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Guide to estimating the needs, costs and funding of social and environmental infrastructure

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Notes

This is intended to provide background information and a checklist ready-reckoner. It should not be used for decision making purposes without being checked because no warranty is given that it is either comprehensive, accurate or up to date. I assert my authorship. You are free to use the information at your own risk but creating this took a lot of time and I am making it available for nothing so please do give Michael Beaman Limited due credit in any written material that makes use of it.

The list of funding sources is intended to cover the type of major and mainstream sources that might be useful in a strategic context. The sources that I have used vary and include case studies, published guides and interpretations of data from Spons, BCIS etc. Around 35 SPD's have been scoured for well founded and evidence based examples of charges. But I have not updated the schedule to take account of the 2010 Spending Review, pending clarification of departmental plans and to that extent the funding commentary is not up to date.

The cost figures do not allow for contingencies and internal management project management costs but usually include consultants fees etc.

Non-local services such as national rail, road network, higher education, acute health care etc. are not included. Acute health care is normally paid for through PCT's on a revenue basis and higher education through the Higher Education Funding Council. Note that many of these funding streams are now actively under review.

If you find any errors in this or, better still, if you can help me to add to it and improve it, please do get in touch.

Any queries, contact beaman@regenerate.co.uk

Item	Estimating Need	Costs	Funding Sources
Urban Parks & Gardens	PPG 17 Assessment	<p>Oxford C.C. used project costs costs as a basis for their SPD. Florence Park included a wide variety of amenities but was otherwise ordinary. The budget was £1291k equating to around £150k per ha. A separate budget equating to £68k per ha was given for a 'Gillians' neighbourhood park with limited amenities. Neither included fees or land costs. Proposed figure: On this basis a reasonable budget for mid 2008 and including fees but not land might be £180,000 ha for an urban park and £82k for a neighbourhood park.</p> <p>Typical maintenance might be £25 sq m p.a. with wide variations depending on practice</p>	<p>LA Capex</p> <p>There appear to be no lottery schemes directly aimed at funding parks at present. The current list of programmes can be found here.</p> <p><u>Changing Spaces - Community Spaces</u> Up to £0.45m for community led schemes.</p> <p>Parks for People is part of the Heritage Lottery Fund. Details can be found here</p>
Country Parks	PPG 17 Assessment	<p>In March 2004 Cambridgeshire CC commissioned a Strategic Open Space Study. This included a notional budget for a 100 ha Country Park . The estimated cost was around £30,000 per ha. which included the purchase of land at agricultural values. This was based on a fairly elaborate specification including a playground and visitor's centre which would require revenue subsidy to run and thus might be</p>	<p>LA Capex</p>

avoided. Proposed figure: Deducting the allowance for this together with the attendant fees suggests that, after making an allowance for inflation from 2004 to end 2008, an allowance of £30k per ha remains practical.

Natural and Semi Natural Greenspaces

PPG 17 Assessment

There is no single model for the provision of LA Capex natural and semi –natural greenspaces. (These differ from the Country Park model referred to above by necessitating less interventionist investment in landscaping and facilities). Some Councils levy a charge but do not give a calculation. e.g. Crawley estimated that it would cost around £4k per ha to make necessary qualitative improvements to that area i.e. Oxford based a charge on the cost of creating an ecological site at Milham Ford - £21,000 per ha. Proposed figure: £10k per ha.

The National Forest Company have published guidelines on contributions to and costs of forest creation .

See [here](#)

See [here](#) for information on future use of the Aggregates levy Sustainability Fund

Buckinghamshire CC published a Green Infrastructure Plan with a useful summary of funding sources which can be found [here](#)

Green Corridors	PPG 17 Assessment	This concept is too vague to be amenable to costing. Specific proposals would be needed.	
Outdoor Sports Facilities	<p>PPG 17 Assessment</p> <p>NPFA standard assumes around 1.6 ha of playing fields etc. per 1000 population.</p> <p>Because pitches require a large amount of open space and existing provision varies widely a generic requirement cannot be determined.</p>	<p>Reasonable budget estimates are given in the Sports England 'Kitbag'. See the link here to their facilities costings. The Q2 2008 figures are provided in the Appendix. The NPFA used to publish cost guides giving more detailed on a wider variety of types of facility but which required more interpretation. The last edition was 2003. Note that the variation in cost between (say) Rugby and football pitches will be less than that variation in costs arising from site specific factors such as drainage and access. Note also that there are other standards – for instance the FA Foundation applies higher standards when considering requests for grants under their facilities scheme.</p> <p>Maintenance NPFA mid range approx £1k per ha p.a. & (say) pitch charges cover pavilion maintenance.</p>	<p>LA Capex</p> <p>The Football Foundation provides grants for football facilities</p> <p>The Tennis Foundation provides support for investment in tennis facilities</p> <p>The current Sport England grant regimes for sports are summarised here. At present few are aimed at capital investment.</p>
Amenity Greenspaces	PPG 17 Assessment	<p>Costs depends on specification etc. Worthing's SPD budgets £130k per ha for amenity space. Crawley budget £22kper ha. In practical terms the creation of amenity green space as defined in PPG17 might only involve some earth moving, grass and perhaps a footpath, provision at the lower end seems adequate. Spens mid range</p>	<p>LA Capex</p> <p>Groundworks manage the Community Spaces lottery grants. See here</p>

		provision for grassing & draining 'parkland' is approx £20k per ha incl. fees.	
LEAPs	PPG 17 Assessment Typically play areas of 100 sq m (Worcester) to 400 sq m GLA Guide) within 240m of home & with at least five different play components GLA provide a SPG standard based on sq m per child and children per household here	Oxford's SPD estimates c. £36k for a LEAP but give no cost breakdown. Mid Sussex provide a summary budget suggesting £59k. The NPFA Cost Guide 2003 quoted £19.5k - £32k although this seems to exclude fees etc. The current equivalent range including fees might be £27k -£42k..Proposed Figure: £40k Maintenance charges vary widely. say £4 sq m p.a. .	LA Capex A programme of 'Play Pathfinder and 'Playbuilder' capex & revenue grants has been announced covering 2010. See here
NEAPs	PPG 17 Assessment Typically 10 play components NPFA : The activity zone requirements are 1,000 sq m divided into two parts, one containing a range of play equipment and the other a hard surface of at least 465 sq m with 30 m distance between the edge of the activity zone and the boundary of the nearest residential property.	The NPFA Cost Guide 2003 quoted £50k - £80k although this seems to exclude fees and the supply of any mains services to the site. The current equivalent range including fees might be £70k - £110k. Oxford's SPD estimates c. £60k for a LEAP but give no cost break down . Mid Sussex provide a summary budget suggesting £59k. Proposed figure £80k. Maintenance charges vary widely. say £4 sq m p.a. .	LA Capex See above re Play.

Also see GLA standard above.		
Flood Protection & Drainage	Planning Policy is set out in PPS25. get it here .	The emerging regime is described in the Flood and water Management Bill 2009. See here The general rule is that works to protect existing property are paid for by the public sector on a scored prioritisation basis while works to protect new schemes are paid for by the developers. EA are currently trying to refine this approach.
MUGA's & Shelter's	Oxford's SPD estimates c. £60k for a combined MUGA & Shelter, being £55k and £5k respectively. Proposed figure : £60k and £5k respectively. Maintenance charges vary widely. say £10 sq m p.a. .	LA Capex
Skateboarding	Cambridge CC Open Space Strategy for 2003 refers to capex on £215k over 5 skateboard facilities, averaging £43k, (half pipe costs less) and £9k for a BMX range. At current prices these might be £ 52k and £11k. Requirements change according to fashion. Proposed figure (where there is a requirement) a budget of £40k for each themed activity facility.	LA Capex
Allotments,	Following the repeal of the Allotments Act 1925 LA's are no longer obliged to provide	In Sept 2008 Shrewsbury & Atcham Council considered proposals to create new LA Capex

<p>Community Gardens & Urban Farms</p>	<p>allotments.</p>	<p>allotments. The budget is shown in the Appendix. The cost per hectare was approximately £100k and this is the proposed figure.. Allotment fees are around £25 - £50 depending on size & location & this should cover maintenance primarily of access & fencing. .</p> <p>Community gardens and Urban Farms are usually 'one off's' and a specific budget is not practical.</p>	
<p>Churchyards & Cemeteries</p>		<p>It is assumed that in most cases the requirement will be to extend existing cemeteries. In practical terms the extension will need a fence or wall, access paths and possibly equipment storage with the first of these being the major cost. Assuming £100m for a 300 m perimeter fence together with additional access works a budget of £50,000 ha. might be appropriate.</p>	<p>State support for purely religious purposes is not available. Heritage Lottery Grants are available for repair of listed buildings. See here</p> <p>Cemeteries. LA Capex & some cemeteries in the cities are run as private companies.</p>
<p>Churches and religious buildings</p>	<p>Needs not normally defined. Provision sometimes made for multi-faith facilities</p>		<p>Grants for repairing historic churches from English heritage Lottery Fund. e.g. here</p> <p>Note that public funding is not made available to support religious building or activity but for ancillary purposes e.g. conservation or towards an associated community facility. See here for DCMS</p>

			generally supportive advice in this respect.
Civic Spaces		Normally one – offs and design led	LA Capex
			<u>Townscape Heritage Initiative</u> run by Heritage Lottery Fund. Up to £2m.
Indoor Leisure facilities	Sports England calculator for pools, sports halls and bowls	Maintenance. BCIS 2004 + 20%. Swimming pools £5.8 sq m gfa Sports centre £5.15 sq m gfa	Sport England strategy, including funding, mostly revenue at present, can be found <u>here</u> .
		Audit Commission data suggests av. spending per head on running indoor sports is around £6 p.a.. See <u>here</u> .	Details of Sport England's Swimming Capital Modernisation Programme <u>here</u>
Community and youth centres	The key issue is how big the facility should be with requirements elsewhere seemingly ranging from under 0.2 sq m per dwelling to 1 sq m per dwelling	Costs typically range from £1,200 sq m to £1,800 sq m. Proposed figure 0.4 sq m per dwelling and a cost budget of £1,700 sq m to cover construction, fees and basic equipment. This should cover (for instance) the facilities specified in Sports England's Design Guidance on dual purpose "Village and Community Halls" (2001. ISBN 1 86078 130 6).	LA Capex
		Audit Commission data suggests av. spending per head on running indoor sports	

is around £6 p.a.. See [here](#).

Health centres & PCT Facilities

Gov target and average ratio of GP's to population in UK is 1800. Special services requirement will vary from area to area. At 2.4 people per dwelling that is 1 GP : 750 dwellings.

In London & the SE the specialist' HUDU' model can be used to predict demand.

[Link to procurement advice for PCT's](#)

The 3 case studies on this website (Oct 2008) have a mean all in cost of £1,850 sq m. Assuming 100 sq m per GP & ancillary uses suggests £185,000 per GP. or £247 per household

HUDU also predicts costs, both capex & revenue.

PCT are revenue funded on an adjusted capitation basis. Details at this [link](#)

[The Lift Scheme](#) is a mini PFI' for PCT's.

Note that Doctors directly or indirectly pay a rent for their premises and some private companies provide this space.

e.g. [Primary Health Properties](#)

PCT's in Growth Areas get supplemental grant. See docs at link above.

Care Homes - Residential

Spons: Mid range + fees approx £45k bed

Normally private sector provision.

Care Homes -

Based loosely on Spons & BCIS, probably around £60k bed up to £100k for intensive care / hospice accom.

Often private sector provision. e.g. [Southern Cross](#)

Adult Social

Needs should be analysed and defined in a

The DoH overview of funding for social

services provision	<p>strategy for the provision of Children's Services on the Council website. Needs will include secure accommodation, refuges etc.</p> <p>Note that from 1/4/2008 Social Services depts. and PCTS have been required to jointly prepare a 'Joint Strategic Needs Assessment for Health & Well Being'</p>	<p>services can be found here</p> <p>More detailed information is provided by I&DEA here</p> <p>Information on current levels of funding can be found here .Note that this is ring fenced grant.</p> <p>See also Note 1</p> <p>DoH Extra Care Housing Fund details can be found here.</p>
Child Social Services Provision	<p>Needs should be analysed and defined in a strategy for the provision of Children's Services on the Council website</p>	<p>Information on current levels of funding can be found here. From this web page you can also find current information on capital funding available to support the Children's Plan.</p> <p>See also Note 1</p>
Nurseries	<p>The need for public provision of space for these primarily arises in large new settlements where private and voluntary</p>	<p>Spons 2007 gives a construction cost range of £4k - £9.5k per child. (say £5k - £11k at 2008 prices including fees). Proposed figure Further Financial information on early</p>

	<p>projects cannot provide a service in advance of full demand. Note that an adequately sized community centre can accommodate a nursery and avoid the need for purpose built provision. But a more frequent requirement is for a nursery extension to a primary school and. A typical requirement overall might be for 5 spaces per 100 dwellings.</p>	<p>£400 per dwelling where necessary</p>	<p><u>years care generally</u></p> <p>Some Sure Start funding is used for nursery places. information is directly accessed through the Links below.</p> <p>See also Note 1</p>
<p>Children's Centres & Extended Schools</p>	<p>Apparently Milton Keynes which has a population of around 200,000 soon, will need 20 children's centres to provide a full service. (Source: Hansard July 2008) i.e. 1 centre per 10,000 households.</p>	<p>The construction cost of built centres seems to typically run from £800k to £1500k. Proposed figure: £120 per household.</p> <p>Note that responsibility for managing capex investment in co-location of children's services has now passed from DCSF to Partnerships for Schools. See here</p>	<p><u>Children's Centre Capital Funding Guidance</u></p> <p><u>Capital Grants for Children's centres</u></p> <p>LA's also get a block grant for investment i nearby years services</p> <p>See here</p> <p>NB. DCSF confirm that revenue & capex allocations are based on LA demog. data and thus include a provision for growth.</p> <p>See also Note 1</p>
<p>Primary Schools</p>	<p>Link to calculation of school size</p>	<p>Link to basic cost information on Teachernet</p>	<p>Link to information on funding for schools</p>

			<p>Link to location adjustment spreadsheet on DCSF Funding Allocations teachernet</p> <p>Note that a lot of the responsibility for managing capex investment in schools has now passed from DCSF to Partnerships for Schools. See here</p>
Secondary Schools	as above	as above	<p>Link to information on funding for schools</p> <p>DCSF Funding Allocations</p>
Voluntary Aided Schools	In some areas some of the pupils generated by any given scheme will be taken by Voluntary Aided schools. These help meet the overall demand for places.	as above	Information on state funding for new places at Voluntary aided schools can be found here
Adult Education			Information on the LSC 16-19 capital Fund is provided in Guidance here and a more general guide to LSC capital funding policy here .
Arts Facilities	As required. For an example of a small facility see this CABE case study	<p>Studio theatre (Under 500 seats) c. £10,000 seat incl. fees.</p> <p>Arts & Drama studios av. £1600 sq m incl fees</p> <p>Both from Spons.</p>	DCMS Guide to Arts Funding

Police	As required	Budget for a low rise, non air conditioned bespoke office incl fees and external works £1500 sq m.	Police funding comes from (a) Home Office and (b) Local Authorities. It is effectively capitation based.
			<u>Information on the Home Office funding</u>
			Note that dedicated capital funding from the Home Office is intended to pay for national strategic projects only. .
Fire & Rescue	(say) 50 sq m per bay extension	West Northants costs imply budget of £1.073 m for this. Presumably excludes vehicles.	Funding mostly channelled through Local Authorities on a formula based on risk with access to PFI for larger projects and discrete funding for special purposes.
		West Northants calculate 1 new fire station + 5 appliances per 12,476 dwellings. This sounds excessive based on ratio's elsewhere. .	<u>Info on PFI for Fire & Rescue Service</u>
Ambulance	(Say) 50 sq m per bay extension.	Approx £65,000 bay @£1000 sq m based on <u>Scottish Assessors Association guidance</u> for a basic station adjusted for location & inflation	Ambulance services are paid for through the PCT's. on a demand basis so there is no clear reason why they should need a contribution unless this is clearly excluded from the funding to the PCT.

Libraries	Average facility size 6 sq m per 1000 population - say 400 homes. Museum Libraries & Archives Council "Public Libraries, Archives and New Development: A Standard Charge" For definition of standards and needs see here and here	Average cost per sq m in SE England including books £3,068 sq m Museum Libraries & Archives Council "Public Libraries, Archives and New Development: A Standard Charge"	Through Local Authority mainstream funding.
Waste - Collection	Provision of wheelie & recycling bins per dwelling.. Extra costs might be incurred where there are specific initiatives to ensure compliance with Landfill Allowances and Trading Scheme Directive 2005	Typical costs reflected in existing SPD's seem to be around £50 per house and £70 per flat. West Northants DC calculate a need for a total of £480 per dwelling for this, presumably to include above.	L A Capex
Waste - Treatment & disposal	Depends on nature of need & context. These should be defined in the local Waste Strategy		Summary of DEFRA funding for waste Infrastructure Waste PFI Info Also LA capex
Transport	Highways Agency main road projects are listed here Local requirements for non-trunk roads		Through Local Transport Plans Highways Agency (Trunk Road) , Network Rail etc. & some special funds

and other local transport infr are set out in LTP's or strategic studies

[Guide to determining Regional Funding Allocations](#)

<http://www.dft.gov.uk/pgr/regional/fundingtransportinfrastructure/>

[Guide to the Transport Innovation Fund](#)

A Guide to Developer Contributions for Strategically Important Projects can be found [here](#)

NB. Transport Innovation Fund now scrapped

Car Parks

Per car incl fees.

Surface Average £1.3k - £2.0k

Undercroft £2.5k - £5k

Multi storey £6k - £13k

Basement £25k - £40k

Where charges are higher, low cost multi storey car parks should cover their own finance & running costs.

Water & Sewage	<p>Responsibility for the sewage and water supply rests with the statutory undertakers and the same company often (not always) supplies both. They charge developers for connecting to drains and sewers and can also charge for extra pipework that they have to lay.</p>	<p>Examples of the costs incurred by developers in connecting to sewers and mains can be found here</p>	<p>For information on the arrangements for paying for sewage and water connections click here</p>
			<p>For information on the strategic management of water supplies click here</p>
			<p>Reports on the plan for each region are here</p>
			<p>OFWAT are currently consulting on the structure of the next review. See here</p>
Electricity	<p>Standard charges are levied on developers connecting to the mains. No additional charge is normally levied if (a) the additional demand is less than a 25% increase in burden at the point of connection or (b) any need for system reinforcement at 1 voltage step above the connection. Utilities can refuse if the cost of connection is 'uneconomic' in the context of their subsequent income. This covers all but the most power hungry schemes.</p>		
Gas			

Remediation	General principle is 'polluter pays'.		<u>Contaminated Land Capital Projects Programme</u>
Environmental Sustainability	Frequent requirement for Sustainable Urban Drainage System (SUDS). For explanation see here	It is not possible to generalise about the cost of a SUDS scheme because they vary from site to site.	Normally paid for directly by developers.
Affordable Housing	Normally required as direct provision but in some cases cash in lieu is accepted.		HCA funding for the coming years is set out in the Regional Investment Strategy & Statement for each region. Information on each region is here The process of allocation is through the single conversation, summarised here

Notes:

1. Local Authority Capex
For a general guide and information on Local Authority Capex Funding see [here](#).
For specific figures see [here](#).
A lot of what were specific purpose grants to Local Authorities are now covered by Area Based Grant which is aimed at giving Local Authorities more financial flexibility. For details see [here](#). Section 2 lists the subsumed grants .
Special purpose grants to Local Authorities are listed [here](#)
2. Voluntary Sector Grants
Voluntary Organisations can access funding sources that public bodies cannot. These are mostly charitable. See [here](#) . but include some dedicated Government funding streams. See [here](#).