floorspace |
| A1 Medium food and convenience goods shops 370 - 999 $m^2$ | 1 space per 21 $m^2$ gross floorspace |
| A1 Large food and convenience goods shops more than 999 $m^2$ | 1 space per 14 $m^2$ gross floorspace |
| A2 Offices providing services mainly to visiting people | 1 space per 30 $m^2$ gross floorspace |
| A3 Restaurants and cafes | 1 space per 5.5 $m^2$ used by customers |
| A4 Public Houses / bars | 1 space per 2 $m^2$ of floorspace used by customers for drinking. For dining floor space, the above standard will apply. |
| A5 Hot food takeaways | 1 space per 5.5 $m^2$ used by customers |
| B1 General business uses | 1 space per 30 $m^2$ gross floorspace |
| B2 Manufacturing | 1 space per 51 $m^2$ gross floorspace. Lorry parking assessed on merits of each case. |
| B2 Small industrial units less than 235 $m^2$ | 1 space per 44 $m^2$ gross floorspace. Small industrial units particularly of the grouped or court variety need separate assessment. Parking provision will normally be communal. |
| B8 Warehouses less than 2500 $m^2$ | 1 space per 70 $m^2$ gross floorspace. Lorry parking will be assessed on merits of each case. |
| B8 Warehouses larger than 2500 $m^2$ | 1 space per 200 $m^2$ gross floorspace. Lorry parking will be assessed on merits of each case. |
| B8 Wholesale cash and carry | Car and lorry parking will be assessed on the merits of each case. |

| Land Use | Maximum Parking Standard |
|---|---|
| C1 Hotels and guest houses | 1 space per guest room + 1 space for the resident proprietor or resident manager. Conference / function space will be determined on merit. Coach parking needs will be assessed on merits of each case. |
| Hostels | 1 space per 8 residents + 1 space per 2 non-resident staff + 1 space for a resident proprietor / resident manager. |
| C2 Convalescent/ nursing homes | 1 space per 8 residents + 1 space per 3 non-resident staff + 1 space for any resident proprietor / manager.<br><br>Provision for visitors will be determined on merits of each case. For nursing homes, attention will be paid to need for adequate servicing, particularly for ambulances, and additional staff. |
| C2 Hospitals | 1 space per 4 staff + 1 space per 3 visitors. |
| C3 Communal housing of elderly and disabled | 1 space per 2 dwellings + 1 space per warden |
| C3 Holiday caravans and chalets | 1 space per unit<br><br>Additional spaces required where camping or other facilities are provided or made available for non-residents. |
| C3 Dwelling houses and C4 HMOs | Parking standards are set out in Table 8.1 |
| D1 Primary schools | 1 space per teacher + 1 space per classroom for support staff and visitors |
| D1 Secondary schools | 1 space per teacher + 1 space per classroom for support staff and visitors |
| D1 Higher and further education | 1 space per 2 staff + 1 space per 15 students |
| D1 Libraries | To be determined on the merits of each case |

| Land Use | Maximum Parking Standard |
|---|---|
| D1 Crèches, day nurseries or day centres | 1 space per 3 staff members. Attention must be paid to the safety of the children. Adequate facilities should be provided for the dropping off and collection of children. |
| D1 Doctors', dental and veterinary surgeries and other health services (excluding hospitals) | 1 space per practitioner, 1 space per 2 additional staff and 2 spaces per consulting room |
| D2 Cinemas and conference facilities larger than 1000 $m^2$ | 1 space per 5 seats |
| D2 Concert halls, casinos, community centres, and indoor sports facilities larger than 1000 $m^2$ | 1 space per 22 $m^2$ gross floorspace |
| D2 Dance halls less than 1000 $m^2$ | 1 space per 3 $m^2$ of net public floor area |
| D2 Community centres less than 1000 $m^2$ | 1 space per 5.5 $m^2$ of main assembly hall floor space. |
| D2 Snooker, billiards and pool halls less than 1000 $m^2$ | 1 space per table + 1 space per 2 tables |
| D2 Squash courts less than 1000 $m^2$ | 1 space per court + 1 space per 10 spectator seats. Additional spaces may be required if a bar and / or other members' facilities are provided. |
| D2 Swimming pools less than 1,000 $m^2$ | 1 space per 6 $m^2$ of water area |
| D2 Gyms less than 1000 $m^2$ | To be assessed on the merits of each case |
| D2 Stadia with more than 1500 seats | 1 space per 15 seats |
| D2 Stadia with less than 1500 seats | 1 space per 10 seats |
| Launderettes and amusement centres | 1 space per 28 $m^2$ gross floorspace |

| Land Use | Maximum Parking Standard |
|---|---|
| Motor repair garages, car sales, petrol filling stations and car washes | 1 space per staff + 3 spaces for each service / fitting/ testing bay. 1 space per 10 cars displayed. Adequate provision shall be made loading / unloading, servicing and petrol tanker supplies. For car washes sufficient circulation space for waiting cars is required. |
| Taxi and private hire vehicle offices | 1 space per staff / driver |

**Table 8.3 – Maximum car-parking standards for non-residential development**

**8.3.3** Other matters may be taken into account in completing the assessment of parking provision:

- A higher level of parking than that determined by the assessment could be acceptable, but only if strong evidence can be presented on grounds of economic viability or of the impact of a lesser provision on the function of the highway; for example, if the proposal would lead to a level of casual on-street parking that might impact on the operation of the highway.
- In exceptional circumstances, a higher level of parking provision may be acceptable to facilitate and help kick-start a regeneration programme. However, this level of flexibility does not apply to all subsequent developments. Increased economic activity in an area should be linked with increased public transport accessibility.
- Where appropriate, consideration will be taken of the time(s) of day when the majority of the trips will be generated and accessibility assessed accordingly. In particular, shift patterns will be considered where they start or end during periods where public transport does not operate with the same frequency as during normal office hours (8am – 6pm).
- The capacity of public transport and future programmed infrastructure improvements can influence accessibility assessments.
- In areas of existing, or at significant risk of future, congestion, and in existing or potential air quality management areas (AQMA) in particular, further reductions may be necessary in order to make the proposal acceptable in traffic impact terms.

**8.3.4** The assessment must take account of parking availability and restrictions in the surrounding area, and the impact of the proposed development on any parking in the surrounding area.

**8.3.5** Shared use of parking is to be encouraged. It is noted, however, that there may be an imbalance in the amount of parking that should be provided for each development. In this case, the car park should be effectively managed so that an over-supply of parking spaces does not occur at any time which could encourage unnecessary use of spaces and unsustainable travel.

**8.3.6** Larger new developments may include new access roads. These access roads could have on-street parking designed in and this provision could be counted as part of the development.

***Review period***

**8.3.7** The maximum parking standards set out in Tables 8.1 and 8.3 and the application methodology will be reviewed every 5 years. Reviews will establish ease of application, impact on transport networks and impacts on developments.

**8.3.8** The accessibility maps form part of the Local Transport Plan and these will be reviewed on an annual basis to ensure changes to the public transport network are appropriately reflected.

## Disabled parking

**8.3.9** Provision of parking for disabled motorists should be in line with Department for Transport guidance. Provision for disabled parking is included within the calculated maximum levels, but should be calculated on the basis of the size of the car park before any reductions have been applied.

**8.3.10** Disabled parking should be located as close as is practical to the main pedestrian entrance of the development.

Current disabled parking standards are set out in Traffic Advisory Leaflet 5/95 Parking for Disabled People: www.dft.gov.uk

## Powered two-wheelers

**8.3.11** The Council encourages safe use of powered two-wheelers. Therefore, secure parking should be included within all new developments.

**8.3.12** The number of motorcycle spaces required for a development is to be calculated from the maximum parking standard for that development before reduction, and rounded up as necessary.

**8.3.13** For employee parking, a minimum provision of 4% of the maximum parking standard for cars is applicable.

**8.3.14** For other parking, based on motorcycles currently accounting for 1% of Plymouth's traffic, a minimum of 1% of parking spaces should be for motorcycles. The absolute minimum is 1 space.

**8.3.15** In some cases provision greater than the minimum may be more appropriate, for example when shift patterns do not allow travel by public transport.

**8.3.16** Motorcycle parking should be provided in line with the Institute of Highway Incorporated Engineers Guidelines for Motorcycling.

## Cycle facilities

**8.3.17** The Council actively encourages increased use of cycles as a mode of transport. To complement public investment in cycling, facilities for cyclists must be included within all new developments and must be sufficient to meet increasing demand.

**Short stay cycle parking, Drake Circus**

**8.3.18** Minimum cycle parking standards for non-residential development are set out in Table 8.4.

**8.3.19** Cycle parking for staff and other long-stay users may need to be different from that for short-stay users. Ease of access needs to be balanced with security.

**8.3.20** Staff and other long-stay cycle parking ideally should be located within the main building. If this is not possible then it should be located close to the entrances and must be closer than any corresponding car parking (staff cycle parking should be close to staff entrances). It must be secure, covered, well-lit and easily observed. Employers should provide lockers, showers and changing facilities.

**8.3.21** Short-stay cycle parking must be close to the appropriate building entrances and closer than car parking. It must be secure, clearly visible, well-signed and easily accessible. It will preferably be covered but not so as to compromise safety and security.

**8.3.22** For convenience, and to encourage cycling, it may be preferable on a larger site to have clusters of cycle parking facilities rather than one central point.

| Land Use | Minimum Cycle Parking Standard |
|---|---|
| A1, A3, A4 and A5 (Shops, food and drink) | Staff: 1 space per 370m$^2$ gross floorspace, or 1 space per 10 employees whichever is the greater, to be secure and under cover.<br><br>Customer: 1 space per 500m$^2$ gross in a prominent and convenient position in the form of Sheffield racks or similar. |
| A2 and B1 (Financial and professional services and businesses.) | Staff: 1 space per 300m$^2$ gross floorspace, or 1 space per 10 employees whichever is the greater, to be secure and under cover. |

| Land Use | Minimum Cycle Parking Standard |
|---|---|
| | Customer: each case to be determined on its merits. |
| B2 (General industry) | Staff: 1 space per 400m$^2$ gross floorspace, or 1 space per 10 employees whichever is the greater, to be secure and under cover. |
| D1 and D2 (Non-residential institutions, assembly and leisure) | Staff: 1 space per 10 employees to be secure and under cover.<br><br>Customer: 1 space per 20 people expected to use the facility at any one time in a prominent and convenient position, in the form of Sheffield racks or similar. |
| All other uses | To be determined on their individual merits. |

**Table 8.4 – Cycle Parking for non-residential development: minimum standards**

## 8.4 Travel plans and car park management plans

**8.4.1** Depending on the nature of the development, it is likely that the Council will ask the developer to submit a travel plan. Travel plans may be requested for:

- Residential developments
- Non-residential developments
- Schools.

**8.4.2** Voluntary travel plans may also be submitted. These are welcomed from all developments where a travel plan has not been specifically requested by the Council but where the organisation/development has a commitment to encouraging sustainable travel.

***What is a travel plan?***

**8.4.3** A travel plan is a long-term management strategy which enables an organisation / development to achieve increased levels of sustainable travel modes for all journeys to and from a site. It should consist of a package of measures aimed at promoting sustainable travel and reducing reliance on single occupancy car journeys.

***What should it contain?***

**8.4.4** In general, a travel plan should cover four areas:

- A site audit report giving a description of the site and information on how the site is accessed by all modes of travel
- An action plan to address and promote sustainable travel to and from the site covering staff, customers and visitors (and pupils and parents in connection with a school travel plan)
- A monitoring strategy which provides a methodology and schedule for monitoring travel to and from a development site by all modes of travel. This also includes modal share targets agreed by the Council
- A commitment to operating the travel plan, to working with the relevant Council travel plan officers and providing relevant data on modal share targets.

**8.4.5** It is the responsibility of the developer/organisation to appoint a travel plan coordinator who will develop, implement and monitor the success of the plan in conjunction with the Council. Where appropriate, the developer/organisation will be required, with support from the travel plan coordinator, to use the Council's web-based travel plan assessment and monitoring system, called "iTRACE". If a travel plan is requested, the developer/organisation is obliged to make contact with the Council's Travel Plan Officers within the Sustainable Transport Team at the earliest possible opportunity so that advice on the appropriate content for the plan can be sought.

**8.4.6** Travel plans, where appropriate, should be linked to a Transport Assessment and Car Park Management Plan to show how car parking spaces will be managed. This may be for reasons of land efficiency, accessibility, restriction of overflow parking, etc., as well as for sustainability and the simple economics of the site operation.

**8.4.7** The Car Park Management Plan should be included within the travel plan for the development and may also be a condition of planning permission. This should include intentions for future charging for staff parking, specifications for the operation of the car park, allocation of spaces, operating hours, and other details that affect the use of the car park. For example, only a limited number of spaces may be made available before 10 am, reserving the remainder for non-commuter use later in the day. This may be of particular significance when parking spaces are shared between developments, or within a mixed use development.

## 8.5 Controlled parking zones

**8.5.1** The introduction of a controlled parking zone (CPZ) should be a last resort within any new development; improvements to more sustainable modes should be the primary consideration. However, a CPZ may ultimately be required to ensure parking is managed appropriately. Factors that should be considered when deciding to introduce a CPZ are:

- Propensity of cars to overspill from a nearby employment area / leisure facility / retail area
- On-street parking and the absence, or otherwise, of controls

- Whether there are nearby public car parks, and
- The potential for shared parking.

**8.5.2** A proposal within a CPZ which operates at least 6 days a week and more than 6 hours a day could be acceptable without the provision of off-street parking.

**8.5.3** Occupants of new developments within an existing CPZ will not be issued with permits in accordance with the Plymouth Joint Highways Committee Report recommendation of May 1997. It must be checked that there are no adjoining areas where on-street parking could take place to the detriment of others.

**8.5.4** Within a shorter operating CPZ, a contribution must be made in that the developer will have to:

- Provide some off-street car parking (application of maximum standard for private residential or up to 50% of the maximum for student accommodation) or
- Pay monies / provide engineering work to restrict on-street parking or
- Apply parking management techniques to their development which ensures no on-street parking will take place.

**8.5.5** For major developments it may be appropriate for the development to fund the costs of consultation and implementation to change the short hour CPZ into long term zones.

**8.5.6** Where the extension (operating hours or geographic scope) or introduction of a CPZ is not publicly acceptable, alternative mitigation measures will need to be considered which could include engineering works or contributions towards more sustainable transport modes.

## 8.6 Methodology for calculating accessibility

**8.6.1** The Council has produced accessibility maps using the Accession software which are to be used to determine the accessibility of each site (see example in Diagram 8.1).

**8.6.2** These maps show the percentage of Plymouth residents that live within a 30 minute travel time by public transport and/or walking of each location. The travel time is defined as up to a 400 metre walk to a bus stop, in-vehicle bus time and a maximum 400 metre walk to end destination at an appropriate time of day. Sites further than 400 metres from a bus stop are not considered to be accessible. Sites are assessed from 0% accessibility to over 80% accessible.

**8.6.3** These maps form part of the evidence base for the Car Parking Strategy of Plymouth's current Local Transport Plan and are updated on an annual basis to ensure changes to public transport routes / times / frequencies are incorporated.

**8.6.4** The following steps should be taken to determine the maximum car parking standard for a particular development:

1. Calculate the site's 'accessibility per cent score'. This is taken from the nearest point(s) on the appropriate accessibility map. Then subtract this score from 100 to calculate the site's accessibility.
2. Add 20%.
3. Multiply this percentage by the maximum car parking standard identified in Table 8.3.

**8.6.5** It should be noted that these maps are not site specific and a more detailed consideration may be required. The accessibility on the maps is given as a band. The mid point of the band should be used unless there is evidence to the contrary. This evidence may include a lower or higher accessibility level on the adjoining point with the site somewhere between the two.

For example, site X is a supermarket development with a GFA of 2500 $m^2$. The parking standards in Table 8.3 would enable the site to have a maximum of 179 parking spaces (1 space per 14 $m^2$).

This would require the development to provide –

- 11 disabled parking bays (based on current standards)
- 7 motorcycle spaces for employees and at least 2 for customer parking

These are calculated before adjustments are made.

The total maximum number of car-parking spaces allowed would then be adjusted as follows –

The site has an accessibility score of 55% which gives it an accessibility of 45% (100 – 55). However, the adjustment is less than this because of the 20% 'additional' allowance -

65% of 179 (45%+20%) = 116 spaces.

This includes disabled spaces, so a maximum of 105 spaces could be provided for other car-parking.

Cycle parking (using the standards set out in Table 8.4) would require a minimum of 7 spaces for employees (based on size rather than number of employees) and at least 5 spaces for customers.

**8.6.6** The maps are based on current public transport services. Any applicable likely future changes to accessibility, such as a likely HQPT link, must be considered at this point. Future accessibility maps will be developed to enable this to occur with ease. Until this time, applicants need to take a realistic view of the potential for improvements to take place following discussions with the Council's Development Management team (Transport). The maps will be updated regularly to take account of service changes in the short term.

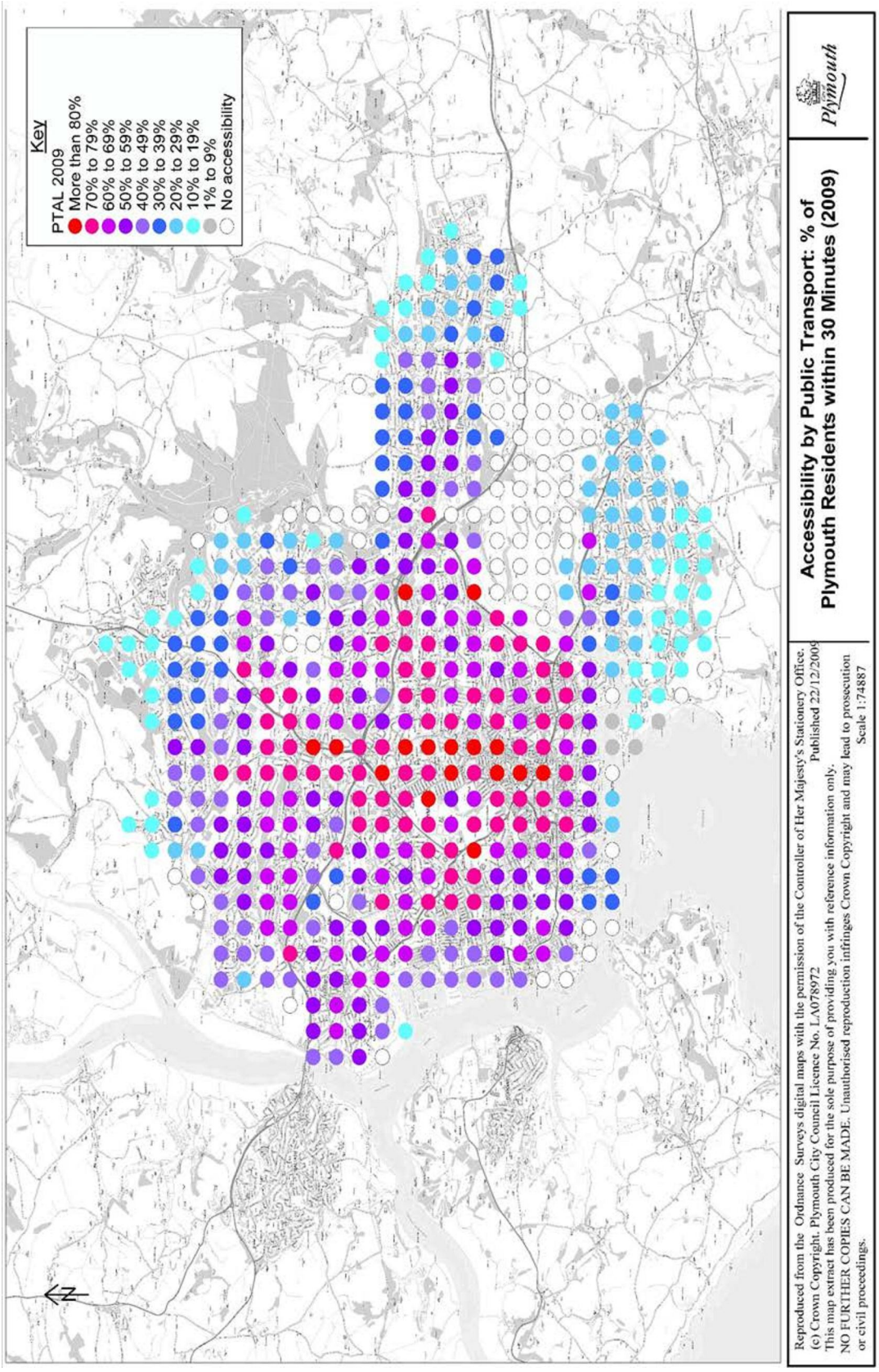


**Diagram 8.1 - Public transport accessibility levels in Plymouth, 2009**

## 8.7 Further information on parking standards and travel plans

**8.7.1** *The design of car-parking and cycle parking should comply with guidance in the Manual for Streets (2005) available on www.communities.gov.uk.*

**8.7.2** *The Council's Parking Strategy can be accessed at http://www.plymouth.gov.uk/proltpparking.htm*

**8.7.3** *Government guidance on parking is set out in PPG13 (2001) Transport and PPS3 (2006) Housing which are available on www.communities.gov.uk.*

**8.7.4** *Cycle parking should be provided in line with Cycling England guidance.*

*Cycling England guidance can be found on the following website – www.dft.gov.uk/cyclingengland*

**8.7.5** *More information and guidance on travel plans can be found on the Sustainable Transport Team's web pages at:*

*www.plymouth.gov.uk/workbasedtravelplans*
*www.plymouth.gov.uk/schooltravelplan*

*Telephone: 01752 304585/5417*
*Email: publictransport@plymouth.gov.uk*

*Further information is also available at: www.dft.gov.uk/pgr/sustainable/travelplans*

## 8.8 Checklist for applications: parking standards and travel plans

- Does the application comply with the Council's standards for car-parking, cycle-parking, motor-cycle parking and disabled parking?
- Is a travel plan required and does it comply with the Council's guidance?
- For non-residential developments, is a Car Park Management Plan included?