

Plymouth's Planning Obligations Evidence Base

1 Purpose of this document

- 1.1 This evidence base document has been produced to accompany the Planning Obligations and Affordable Housing SPD first review. The revised SPD sets out the Plymouth Development Tariff and Negotiated Element and how it will be applied to development. It also includes justifications for the inclusion of planning obligation matters within the tariff and negotiated element.
- 1.2 In order to streamline the SPD, background information about how the tariff has been calculated for the different contributions is presented in this evidence base document. This document also includes references to evidence base documents that have been used to calculate the tariff.
- 1.3 This document will take each planning obligation matter within the Plymouth Development Tariff in turn, setting out how each element of the tariff has been calculated. It refers to local and strategic elements of the tariff as set out in the SPD.
- 1.4 Local infrastructure is defined in the SPD as infrastructure that is necessary to make a neighbourhood or locality of the city more sustainable. Strategic infrastructure is infrastructure that is often provided at a higher spatial level to serve the wider needs of the city and to provide for the sustainable growth of the city.

2 Local schools tariff

- 2.1 Primary schools are local infrastructure in that their need is normally generated at a local level. Education contributions through the Plymouth Development Tariff may be secured where a need is identified for the following areas:
 - Early Years 0-5
 - Primary Schools
- 2.2 The Council has embarked on an extensive programme of school investment and amalgamations as outlined in the Investment for Children: Strategy for Change document. The aim is to improve the quality of education provision within the city.
- 2.3 The 'Investment for Children: Strategy for Change' document (2008) identified a trend of rising birth rates, which means that the number of children in primary schools started to increase from 2009, with primary school numbers forecast to rise by 5% between 2009 and 2015. If the city

achieves its ambition to significantly increase its population through regeneration and development, the rise would be 9% over the same period.

2.4 Figure S1 shows that rises in birth rates mean that primary schools across the city are reaching capacity. All of the localities will have exceeded or will be nearing capacity by 2014. New development will add further pressure on school places.

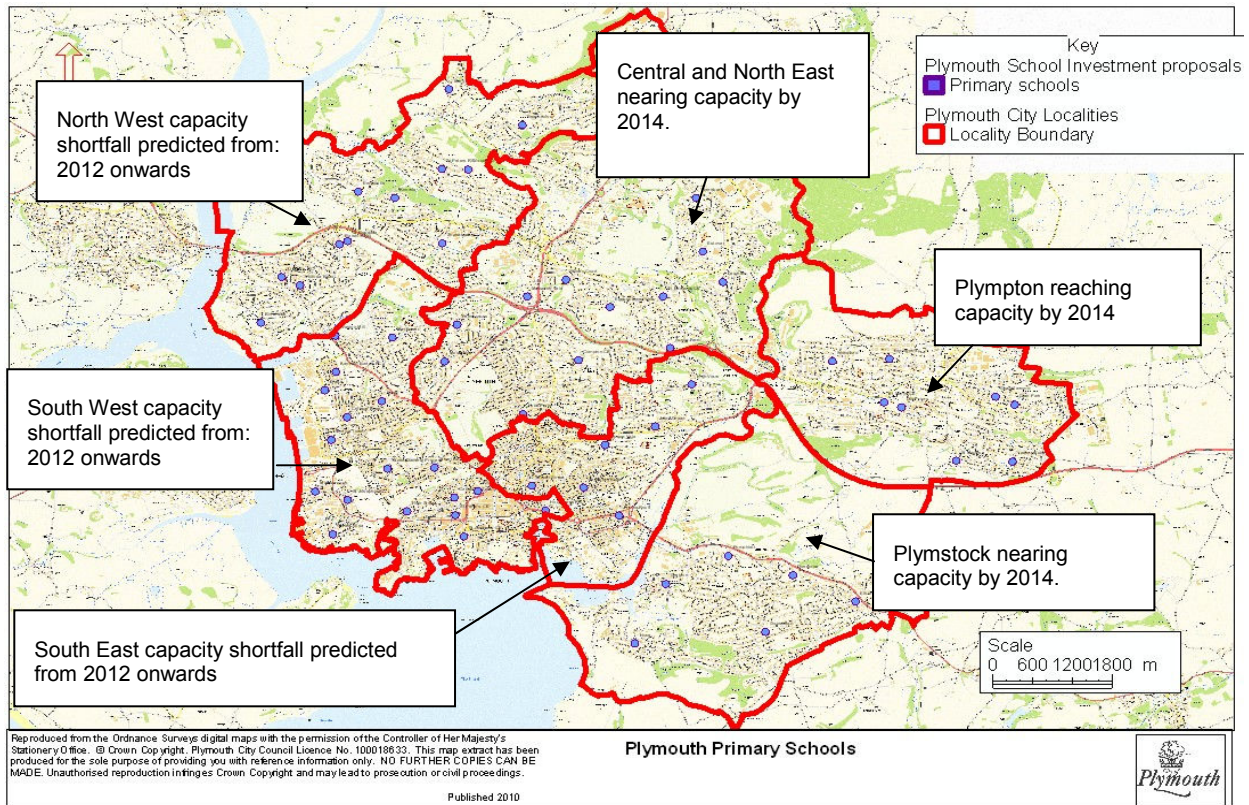


Figure S1: Primary schools capacity based on predicted increases in admissions to 2014, excluding new development. (Source: Children's Services)

2.5 Due to the existing surplus capacity in secondary school places and the fact that the increase in primary student numbers will take some time to filter through to secondary school level, the immediate priority is on the primary sector, although this may change in future.

Calculating the tariff contribution for education

2.6 The requirement for educational contributions will be assessed on the net increase in the number of new school places generated by a development and the resulting capital cost to accommodate the increased demand.

2.7 The Council has identified a pupil:product ratio for each new residential unit containing two or more bedrooms. Table E1 below is based on the

average household composition from the 2001 Census, which identifies an average of 0.15 pupils per dwelling of secondary education age and 0.20 pupils per dwelling of primary and early years age. This average has been proportionally weighted to dwelling size to reflect pupil generation of different sized dwellings.

Table E1: Pupil:Product ratio per dwellings

	Early years and primary places	Secondary places
Two bedrooms	0.17	0.14
Three bedrooms	0.22	0.16
Four+ bedrooms	0.25	0.18

2.8 Cost multipliers provided by the Department for Children, Schools and Families (DfE) identify the cost per pupil for the construction of accommodation to provide for additional pupil places. The 2008-9 multipliers, including Plymouth's location factor of 0.98, are set out below. These costs will be updated in line with future DfE revisions:

- Early years and Primary £12,012.25 per place
- Secondary £18,099.62 per place

2.9 Table E2 applies the number of pupils generated from different sized dwellings (Table E1) and relates them to the cost of providing a primary or secondary school place, to arrive at the cost per dwelling.

Table E2: The cost of school place provision per dwelling

	Early years and primary places	Secondary places	Total per dwelling
Two bedrooms	£2,042.08	£2,533.95	£4,576.03
Three bedrooms	£2,642.70	£2,895.94	£5,538.64
Four+ bedrooms	£3,003.25	£3,257.93	£6,261.18

2.10 It is not felt appropriate given the current surplus capacity at secondary level to have a tariff charge for secondary school provision. This will be kept under review and the tariff element for secondary schools will be introduced when appropriate.

Further information on education

Plymouth City Council's Investment for Children: Strategy for Change (2008) document is available on:

<http://www.plymouth.gov.uk/homepage/education/strategyforchange.htm>

3 Health tariff

- 3.1 Contributions will support the provision of appropriate local primary healthcare facilities and services where a need is identified by the Primary Care Trust in line with Health Building Note 11-01 for the following areas:
 - Primary care: GP Services
 - Intermediate care: day places and beds
- 3.2 Primary healthcare capacity across the city varies and will continue to vary over the Core Strategy plan period to 2021. To ensure that tariff contributions are considered fair, reasonable and directly related geographically, the Council will only seek contributions within localities where capacity issues have been identified over the Core Strategy plan period. Figure H1 below shows existing GP practices by locality. It shows capacity as of 2010, and where there is likely to be a capacity shortfall over the Core Strategy period due to planned developments.
- 3.3 Population figures are based on Core Strategy housing targets and potential housing development in each locality under current market circumstances, assuming a household size of 2.2 persons per dwelling.

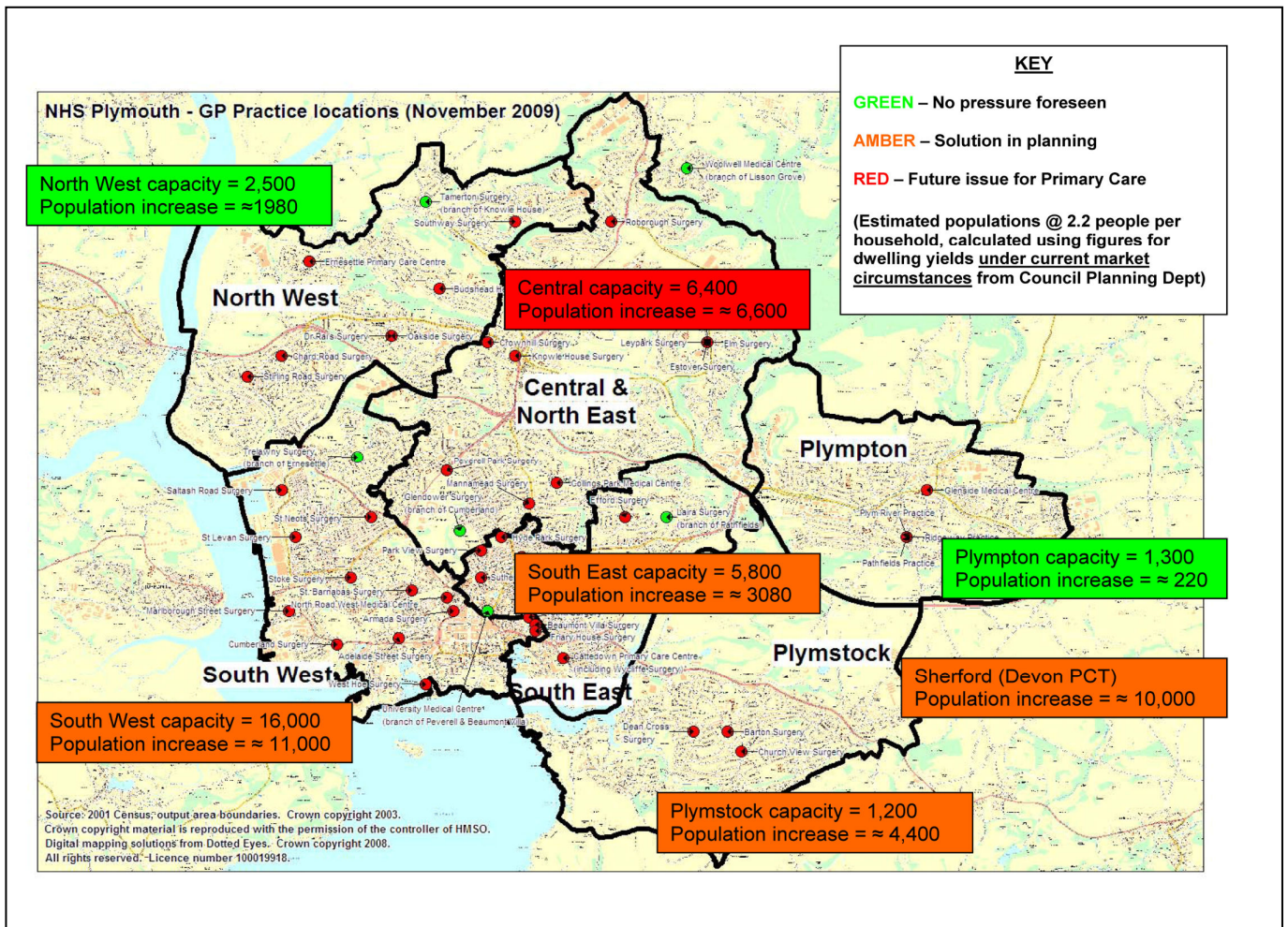


Figure H1: GP practices across the city and predicted capacity shortfalls based on planned new development (Source: Plymouth PCT)

3.4 Where new residential development delivers health facilities and services as part of its obligation, the Council may use pooled tariff to cover temporary staff and running costs if these cannot be met from existing NHS budgets. Until mainstream funding kicks in, contributions to the initial support (“pump priming”) of new facilities may be necessary and these will reflect the time lag between the provision of the new facility and its inclusion in public sector funding streams.

Calculating the tariff contribution for health

3.5 Costs have been calculated from figures provided by the Primary Care Trust, and benchmarked against other authorities. They are based on a health provision standard of 500 sq m per 6,000 people. Average household size and the capital cost of £2,000 per sq m have been used to generate a cost per dwelling size. Table H1 below sets out the calculation.

Table H1: Cost per dwelling

Dwelling size	Average household Size	Contribution (£)
1 bedroom	1.33	221.66
2 bedroom flat	1.86	309.99
2 bedroom house	2.45	408.33
3 bedroom	2.62	436.66
4 bedroom	2.85	474.99
5+ bedroom	3.13	521.66
<i>per bed space (other residential)</i>	1	167

Further information on health

The Healthy Plymouth Strategy 2007 – 2020 is available on:

http://www.plymouth.gov.uk/health_strategy_consultation_document141107v2mj-3.pdf

Health Building Note 11-01: Facilities for primary care and community care services is available on www.spaceforhealth.nhs.uk

4 Libraries tariff

- 4.1 As a library authority the Council has a statutory duty to provide a public library service and to ensure that it is comprehensive and efficient. Libraries are identified as a local infrastructure requirement as their need is generated primarily at a local level.
- 4.2 In addition to its statutory duties, the library service has to meet a number of national library standards which together constitute a nationally recognised acceptable level of service:
- 88% of the population to live within 1 mile of a static library
 - 100% of the population to live within 2 miles of a static library
 - The provision of 6 electronic workstations per 10,000 population
 - The provision of 216 new items of stock per year per 1,000 population.
- 4.3 Table L1 lists the city's libraries and highlights those that will need capital investment in response to population growth. Tariff will be charged on development in localities where there is an identified need for library investment. In addition to these existing libraries, there is a need for

library provision at Derriford as part of the proposed new development there.

Table L1: Plymouth’s library network - investment requirements required to service population growth

Library	Locality	Is there likely to be a requirement for investment as a result of population growth?
Central	South East	✓
Crownhill	Central and North East	✓
Devonport	South West	X (under redevelopment)
Efford	South East	X (recently opened)
Eggbuckland	Central and North East	✓
Ernesettle	North West	X (recently opened)
Estover	Central and North East	X (under redevelopment)
Laira	South East	X
North Prospect	South West	✓
Peverell	Central and North East	X
Plympton	Plympton	✓
Plymstock	Plymstock	X (recently opened)
Southway	North West	X (recently improved)
St Budeaux	North West	✓
Stoke	South West	✓
Tothill	South East	✓
West Park	North West	X (recently refurbished)

Calculating the tariff contribution for libraries

4.4 The cost of providing new library facilities is based on a recommended minimum library floorspace standard of 30 sq m per 1,000 population and a cost per sq metre to provide it.

4.5 Table L2 sets out the costings used to calculate a cost per square metre for new library provision. Building costs are derived from the Building Costs Information Service of the Royal Institute of Chartered Surveyors. The figures are based on the updated costs of accepted tenders for 98 public library schemes across England over recent years and are published quarterly, adjusted to reflect the costs of construction in the South West. These costs are in line with Museums, Libraries and Archives Council (2008) recommended costs.

Table L2: Library cost calculations

	Cost per sq. m. (£)	Adjusted cost per sq. m. (£)
Mean building cost for public library building (BCIS)	1,265	
Plymouth regional adjustor (x 0.95) (-£64)		1,201
External works, car parking, hard standing, landscaping, security fencing, signage (assume 15% of building cost)	180	1,381
Design costs (assume 15% of building and external costs)	207	1,588
Fitting out costs, including initial book etc stock and IT (88% of building and external costs)	1,215	
Total (building, external and design costs plus fitting out costs: £1,588 + £1,215)		2,803

4.6 The library tariff contribution is calculated from the library standard and the building costs as shown in Box L1:

Box L1: Library tariff calculation

$\frac{\text{Library sq m per 1000 people} \times \text{cost per sq m}}{1000} = \text{cost per person}$ $\frac{30 \text{ sq m} \times \text{£}2,803}{1000} = \text{£}84.09$ $\text{Cost per person} \times \text{average household size} = \text{cost per dwelling}$
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4.7 The Council has used information on average household size to vary the contribution by dwelling size to ensure that adequate off-site provision can be made for the increased demand in the city in a fair and transparent way, as set out in Table L2.

Table L3: Cost per dwelling (Libraries)

Dwelling Size	Average household size	Contribution per dwelling (rounded)
1 bedroom	1.33	£112.00
2 bedroom flat	1.86	£156.00
2 bedroom house	2.45	£206.00
3 bedroom	2.62	£220.00
4 bedroom	2.85	£239.00
5+ bedroom	3.13	£263.00
<i>per bedspace (other residential)</i>	1	£84.00

Further information on libraries

Museums, Libraries and Archives Council (2008) Public Libraries, Archives and New Development is available at www.mla.gov.uk

DCMS (2006) Public Library Service Standards is available at www.dcms.gov.uk

www.designinglibraries.org.uk

Plymouth Library Services, Plymouth Central Library, Drake Circus, Plymouth PL4 8AL. email: library@plymouth.gov.uk

5 Green space, children's play space and Plymouth Sound and Estuaries European Marine Site (EMS) tariff

5.1 New residential developments put pressure on existing green spaces and play spaces and cumulatively create the need for additional spaces and facilities. Contributions through the Plymouth Development Tariff will support:

- The provision of strategic and local green spaces and local play spaces (both new and enhanced)
- The management of the Plymouth Sound and Estuaries European Marine Site.

Calculating the tariff contribution for green space and children's play space

5.2 Plymouth's Green Space Strategy has determined standards of green space and equipped children's play provision based on an audit of need and provision. These standards are shown in Table G1 below. These standards exclude provision of playing pitches which are set out in Table R1.

5.3 Informal green space refers to spaces whose primary function is for local informal recreation. Parks and Gardens include urban parks, country parks and formal gardens. They offer a greater range of facilities and amenities than informal green space and will serve a larger population. Local Nature Reserves are accessible green spaces managed for people and wildlife. They are places with wildlife or geological features that are of special interest locally. Children's play space refers to equipped play space.

Table G1: Plymouth's Standard for Green Space and Equipped Children's Play Space

	Hectares per 1000 population	m² per person
Informal green space	1.44	14.4
Parks and gardens	1.15	11.5
Local Nature Reserves	1.0	10
Equipped children's play space	0.08	0.8
<i>Allotments</i>	<i>0.12</i>	<i>1.2</i>

Source: Plymouth's Green Space Strategy

5.4 Table G2 sets out provision required for different sizes of dwellings based on average household size and the Plymouth green space and play space standards.

Table G2: Green Space and Play Space provision standards by household size

Dwelling Size	Average household size	Plymouth standard for strategic green space (m²)	Plymouth standard for local green space (m²)	Plymouth standard for equipped play space (m²)

Dwelling Size	Average household size	Plymouth standard for strategic green space (m²)	Plymouth standard for local green space (m²)	Plymouth standard for equipped play space (m²)
		22.7 m ² per person ¹	14.4 m ² per person ¹	0.8 m ² per person
1 bedroom	1.33	30.19	19.15	1.06
2 bedroom flat	1.86	42.22	26.78	1.49
2 bedroom house	2.45	55.62	35.28	1.96
3 bedroom	2.62	59.47	37.73	2.10
4 bedroom	2.85	64.70	41.04	2.28
5 bedroom	3.13	71.05	45.07	2.50

¹ Strategic green space includes Parks and Gardens, Local Nature Reserves and allotments. 22.7 m² represents the sum of the m² standards for these different green space types. Local green space includes informal green space.

5.5 Table G3 sets out the green space and play space tariff by dwelling size, based on Plymouth's green space and play space standards as set out in Tables G1 and G2 and costs of provision supplied by CAGE Space.

Table G3: Plymouth's green space and play space tariff by dwelling size

Dwelling size	Average household size	Parks & Gardens (£39.50/m²)	Local Nature Reserve (£8.3/m²)	Allotments (£7.30/m²)	Strategic Green Space Tariff (£55.10/m²)	Local Green Space tariff (£17/m²)	Children's Play Space tariff (£219/m²)
1 bedroom	1.33	604.15	110.39	11.65	743.37	325.58	233.00
2 bedroom flat	1.86	844.91	154.38	16.29	1039.54	455.33	325.90
2 bedroom house	2.45	1,112.91	203.35	21.46	1369.36	599.76	429.20
3 bedroom	2.62	1,190.14	217.46	22.95	1464.48	641.38	459.02
4 bedroom	2.85	1,294.61	236.55	24.97	1592.91	697.68	499.30
5+ bedroom	3.13	1,421.80	259.79	27.42	1749.37	766.22	548.40

² These costs come from data supplied by CABE Space based on a detailed breakdown of costs for provision of green space in the South West between 2005 and 2007.

Calculating the tariff contribution for Plymouth's European Marine Site

- 5.6 The Tamar Estuaries Management Plan and Yealm Estuary Environmental Management Plan represent the legally required scheme of management for the Plymouth Sound and Estuaries European Marine Site (EMS). These plans currently span the period up to 2012, and identify a range of activities and operations related to recreational pressure that threaten the favourable status of the European Marine Site. These plans are the most accurate and comprehensive expression of recreational management issues that these areas face, and form the basis for calculating the level of contribution required.
- 5.7 Contributions are based on costs over a 20 year period to reflect the period that will generate the most significant increases in recreational activity.
- 5.8 The Tamar Estuaries Consultative Forum and the South Devon AONB unit have estimated the cost of delivering these actions over the current plan period at £1,353,646. These costs have been extrapolated over a 20 year period to a give a total (at 2008 prices) of £4,954,344.
- 5.9 People living in the Plymouth Travel to Work Area will, through their recreational activities, impact on the European Marine Site. This population is expected to increase over the next 20 years to 384,060. This level of change is based on the average of the high and low population growth scenarios as set out in the Plymouth, South East Cornwall and South West Devon Sustainable Growth Study 2005.
- 5.10 The above information is used to produce a cost per head for managing the EMS as set out in Table G4:

Table G4: Calculation for the European Marine Site (EMS)

Total Population in 2026 (Plymouth Travel to Work Area)	384,060
Cost for managing EMS for next 20 years	£4,954,344
Cost per head for managing EMS	£12.90

- 5.11 This cost per head is used to define the following contributions per dwelling as shown in table G5:

Table G5: European Marine Site contribution per dwelling

Dwelling Size	Average Household	Contribution per dwelling
1 Bedroom	1.33	£17.16

Dwelling Size	Average Household	Contribution per dwelling
2 bedroom flat	1.86	£23.99
2 bedroom house	2.45	£31.60
3 bedroom	2.63	£33.93
4 bedroom	2.85	£36.76
5 bedroom	3.13	£40.38
per bedspace (other residential)	1	£12.90

Further information on green space, children's play space and Plymouth Sound European Marine Site

Plymouth's Green Space Strategy 2008 - 2023 is available on <http://www.plymouth.gov.uk/homepage/leisureandtourism/parksgardensandopenspaces/parksandopenspaces/greenspacestrategy.htm>

Plymouth's draft Green Infrastructure Plan is available on <http://www.plymouth.gov.uk/homepage/environmentandplanning/natureconservation/natureprojects/greeninfrastructureproject/gideliveryplanconsultation.htm>

Plymouth's Sustainable Neighbourhood Assessments are available on <http://www.plymouth.gov.uk/homepage/environmentandplanning/planning/planningpolicy/ldf/ldfbackgroundreports/brsustainableneighbourhoodassessments.htm>

The Tamar Estuaries Management Plan 2006 to 2012 is available on <http://www.devonline.gov.uk/localcontent.htm?site=2&ref=tecfmanagementplan.htm&>

The Yealm Estuary Environmental Management Plan 2007 to 2012 is available on http://www.southhams.gov.uk/administration/committee_agendas/executive/04Oct07/item11_app.pdf

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (the 'Habitats Directive') provides legal protection for habitats and species of European importance. It is available on <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31992L0043:EN:html>

PPG17 Planning for Open Space, Sport and Recreation (2002) is available at www.communities.gov.uk

Circular 06/05 Biodiversity and Geological Conservation: statutory obligations and their impact within the planning system is available at www.communities.gov.uk

PPS9 Biodiversity and Geological Conservation (2005) is available at www.communities.gov.uk

6 Playing pitch, sports and recreation tariff

- 6.1 The Council's Playing Pitch Strategy and Sports Facilities Strategy provide a robust evidence base with which to set local standards of provision, to identify needs and to guide investment and management decisions. Contributions from new development will be used to assist in implementing these strategies by meeting the needs of new residents and mitigating the impact of development.
- 6.2 Contributions will be sought for the provision of new and enhancement of existing:
- Playing pitches: local infrastructure
 - Sports and recreation facilities (swimming pools, indoor bowls and sports halls): strategic infrastructure

Calculating the tariff contribution for playing pitches

- 6.3 Table R1 sets out the Council's standards for playing pitch provision per 1000 people, as determined by the Playing Pitch Strategy.

Table R1: Plymouth's playing pitch standards

	City sub area (hectares per 1000 population)			
	South	North	East	City Average
Playing Pitches (of varying types)	0.632	0.61	1.01	0.75

Source: Plymouth's Playing Pitch Strategy

- 6.4 PPG17 requires local authorities to undertake a detailed local assessment of need and provision in order to develop a local standard. Plymouth's Playing Pitch Strategy used the Sport England 'Playing Pitch Methodology' to calculate a local playing pitch standard for three areas of Plymouth: north, south and east (as shown in Figure R1). This reflects different requirements in different parts of the city based on existing provision in relation to demand and expected population growth to 2016. Shortfalls in provision have been identified in each sub-area of the city. The strategy also assessed the quality of existing pitches and identified priorities for enhancement.

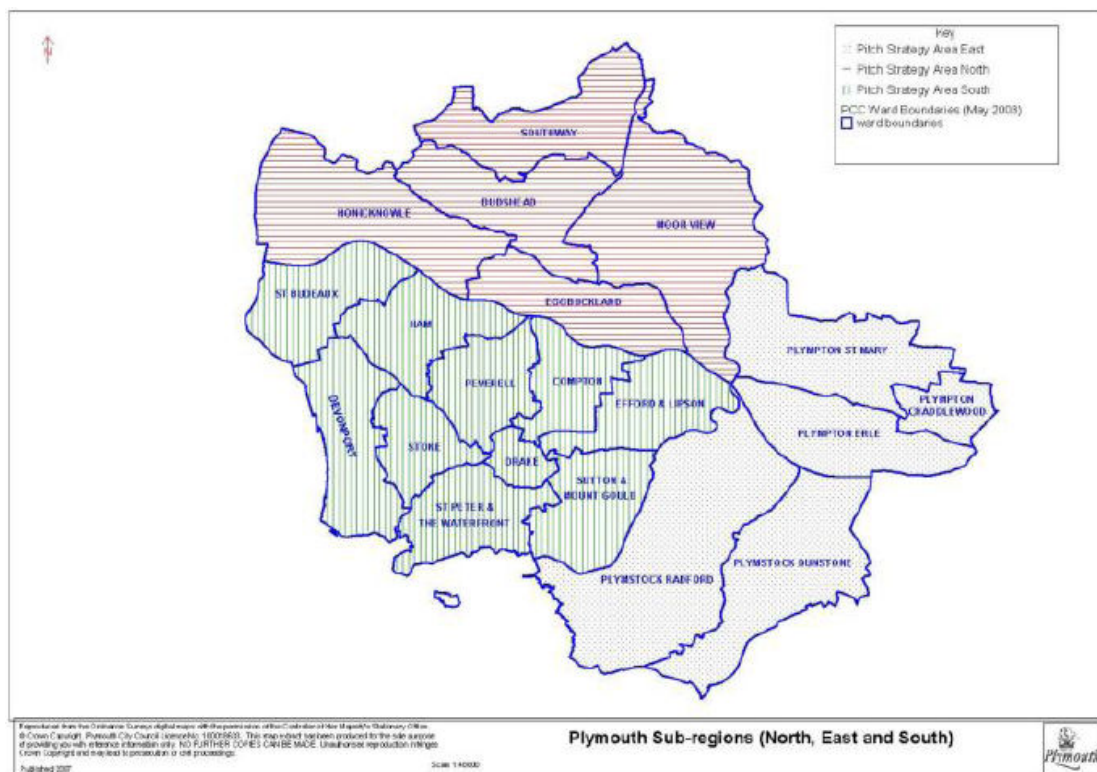


Figure R1: Plymouth sub-regions (for playing pitch standard)

6.5 These standards are used to calculate the provision requirement per dwelling. Contributions are calculated in accordance with the Council's Playing Pitch Calculator and Sport England's Sports Facility Calculator. Table R2 shows the costs per dwelling for playing pitches, both by sub area (reflecting the local standards) and averaged for the city.

Table R2: Playing pitch contributions by dwelling

Dwelling size	Average household size	North (£)	South (£)	East (£)	Local playing pitch tariff (£)
1 bedroom	1.33	522.51	503.81	745.48	590.60
2 bedroom flat	1.86	730.73	704.57	1042.55	825.95
2 bedroom house	2.45	962.53	928.06	1373.25	1087.95
3 bedroom	2.62	1029.31	992.46	1468.54	1163.44
4 bedroom	2.85	1119.67	1079.58	1597.46	1265.57
5+ bedroom	3.13	1229.68	1185.65	1754.40	1389.91

Dwelling size	Average household size	North (£)	South (£)	East (£)	Local playing pitch tariff (£)
per bedspace (other residential)	1	392.86	378.80	560.51	444.06

Calculating the tariff contribution for sports facilities

6.6 Plymouth's Sports Facility Strategy sets out city-wide standards of provision for different types of sports facilities, following Sport England guidance.

Table R3: Sports Facilities Standards

Type of space	Standard (per 1000 population)
Swimming Pools with community access	11.4 sq m of swimming pool area
Indoor Bowls	0.054 indoor bowls rinks
Sport Halls with community access	60 sq m
Synthetic Turf Pitches	306 sq m
Managed All-weather Sports Areas	101 sq m
Outdoor tennis courts	0.2 courts
Fitness gyms	5.4 stations
Small community halls/ activity space	130 sq m

Source: Plymouth's Sports Facility Strategy

6.7 For the purposes of the tariff, swimming pools, indoor bowls and sports halls are prioritised. Table R4 shows the cost per dwelling for contributions towards strategic sports facilities. These costs are based on Sport England's Sports Facility Calculator, adjusted in relation to dwelling size.

Table R4: Tariff contribution for sports facilities per dwelling

Dwelling size	Average household size	Swimming pool	Indoor bowls	Sports hall	Total sports facility tariff
1 bedroom	1.33	£155.00	£23.00	£286.00	£464.00

Dwelling size	Average household size	Swimming pool	Indoor bowls	Sports hall	Total sports facility tariff
2 bedroom flat	1.86	£217.00	£32.00	£400.00	£649.00
2 bedroom house	2.45	£286.00	£42.00	£527.00	£855.00
3 bedroom	2.62	£306.00	£45.00	£563.00	£914.00
4 bedroom	2.85	£332.00	£49.00	£613.00	£994.00
5+ bedroom	3.13	£365.00	£54.00	£673.00	£1092.00
per bedspace (other residential)	1	£117.00	£17.00	£215.00	£349.00

Further information on playing pitches and sports facilities

Plymouth's Playing Pitch Strategy 2007 – 2016 is available on <http://www.plymouth.gov.uk/homepage/leisureandtourism/sportandrecreation/sportsrelatedstrategies.htm>

Plymouth's Sports Facilities Strategy is available on <http://www.plymouth.gov.uk/homepage/leisureandtourism/sportandrecreation/sportsrelatedstrategies/sportsfacilitystrategy.htm>

Sport England's Sports Facilities Calculator is available on www.sportengland.org/facilities

PPG17 Planning for Open Space, Sport and Recreation is available on www.communities.gov.uk

7 Public realm tariff

7.1 Public realm is identified as a strategic element of the tariff, because the primary focus for public realm improvement is the City Centre as the primary commercial centre for Plymouth.

7.2 Many small developments are not enough in themselves to have a major impact on the public realm; however, collectively they do as occupants will visit the City Centre. Therefore, the pooling of contributions will be used to deliver public realm enhancements.

7.3 Contributions could potentially include:

- Public realm masterplanning
- Scheme implementation
- Public realm improvement works such as surfacing and street layouts, street lighting and street furniture, public art and hard and soft landscaping.

Calculating the tariff contribution for public realm

7.4 The tariff has been calculated on the basis of the total area identified for city centre public realm improvements in the Core Strategy (excluding those works already undertaken to Armada Way, or programmed in the West End). This is approximately 5.27 hectares, or 52,700 sq m.

Proposals to create additional north-south linkages in the city centre are also excluded and these works would be expected to be funded directly from redevelopment proposals, or other funding sources.

7.5 The cost for public realm works already completed on Armada Way, updated for inflation, is £199 per square metre. A 19% increase in dwellings is anticipated in the period to 2021, representing 21,000 new homes, therefore, a proportionate average cost per additional dwelling can be calculated based on the following formula:

$52,700 \text{ sq m.} \times \text{£}199 = \text{£}10,487,300.$

$\text{£}10,487,300 \times 19\% = \text{£}1,992,587$ divided by 21,000 = £95 per dwelling.

Further information on public realm

The Manual for Streets is available on

<http://www.dft.gov.uk/pgr/sustainable/manforstreets/>

The City Centre and University Area Action Plan 2006 – 2021 is available at

www.plymouth.gov.uk

Transport tariff

7.6 Transport is identified as a strategic infrastructure need because it is critical to the successful and sustainable growth of the city.

Calculating the tariff contribution for strategic transport

7.7 The Council has identified the likely cost of delivering city-wide High Quality Public Transport (HQPT) as about £236 million over the period to 2021. This includes £130 million for the Eastern Corridor scheme and £107 million for the Northern Corridor scheme. This cost does not factor in construction industry inflation or optimism bias. After potential public sector funding is taken into account, an additional £101 million will be required from developer contributions to complete a comprehensive city-wide HQPT network.

7.8 The Council has assumed that 80% of the remaining £101 million cost (£80.8 million) will be sought from new residential development, and 20% (£20.2 million) from new commercial development. This split is based on assumptions made in other local authority practice, including the Milton Keynes Partnership. To calculate the tariff cost per dwelling, this is divided by the 21,000 new homes planned by 2021 as shown in Box T1.

Box T1: Calculating residential contributions for strategic transport

£80.8 million from 21,000 new homes by 2021 = £3847.62 per dwelling

7.9 In order to more reasonably reflect the varying levels of trip generation from housing units of different sizes, the Council has factored up and down the contributions per unit of different sizes. Table T1 shows the cost per dwelling type:

Table T1: Residential Transport Tariff

Dwelling Size	Contribution per dwelling
1 bedroom	£2,871
2 bedroom	£3,589
3 bedrooms	£4,307
4 bedrooms	£5,025
5+ bedrooms	£5,743
HMO/ Student bed space	£2,208

7.10 The remaining £20.2 million divided among approximately 78 hectares of combined employment and retail floor space (64 hectares employment and 14 hectares, or 140,000 sq. m retail floor space) anticipated to be delivered in the city by 2021, suggests that average contributions will be required from commercial developments of £25.90 per square metre.

Box T2: Calculating commercial contributions for strategic transport

£20.2 million from 64 hectares employment land and 14 hectares retail floor space (780,000 sq m).

$£20.2 / 780,000 \text{ sq m} = £25.90 \text{ per sq m}$.

7.11 However, in order to (a) reflect the significantly higher levels of trip generation associated with retail development (broadly speaking 5:1) and (b) offset the anticipated 'loss' of contributions from new commercial development below the 500 square metre threshold, contributions for retail development will be factored up to £56.06 per square metre and for all other forms of commercial development will be factored down to £21.89 per square metre as shown in Table T2.

Table T2: Commercial Transport Tariff

Commercial Use	Contribution per 100 sq m
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Retail Use	£5,606
<i>Office, Industrial, leisure and hotel</i>	£2,189

Further information on strategic HQPT transport

Plymouth City Council (2009) Infrastructure Delivery Plan Final Report. Ove Arup and Partners.

Plymouth City Council (2006) Local Transport Plan 2, 2006 – 2011.
www.plymouth.gov.uk