CHAPTER TEN - AFFORDABILITY

INTRODUCTION

10.1.1 This section summarises the financial affordability of the preferred option. It describes the underlying financial position of the Trust, and sets out the key assumptions and methodologies employed in deriving projected income and expenditure. This section also explains how the affordability of the preferred option varies between a publicly funded scheme, a scheme procured under PFI and a scheme funded by Prudential Borrowings.

10.1.2 The Trust's analysis of affordability is aligned with the Trust's Foundation Trust application and utilises the Trust's long-term financial model (LTFM). The first version of this was approved by the Trust Board and submitted to the South East Coast SHA in December 2010. This was :-

- updated in June 2011
- refreshed in November 2011
- refreshed in February 2012 (and in May 2012 the OBC was re-approved by South East Coast SHA and approved by the Department of Health)
- refreshed in November 2012
- refreshed in April 2013

10.1.3 The LTFM covers the period to 2021/22, and data is based on real prices and converted to nominal prices using the Trust's view on tariff changes and inflation assumptions.

10.1.4 The Trust has moved towards financial sustainability over a number of years, with in year performance consistently delivering significant Surpluses, following a number of years of deficit. The Trust has consistently delivered significant levels of cost improvements, demonstrating the capacity to manage the challenges arising from this development.

10.1.5 The Trust faces a challenging efficiency requirement over the next few years, as a result of changes in the NHS financial position. The 3Ts development is a key enabler for the delivery of these efficiencies, as the Trust will be operating within a safer, more clinically appropriate and flexible operating environment. Although the initial impact of the investment drives a higher efficiency target in the short term, to cover the increase in operating costs, the Trust is confident that it will be able to deliver a step-change in the efficiency of service delivery, as well as the quality improvements described in this case.

10.1.6 The Trust long-term financial model has been refreshed, and continues to be regularly updated with income and activity assumptions discussed and agreed with local and regional commissioners. The Trust is modelling delivery of at least an overall 1% Surplus in the future, as part of the FT application, and the annual efficiency requirement is driven by this assumption, which ensures compliance with the Monitor Financial Risk Rating regime. In this chapter, the Trust disaggregates the element of the efficiency requirement that is specific to 3Ts, but operationally, this forms an element of the overall Trust programme for

the future and is managed and delivered in an integrated fashion. 3Ts provides the key platform for the delivery of the savings requirement as the Trust moves to FT status.

10.1.7 For the publicly funded model, the required annual efficiency savings are at a level which is considered deliverable in the context of a transformation of the Trust estate and obtaining an appropriate EBITDA margin (Earnings Before Taxation Interest Depreciation and Amortisation). The PFI procurement model is less clear-cut, and would generate a significant additional savings requirement, over and above the impact on the delivery timescale.

10.1.8 The publicly funded model also differs from a PFI procurement model in that incremental Revenue costs arise before any building opens. These costs arise from Public Dividend Capital payments being based on 3.5% of the average Assets under Construction. Under International Financial Reporting Standards (IAS16 Property, Plant and Equipment) such costs would normally be capitalised, but NHS accounting rules preclude such treatment. In a similar way interest costs under a Prudential Borrowing arrangement would not be capitalised. From an Affordability perspective this “accounting anomaly” gives PFI procurement a distinct advantage. Savings to meet this accounting anomaly are highlighted later in the chapter.

10.2 HISTORICAL FINANCIAL PERFORMANCE

10.2.1 After a number of years of financial overspend, the Trust moved to recurrent in-year financial balance in 2007/08, and has consolidated this position with an I&E operational Surplus in most years since. The table below sets out the summary financial performance with step change in 2011/12 being the hosting of the Kent Surrey and Sussex (KSS) Deanery.

Figure 10.1: Historic EBITDA and I&E Trend

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Total Income	309.3	326.3	352.7	400.9	417.5	440.1	574.2	604.5
Total Operating Expenditure	-303.8	-314.7	-331.1	-363.8	-382.3	-410.6	-545.9	-572.1
EBITDA	**5.5**	**11.6**	**21.6**	**37.2**	**35.2**	**29.5**	**28.3**	**32.4**
Depreciation/P&L on disposal	-9.4	-9.4	-11.0	-14.3	-14.5	-15.1	-18.2	-19.3
Interest Payable / (Receivable)	0.0	0.2	-0.5	-3.1	-3.0	-2.8	-2.5	-2.6
PDC Dividend	-7.4	-7.7	-7.6	-8.9	-7.6	-7.7	-7.8	-7.3
Surplus / (Deficit)	**-11.3**	**-5.3**	**2.5**	**10.8**	**10.2**	**3.9**	**-0.2**	**3.2**
Non Operational adjustments	-2.2		-2.3	-5.6	-5.4	-16.0	-16.0	-3.2
In-year performance per Annual Accounts / LTFM	**-13.5**	**-5.3**	**0.2**	**5.2**	**4.8**	**-12.1**	**-16.2**	**0.0**

Note: all figures shown are in £'millions.

10.2.2 Following a number of years of ‘turnaround,’ the Trust is now in a position of improved financial sustainability. This has been delivered with the support of the local health economy, and has been a key strategic priority for both the Trust and commissioners for a number of years.

10.2.3 A key element of this improved financial performance has been the delivery of efficiency savings, and the figure below sets out the savings delivered for the past six financial years and shows a cumulative total of £138.9m.

Figure 10.2: Savings delivered 2007/08 - 2012/13

	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Savings	19.8	18.6	25.1	22.9	20.5	32.0

Note: all figures shown are in £'millions.

10.2.4 The published Reference Cost Index (RCI) provides a measure by which Trusts can compare costs against a mean index score of 100. The Trust's historic RCI were as follows :-

- 2005/06 = 96.36
- 2006/07 = 100.45
- 2007/08 = 99.62
- 2008/09 = 98.15
- 2009/10 = 92.71
- 2010/11 = 95.49
- 2011/12 = 95.79

10.2.5 This is a broad indicator of relative efficiency. Within this there will be areas of the hospital where costs are higher than average as well as areas where the Trust's costs are lower. The 2012/13 RCI will be available in the Autumn of 2013.

10.2.6 The Trust has rolled out a system of Service Line Reporting, and is in the second year of rolling out a system of Service Line Management. In this model, the financial contribution of individual operational units is analysed and used as a tool to support the management of risk and performance issues. This process allows the Trust to focus on service areas where costs are at significant variance to the tariff. Service Line Reporting highlights areas where costs are less than income

10.3 ELEMENTS OF THE FINANCIAL MODEL

10.3.1 The Trust has developed robust financial models for this development, and has deployed these, alongside the Trust's Long Term Financial Model, to review affordability. These models contain a number of key assumptions around activity, income and expenditure. These assumptions are discussed below, and are subject to regular review.

Activity and Associated Income

10.3.2 The local NHS landscape is changing, and the Trust has taken account of this in its ongoing review of affordability. The Trust worked closely with the local commissioning PCTs in 2009 and 2010, to ensure that the OBC reflected their commissioning intentions. The original OBC assumptions utilised in the modelling were assessed against the PCT plans by 2020 Delivery Ltd, an independent consultancy firm, which supported the PCTs in developing the Sussex-wide Tertiary Commissioning Strategy.

10.3.3 The establishment of Clinical Commissioning Groups (CCG) will have an impact upon the flow of patients to the Trust. To reflect this impact, the Trust has modelled additional Demand Management schemes over the next three years.

10.3.4 For the refresh, the baseline financial assumptions for the OBC, and for the Trust Long Term Financial Model have now been refreshed in the light of the changing resource situation for the health service and for the local health economy. In particular, assumptions around growth have been scaled back to ensure alignment with CCG commissioning plans. As commissioners take increased ownership of the financial resources of the local health economy, the Trust will have more detailed discussions to ensure that the financial assumptions are also owned by these groups.

10.3.5 The modelling assumes a small amount of activity growth over the period. The net growth assumptions reflect the historic trend of activity growth, but allows for a greater amount of Demand Management initiatives than seen in recent years.

10.3.6 The modelling is based on the outturn activity for 2012/13 as reported in contract monitoring forecast activity and income for the year. Adjustments have included increases from:

- general activity growth, arising from population & patient acuity;
- specific activity growth, for high-growth areas;
- new service developments; and
- repatriation of neuroscience, haematology and trauma patients, in line with long-term commissioning intentions of the Local Health Economy

10.3.7 Adjustments have also been built in for decreases arising from CCG demand management, and services being developed in the community. The Trust's modelling has assumed changes to capacity to reflect this and these are shown by reducing expenditure in our financial modelling.

10.3.8 Although the experience in the recent past has been that activity over-performs against the CCG demand plans, an assumption of over-performance has not been built into the planning assumptions for 3Ts. The activity and income projections set out in this OBC can therefore considered to be extremely prudent.

10.3.9 The Trust has modelled significant activity management schemes until 2015/16 and incorporated prudent growth assumptions thereafter. It is anticipated that CCGs will need to introduce further demand management schemes above the level notified to the Trust to manage demand in future years. The Trust will need to work closely with Commissioners and will incorporate any developments at Full Business Case stage.

10.3.10 The income modelling is consistent with the activity assumptions underpinning the capacity modelling for the 3Ts development, with updated bed reduction plans offsetting the change in general growth assumptions.

10.3.11 The anticipated change to income received from each commissioner for the period to 2021/22 (the planning period included in the Trust's Long Term Financial Model and the year of the opening of the second phase of the new hospital) based on the activity, performance and other assumptions identified

above is shown in the figure below. These indicative numbers are shown in more detail in **Appendix 10A**.

Figure 10.3: Income change in terms of 2012/13 prices

Commissioner	2013/14 Forecast	2021/22 Forecast	Income Change	% Income Change
NHS Brighton and Hove CCG	163.0	177.8	14.9	9.1%
NHS Coastal West Sussex CCG	15.7	17.2	1.4	9.2%
NHS Crawley CCG	3.6	3.9	0.3	9.2%
NHS Eastbourne, Hailsham and Seaford CCG	8.0	8.8	0.7	9.2%
NHS Hastings and Rother CCG	3.8	4.1	0.3	9.2%
NHS High Weald Lewes Havens CCG	49.9	54.5	4.6	9.2%
NHS Horsham and Mid Sussex CCG	71.1	77.6	6.5	9.2%
Surrey based CCGs	0.4	0.4	0.0	9.2%
Non contracted activity	2.3	2.6	0.3	11.5%
National Commissioning Board	99.3	159.6	60.3	60.7%
Total	417.1	506.5	89.4	21.4%

Note: all figures shown are in £'millions.

10.3.12 Of the 21.4% change between 2013/14 and 2021/22, 1.9% (£7.9m) relates to 3Ts repatriation of specialist activity including Radiotherapy. Underlying growth in demand for services of between 0.5% and 1% pa is assumed from the opening of Stage 1 in 2018/19, with CCG Demand Management schemes suppressing growth across the period. PBR Exclusions including high cost drugs are effectively a pass through cost and account for 13.2% of the Trust's total income by 2021/22 (9.7% in 2013/14).

10.3.13 High growth areas eg HIV, Cancer and Renal, explain the balance of growth in period, with modelling for the next three years validated via discussions with clinical divisions as part of the ongoing clinical strategy development (after this period, the model includes only generic activity growth for these areas). The National Commissioning Board growth of 60.7% relates to Specialised Services and is therefore not allocated to CCGs.

10.3.13 The table below shows the income deflated to real price levels which reflects the Trust's Long Term Financial Model tariff assumptions shown in Figure 10.5. This modelling uses the income inflation assumptions agreed by the Trust as part of the FT application process.

Figure 10.4: Income inflated/(deflated) to nominal prices

Commissioner	2013/14 Forecast	2021/22 Forecast	Income Change	% Income Change
NHS Brighton and Hove CCG	160.5	170.6	10.1	6.3%
NHS Coastal West Sussex CCG	15.5	16.5	1.0	6.3%
NHS Crawley CCG	3.5	3.7	0.2	6.3%
NHS Eastbourne, Hailsham and Seaford CCG	7.9	8.4	0.5	6.3%
NHS Hastings and Rother CCG	3.7	3.9	0.2	6.3%
NHS High Weald Lewes Havens CCG	49.1	52.2	3.1	6.3%
NHS Horsham and Mid Sussex CCG	70.0	74.5	4.4	6.3%
Surrey based CCGs	0.4	0.4	0.0	6.3%
Non contracted activity	2.3	2.5	0.2	8.6%
National Commissioning Board	97.7	153.0	55.3	56.6%
Total	410.6	485.8	75.2	18.3%

Note: all figures shown are in £'millions.

10.3.14 The repatriation numbers from opening of the first phase in 2018/19 are included within the National Commissioning Board figures. This activity formed part of the tertiary commissioning strategy which was agreed by the local PCTs and transitioned to the CCGs.

10.3.15 The resource associated with this activity is already within the commissioning budgets for each CCG and is therefore a redirection of where this budget is spent – away from other centres and to BSUH. This redirection will result in a benefit to each CCG due to differences in the Market Forces Factor being charged e.g. London hospitals could add between 21.37% and 29.76% compared to 7.44% locally.

10.3.16 The Trust tariff inflation assumptions used are set out in the table below and are consistent with Monitor latest guidance, but adjusted to reflect the weighted average across the current service portfolio :

Figure 10.5: Assumptions on Income Inflation

Year Inflation Assumption	%
2013/14	-1.5%
2014/15	-1.3%
2015/16	-1.3%
2016/17	0.0%
2017/18	0.0%
2018/19	0.0%
2019/20	0.0%
2020/21	0.0%
2021/22	0.0%

Revenue Costs

10.3.17 Cost of activity changes are built into the Trust's LTFM at current prices. A cumulative cost of £20.9 million has been identified for activity changes up to and including the 2021/22 financial year. This covers the costs of general growth and of specific service change, but excludes impact of efficiency savings.

Figure 10.6: Cost of Activity change 2021/22

Cost Type	Cost of Activity Change at 2021/22
Pay Costs	8.1
Drugs & Clinical Supplies	2.9
Other Costs & change in FM	9.9
Total Cost of Activity change	**20.9**

Note: all figures are in £'millions

10.3.18 The above figures were used in the Trust's Long Term Financial Model compiled as part of the Trust's application for Foundation Trust status. These numbers reflected a change to the underlying general growth assumptions between the opening of 3Ts buildings and end of 2021/22 and these will need to be factored into detailed costings at Full Business Case stage. In absence of detailed costings Marginal Rates based on the Trust's Service Line Reporting, were applied.

10.3.19 Transitional costs are those associated with the delivery of the programme and are non-recurrent. They include costs associated with programme management, procurement, commissioning the new facility, double running and decant costs.

10.3.20 In 2009/10 it was assumed that under a publicly funded scheme the Trust will be able to expend around 7.5% of the total capital spend (ie. £31.5m) on transition costs. This would enable the Trust to access transitional costs for each stage of the building. Historically the limitation was that Trusts may draw down a maximum of 2.5% in any one year and that this cannot be held for longer than 7 years. Under a PFI scheme there will be additional transitional costs in respect of financial and legal costs.

10.3.21 These figures were based on the assumptions made by other NHS Trusts in their OBCs and FBCs and was based on evidence collected by Trusts who had gone through this process.

10.3.22 3Ts transitional costs were calculated by estimating the likely costs, based on the tasks that will need to be undertaken, and costs incurred in similar projects elsewhere. With the extension of the programme the latest estimate of transitional costs is £34.3m (the whole life of the programme from 2010/11 to 2022/23).

10.3.23 This will be developed further during the Full Business Case stage. The current estimate of the transitional costs is provided at **Appendix 10B**. The Trust is in continuing discussions with the Local Area Team (LAT) and the Local Health Community about potential sources of funding for these costs.

10.3.24 At time of compiling the Trust's Integrated Business Plan and its long term financial model for Foundation Trust purposes, these transitional costs are shown as funded by CIPs and LAT support in respect of both Project Team support (which was previously funded by the South East Coast SHA) and Other Transitional Costs (which was deemed to be part of "2% Top Slice" funding arrangements). A letter from the Chief Executive of NHS Sussex dated 28 March 2012 is included in **Appendix 10J** confirming the commitment to support the 3Ts programme and highlighting the development's regional strategic importance.

10.3.25 Transitional Support for 2013/14 has been agreed specifically by NHS England Area Team and as noted above, this will be subject to further refinement and agreement between the Trust and NHS England Area Team as the Full Business Case is developed.

Capital, Facilities and Estates Costs

10.3.26 A development of this scale will have a number of significant associated capital and estates costs. Capital costs have been assessed in accordance with the

Outline Business (OB) Case Cost Forms supplied by Cyril Sweett, Laing O'Rourke's cost consultants. These have been checked and validated by the Trust's independent technical advisors (included at **Appendix 8A**) and according to the costing conventions for NHS major capital projects. The difference here is that although the capital costs are presented in OB format, the costs themselves are based on an elemental cost breakdown – the drawings for the proposed facilities have been measured and costed on an item by item basis.

10.3.27 This methodology means that the capital costs as expressed in this Business Case are more accurate than would normally be expected at this stage. Capital costs will fluctuate during the lifetime of the project. There are three key stages - depreciation of buildings created for decanting, demolition of existing buildings at each stage; and opening of the two new buildings (alongside the development of a dedicated logistics centre). The table below describes how the elements of capital and estates costs are treated within the financial model:

Figure 10.7: Commentary on Treatment of Capital and Estates Costs

Description	Treatment
Facilities Management Costs	Facility Management costs will change as a result of the 3Ts building. This comprises two factors - expansion of current facilities for new and expanded services; and reprovision of existing services into a larger area, in line with Health Building Notes and guidance on the appropriate sizing of NHS facilities. The net result is an increase in floor space which is used by Trust services, leading to increase in FM costs. The FM costs have been calculated on £194/m^2. The FM costs are based on expected costs, in line with other NHS projects and the Trust's own facilities management costs. The increase in FM costs is staged over time and changes as the Trust floor space changes as a result of temporary additional Decant space which needs to be brought into use before the main building programme starts, additional space for new buildings, as developed, and reduction in space for demolitions.
Public Dividend Capital	The Trust is required to make a payment to the Department of Health based on the value of its assets. This includes assets under construction ie Public Dividend Capital (PDC) is payable before building opens. The PDC charge will increase as the building work continues and will decrease when buildings are impaired or demolished. The expected PDC has been calculated based on the programme's cashflow and the expected date of demolition. The financial model assumes that the programme is financed through input of additional PDC. There would therefore be a corresponding increase in the PDC charge. The PDC calculations have been based on average annual cashflows in the OB forms at 3.5%.

Description	Treatment
	Under International Financial Reporting Standards (IFRS) these costs would be deemed to be Interest and as such could be capitalised, so that any cost of asset would be matched to the receipt of future benefits ie when asset is brought into use. NHS accounting rules do not allow for Interest to be capitalised.
Depreciation	The Trust is required to make a charge to its Income and Expenditure account for the use of its assets. Depreciation for new build is calculated on the asset once it has come into use. The modelling assumes the timetable set out in Chapter 12 of this Business Case. Where existing buildings are demolished to make space for the new build, the Net Book Value of the building will be treated as an impairment. Since the Trust will no longer have a building to depreciate, this acts to reduce the annual depreciation charge.

Impairment

10.3.28 The capital value used for the purpose of calculating the capital charge is the full capital cost for the buildings in the scheme including VAT and inflation (£420.1m). The District Valuer will value the new buildings once they are completed and the actual value attributed to the new buildings will be on the Trust's balance sheet. The Trust has estimated that this valuation will be approximately 25% lower than the actual capital cost of the building. The development of the new build will be followed by demolition of a number of existing buildings. The residual book value of these assets, subject to the values held on the revaluation reserve, will be treated as an impairment.

10.3.29 The cost of new build depreciation is calculated under International Financial Reporting Standards (IFRS) with reference to each identifiable asset being capitalised under a relevant asset class and the using the asset life associated with that asset class. In the OBC the depreciation was calculated by taking the impaired asset over a weighted-average asset life which was not consistent with International Financial Reporting Standards (IFRS). For the Trust's LTFM and OBC refresh an attempt has been made to recognise the different asset classes, the timing of cashflows and take into consideration existing Trust policy and the views of District Valuers in respect of assets lives of existing estate. The fine level of detail will be available at FBC and therefore FBC will identify capital spend by asset type, and allow more precise calculations to be made and Table 10.8 will be updated in the FBC.

Figure 10.8: Average Asset Life

Asset Type	**Life of Asset**	**Proportion of Capital Spend**
Structure	60	77%
Decant space	Varies	5%
Major plant & lifts	15	13%
Finishes	15	5%

10.3.30 Some elements of equipment will be due for replacement as part of the Trust's regular capital programme and as such are outside the scope of the 3Ts programme. This includes the four current Linear Accelerators and some of the Imaging and Nuclear Medicine equipment.

10.3.31 The Trust's capital programme is currently £18m per annum, of which over half is spent on equipment replacement and technology upgrades or service developments. Hence, between 2013/14 and the completion of Stage 1 of the programme, the Trust is likely to spend over £45m on medical and scientific equipment.

Lifecycle Costs

10.3.32 Lifecycle costs are the replacement costs of the asset, i.e. as and when equipment and/or mechanical and electrical plant (such as air-conditioning equipment) is worn out. This is purely a cash transaction - there is no impact on income and expenditure (I&E) since life cycle costs are reflected in the depreciation charge or picked up through the Facilities Management costs. However life cycle does have an impact on cashflow.

10.3.33 The estimated annual lifecycle costs provided by our technical advisors are shown in the table below and have been used in the economic modelling for the impact of using public funding or PFI for the delivery of the programme. The below table is per the original OBC and will be updated for the FBC.

Figure 10.9: Annual Lifecycle Costs

Description	**Area (m^2)**	**£/m^2 per annum**
New Build – Stage 1	62,649	36.11
New Build – Stage 2	29,667	36.11
Indicative Base Lifecycle cost	92,316	36.11
Lifecycle on-costs		
Lifecycle Management	92,316	1.08
Risk	92,316	1.81
Overhead	92,316	1.81
Profit	92,316	4.08
Indicative Total including on-costs	**92,316**	**44.88**

10.3.34 The Trust's ongoing Capital Programme may be affected 5-10 years after completion of New Build by cash flows of between £2-10m per annum. **Appendix 8C** shows a graph summarising Cyril Sweett estimates.

Annual Efficiency Savings

10.3.35 The LTFM shows that the Trust will achieve on average 5.7% annual efficiency savings based on Total Income and the yearly savings are shown in figure 10.10.

10.3.36 Whilst the new build will add costs, it also enables the Trust to realise significant operational efficiencies. It has been assumed that the Trust will generate additional savings as the 3Ts development becomes operational.

10.3.37 The table below shows the anticipated annual savings from 2013/14. The Pathology and EPR savings are incorporated into Service Development tabs in the LTFM and are therefore in addition to those included on the I_CIP tab in the LTFM. For presentation purposes a sub-total has been included so that there is direct reconciliation with I_CIP.

Figure 10.10: Anticipated Annual Savings

Year	Forecast Total Trust Income	Anticipated Annual Savings					
		Trust Savings targets under "Do Nothing" scenario	3Ts Additional savings	Sub Total CIPs per LTFM	Additional Savings incl Pathology & EPR serv devs	Total CIPs included in LTFM	Total CIPs as % of Total Trust Income
2013/14	491.9	31.0	0.1	31.1	0.0	31.1	-6.3%
2014/15	492.2	31.6	0.7	32.3	2.7	35.0	-7.1%
2015/16	497.4	22.7	1.4	24.1	3.2	27.3	-5.5%
2016/17	506.2	21.7	2.8	24.5	2.2	26.7	-5.3%
2017/18	511.7	25.3	(0.3)	25.0	1.0	26.0	-5.1%
2018/19	517.7	22.8	6.2	29.0	0.2	29.2	-5.6%
2019/20	524.2	24.7	6.2	30.9	0.5	31.4	-6.0%
2020/21	531.2	27.4	(0.8)	26.5	0.3	26.8	-5.0%
2021/22	536.5	29.9	(1.8)	28.2	0.3	28.4	-5.3%
Totals	**4,609.0**	**237.0**	**14.6**	**251.7**	**10.3**	**261.9**	**-5.7%**

Note: all figures are in £'millions. Total Income includes CCG activity income per Table 10.4. Percentages are based on Total Income rather than the LTFM basis which uses Cost Base as the denominator. Some figures may not exactly add in the table due to rounding

10.3.38 The main driver for the 3Ts additional savings are increased Capital Charges and this includes Public Dividend Capital dividends payable in advance of the building opening. Under IFRS accounting standard IAS16 Property, Plant and Equipment, a PFI arrangement would be able to capitalise the equivalent interest cost being incurred on the development, but under NHS accounting rules a publicly funded scheme does not allow PDC to be capitalised. The table below shows the drivers for the 3Ts additional savings.

Figure 10.11: Drivers of 3Ts Additional Savings

Year	3Ts Additional Savings requirements		
	PDC payable before Asset brought into use	Other eg Transitional Costs, new Capital Charges, contribution from Trust, new Income etc	Total Additional Savings
2013/14	1.0	(0.9)	0.1
2014/15	0.6	0.1	0.7
2015/16	2.4	(0.9)	1.4
2016/17	5.2	(2.4)	2.8
2017/18	7.2	(7.5)	(0.3)
2018/19	0.6	5.7	6.2
2019/20	1.9	4.3	6.2
2020/21	3.5	(4.3)	(0.8)
2021/22	0.0	(1.8)	(1.8)
Totals	**22.3**	**(7.7)**	**14.6**

Note: all figures are in £'millions.

10.3.39 The above table highlights that £22.3m of the savings the Trust is being asked to deliver is actually driven by this difference in accounting rules.

10.3.40 The rationale for PDC and capital charging is understood and fully accepted by the Trust, but it is important to highlight the consequences of these additional savings requirements on the Trust, arising from an internal charging mechanism.

10.3.41 With a transformation of the Trust's Estate and to deliver an appropriate EBITDA, regardless of funding route, savings programmes will be required in advance of the buildings opening, but the above table demonstrates the publicly funded route and a Prudential Borrowing route have additional cost pressures.

10.3.42 One option would be to remove significant Assets under Construction balances from the Relevant Net Assets used in the PDC calculations, which was the methodology used under UK GAAP. However, no adjustment has not been made to the Trust's modelling, so that NHS accounting rules have been followed to the full.

10.4 AFFORDABILITY REVIEW – ANALYSIS OF OPTIONS

10.4.1 The Trust has identified the impact on forecast Income and Expenditure for five scenarios. In each case, the Trust has modelled the requirement for a minimum of a 1% Surplus, and has considered the implications for the underlying financial position. The five key scenarios are as follows:

- Scenario 1 – Do Nothing (if the 3Ts development were not to happen);
- Scenario 2 – Public funding of the 3Ts development;

- Scenario 3 – Prudential Borrowings to Tier 1 followed by PDC funding;
- Scenario 4 – Fully funded by Prudential Borrowings;
- Scenario 5 – Delivery of the 3Ts development through PFI;

10.4.2 The LTFM has been used to calculate all these scenarios.

Scenario 1 – Do Nothing

10.4.3 Under this scenario, a number of direct costs of the development would be avoided (capital charges for the new facilities, plus cost of additional neurosciences and cancer activity) and some direct income would not be received (additional neurosciences and cancer income).

10.4.4 Under this scenario any general growth could not be met by the Trust and as such would result in increased numbers of patients going to hospitals outside the area. This would include increases in the traffic going to London hospitals and therefore have an adverse effect on CCG resources from differing Market Forces Factors.

10.4.5 The numbers of patients on waiting lists could also increase, but this has not been factored into or costed in this scenario.

10.4.6 Under this scenario its assumed that the local health economy resources will continue to be invested in complex activities eg PBR Exclusions. However, it could be argued that such activity would actually reduce without the facilities and workforce that is associated with a significant investment such as 3Ts. Again, this has not been factored into or costed in this scenario.

10.4.7 Previous iterations of the LTFM and OBC have assumed zero or minimal growth up to the opening of 3Ts Stage 1, at which point the Trust would have capacity to accommodate additional (eg. repatriated) activity. However the Trust/Local Health Economy medium-term QIPP plans (Quality, Innovation, Productivity and Prevention) and Cost Improvement Plans (CIPs) now envisage a reduction in non-elective inpatient admissions and inpatient Length of Stay, which therefore creates capacity for some repatriation of activity in advance of 3Ts Stage 1. This is reflected in the revised growth assumptions and is not removed from the Do Nothing scenario.

10.4.8 Three of the 3Ts decant workstreams (Front Car Park, Courtyard, Royal Alex) have already been approved as stand-alone schemes and building work will commence shortly. This includes reprovision of the Trust's Nuclear Medicine service (as part of the Front Car Park Building), which provides both diagnostic and therapeutic patient services. The costs and income associated with these developments have therefore not been removed under the Do Nothing scenario.

10.4.9 CQUIN income of around £10 million per annum is included in the Base Case LTFM and its assumed that under a Do Nothing scenario the Trust would continue to have access to this income stream. The 3Ts development, through provision of modern facilities, would naturally help to ensure this level of CQUIN income is sustained over the longer term.

10.4.10 The full schedule identifying income and expenditure for this comparator is attached as **Appendix 10C**. The table below summarises the impact on income and expenditure over the period:

Figure 10.12: I&E impact of not proceeding with 3Ts

	2013/14	2014/15	2015/16	2020/21	2021/22
Total Income	491.9	492.2	497.4	531.2	536.5
Total Operating Expenditure	-452.6	-452.7	-455.0	-489.3	-489.9
- of which CIPs	31.0	31.6	22.7	27.4	29.9
EBITDA	**39.3**	**39.5**	**42.4**	**41.9**	**46.6**
Depreciation/P&L on disposal	-21.7	-23.9	-25.3	-23.8	-24.5
Interest Payable / (Receivable)	-2.7	-2.9	-3.5	-3.4	-3.3
PDC Dividend	-7.1	-7.2	-7.8	-7.8	-7.7
Surplus / (Deficit) before impairments	**7.8**	**5.5**	**5.8**	**6.9**	**11.1**

Note: all figures are in £millions.

10.4.11 The Trust would have delivered £237m of savings in the period.

10.4.12 The Trust would generate a cash surplus at the end of this period and would have grown income by 9.1%. This includes the effect of service developments and inflation, with underlying general growth being zero from 2017/18. The Surpluses mirror the preferred option so that impact of change is highlighted in savings requirements. The Trust would have maintained a Risk Rating of 3 through to 2014/15 and then 4 thereafter as liquidity improves.

10.4.13 Service developments within this scenario continue to be Pathology Network and EPR.

10.4.14 Should complex activities such as PBR Exclusions reduce because of lack of appropriate facilities and workforce, then the above Income and Costs would fall.

10.4.15 The full schedule identifying Cashflow, Balance Sheet and Risk ratings for this comparator is attached as **Appendix 10L**. The tables below summarise the impact on these financial statements over the period:

Figure 10.13: Cashflow Statement of Do Nothing scenario

All figures £'ms	2013/14	2014/15	2015/16	2020/21	2021/22
Surplus/(Deficit) from operations	39.3	39.4	42.3	42.0	46.5
Non cash adjustments	-2.6	0.0	0.0	0.0	0.0
Op cashflows before working capital movement	**36.7**	**39.4**	**42.3**	**42.0**	**46.5**
Increase/(decrease) in working capital/Provisions	-12.2	5.1	-5.2	-4.5	-4.6
Net cash from operating activities	**24.5**	**44.5**	**37.1**	**37.5**	**41.9**
Net cash from investing activities - 3Ts capex	-17.1	-5.7	0.0	0.0	0.0
Net cash from investing activities - Other	-16.0	-25.0	-25.6	-20.8	-20.2
Cashflow before Financing	**-8.6**	**13.8**	**11.5**	**16.7**	**21.7**
Net cash from financing - 3Ts PDC received	0.0	5.7	0.0	0.0	0.0
Net cash from financing - 3Ts New Loans	17.1	0.0	0.0	0.0	0.0
Net cash from financing - PDC dividend paid	-7.1	-7.2	-7.8	-7.8	-7.7
Net cash from financing - Repayment of Loans	-5.8	-6.5	-6.3	-3.9	-3.9
Net cash from financing - Other	5.5	-3.0	-3.5	-3.4	-3.3
Net cash (outflow)/inflow	**1.1**	**2.8**	**-6.1**	**1.6**	**6.8**

Figure 10.14: Balance Sheet of Do Nothing scenario

All figures £'ms		2013/14	2014/15	2015/16	2020/21	2021/22
Assets	3Ts	13.7	15.0	14.5	6.2	6.0
	Other	290.6	289.7	287.6	270.3	263.8
	Total Assets	**304.3**	**304.7**	**302.1**	**276.5**	**269.8**
Current Assets	Cash	20.4	23.2	17.2	13.8	20.6
	Other	29.0	35.7	34.6	42.2	43.8
	Total Current Assets	**49.4**	**58.9**	**51.8**	**56.0**	**64.4**
Total Assets		**353.7**	**363.6**	**353.9**	**332.5**	**334.2**
Liabiilities	3Ts loans	-15.8	-14.1	-12.5	-4.2	-2.6
	Other	-118.2	-110.2	-99.4	-77.5	-72.7
	Total Liabilities	**-134.0**	**-124.3**	**-111.9**	**-81.7**	**-75.3**
Total Assets Employed		**219.7**	**239.3**	**242.0**	**250.8**	**258.9**
Tax Payers Equity	PDC 3Ts	20.0	25.7	25.7	25.7	25.7
	PDC other	215.5	215.5	215.5	215.5	215.5
	Total PDC	235.5	241.2	241.2	241.2	241.2
	Retained Earnings	-23.1	-25.0	-22.3	-13.5	-5.5
	Other Reserves	7.3	23.1	23.1	23.1	23.2
Total Tax Payers Equity		**219.7**	**239.3**	**242.0**	**250.8**	**258.9**

Figure 10.15: Risk Ratings of Do Nothing scenario

		2013/14	2014/15	2015/16	2020/21	2021/22
Financial Risk Ratings	EBITDA margin	7.5%	8.0%	8.5%	7.9%	8.7%
	EBITDA, % achieved	100.0%	100.0%	100.0%	100.0%	100.0%
	NRAF (Net return after financing)	1.7%	1.7%	1.8%	2.3%	3.5%
	I&E surplus margin	1.6%	1.1%	1.1%	1.3%	2.1%
	Liquid ratio	34	38	35	45	49
Continuity of Service Risk Rating (CoSRR)	Liquidity ratio	2	1	1	4	4
	Capital servicing capacity ratio	4	3	3	4	4
	Weighted average	3	2	2	4	4

10.4.16 The Continuity of Service Risk Ratings are mainly driven by same Surpluses being used in modelling and the low debt service.

10.4.17 The Trust is currently developing plans to ensure that delivery of radiotherapy targets and oncology inpatient activity remains sustainable and deliverable, taking into account the required renewal of key equipment and the timescales for reprovision under 3Ts. The Trust is, in this context, working closely with partner healthcare providers in Sussex to ensure that replacement of key equipment secures the optimum value for money and reflects commissioning intentions, both locally and regionally. These plans do not directly impact on the 3T's OBC, but are being developed to dovetail with the 3T plans and the implementation of the new cancer centre.

Scenario 2 - Public Funding of the 3Ts Programme

10.4.18 This assumes that the capital requirements for the 3Ts Programme will be met from public capital. The effect on the Trust's income and expenditure is summarised in the table below and the detailed schedule can be found in **Appendix 10D**.

Figure 10.16: I&E impact of public funding for 3Ts

	2013/14	2014/15	2015/16	2020/21	2021/22
Total Income	493.5	494.8	499.7	554.5	569.1
Total Operating Expenditure	-453.5	-454.3	-455.0	-497.1	-505.4
- of which CIPs	31.1	32.3	24.1	26.5	28.2
EBITDA	**40.0**	**40.5**	**44.7**	**57.4**	**63.7**
Depreciation/P&L on disposal	-21.7	-23.8	-25.3	-27.6	-29.1
Interest Payable / (Receivable)	-3.4	-3.6	-3.5	-3.4	-3.3
PDC Dividend	-7.1	-7.6	-10.1	-19.5	-20.2
Surplus / (Deficit) before impairments	**7.8**	**5.5**	**5.8**	**6.9**	**11.1**

Note: all figures are in £millions. Some figures may not exactly add in the table due to rounding. This table excludes the effects of impairments but includes transitional costs.

10.4.19 The Trust would have delivered £251.7m of savings in the period (£14.7m more than Do Nothing scenario). This excludes the EPR and Pathology savings which would be delivered in both cases.

10.4.20 The Trust would generate a cash surplus at the end of this period, Surpluses from 2018/19 would be in excess of the Trust's target of 1% Surplus Margin. The Trust would have grown underlying income by 15.3%. This growth includes the effect of service developments, three years of high growth for areas such as Cancer, HIV and Renal and inflation, with underlying general growth being, net of Demand Management schemes (1% pa) :-

- 0.5% for Non Elective
- 1% for Elective

10.4.21 Within the £251.7m of savings, £22.3m would be needed to fund the accounting anomaly mentioned earlier in the chapter. The Trust's Risk Rating would be 3 until 2018/19 and then be maintained at 4 from 2019/20. Assuming savings can be delivered this demonstrates that the development is affordable if public funding is utilised.

10.4.22 Surpluses and cash balances would naturally be reinvested into the rest of the Trust's Estate and its workforce, but no specific reinvestment has been factored into the modelling compiled for the FT application.

10.4.23 The Monitor Financial Risk Rating (FRR) remains at the 3 needed to obtain Foundation Trust status in the early years of the model. The FRR then improves to 4 in the later years, from 2019/20 on, because of an improvement in EBITDA. EBITDA improves because the increase in interest (PDC) and depreciation caused by the increase in the capital base is offset by relative declines in operating expenses. However, EBITDA changes are also driven by the increasing Surpluses shown in the LTFM and this is reflected in all scenarios.

10.4.24 The full schedule identifying Cashflow, Balance Sheet and Risk ratings for this comparator is attached as **Appendix 10M**. The tables below summarise the impact on these financial statements over the period:

Figure 10.17: Cashflow Statement for Public funding scenario

All figures £'ms	2013/14	2014/15	2015/16	2020/21	2021/22
Surplus/(Deficit) from operations	40.0	40.5	44.6	57.5	63.7
Non cash adjustments	-2.6	0.0	0.0	0.0	0.0
Op cashflows before working capital movement	**37.4**	**40.5**	**44.6**	**57.5**	**63.7**
Increase/(decrease) in working capital/Provisions	-12.2	4.9	-5.3	-4.6	-5.0
Net cash from operating activities	**25.2**	**45.4**	**39.3**	**52.9**	**58.7**
Net cash from investing activities - 3Ts capex	-29.1	-28.3	-89.5	-41.7	-12.4
Net cash from investing activities - Other	-22.4	-25.0	-15.3	-21.3	-23.2
Cashflow before Financing	**-26.3**	**-7.9**	**-65.5**	**-10.0**	**23.1**
Net cash from financing - 3Ts PDC received	0.0	28.3	89.5	41.7	12.4
Net cash from financing - 3Ts New Loans	24.8	0.0	0.0	0.0	0.0
Net cash from financing - PDC dividend paid	-7.1	-7.6	-10.1	-19.5	-20.2
Net cash from financing - Repayment of Loans	-5.8	-6.5	-6.3	-3.9	-3.9
Net cash from financing - Other	-2.9	-3.7	-7.4	-3.5	-3.4
Net cash (outflow)/inflow	**-17.3**	**2.6**	**0.2**	**4.8**	**8.0**

Figure 10.18: Balance Sheet for Public funding scenario

All figures £'ms		2013/14	2014/15	2015/16	2020/21	2021/22
Assets	3Ts	43.8	60.2	145.2	296.8	270.5
	Other	279.0	283.0	280.9	259.1	248.7
	Total Assets	**322.8**	**343.2**	**426.1**	**555.9**	**519.2**
Current Assets	Cash	20.4	23.0	23.2	23.7	31.8
	Other	29.0	36.0	34.8	43.3	45.5
	Total Current Assets	**49.4**	**59.0**	**58.0**	**67.0**	**77.3**
Total Assets		**372.2**	**402.2**	**484.1**	**622.9**	**596.5**
Liabiilities	3Ts loans	-31.6	-29.6	-27.6	-17.6	-15.6
	Other	-102.4	-110.7	-106.3	-81.8	-74.8
	Total Liabilities	**-134.0**	**-140.3**	**-133.9**	**-99.4**	**-90.4**
Total Assets Employed		**238.2**	**261.9**	**350.2**	**523.5**	**506.1**
Tax Payers Equity	PDC 3Ts	20.0	48.3	137.8	369.0	381.4
	PDC other	215.5	215.6	211.6	211.4	211.4
	Total PDC	235.5	263.9	349.4	580.4	592.8
	Retained Earnings	-23.1	-27.7	-25.0	-82.6	-112.5
	Other Reserves	25.8	25.7	25.8	25.7	25.8
Total Tax Payers Equity		**238.2**	**261.9**	**350.2**	**523.5**	**506.1**

Figure 10.19: Risk Ratings for Public funding scenario

		2013/14	2014/15	2015/16	2020/21	2021/22
Financial Risk Ratings	EBITDA margin	7.6%	8.2%	8.9%	10.4%	11.2%
	EBITDA, % achieved	99.6%	100.0%	100.0%	100.0%	100.0%
	NRAF (Net return after financing)	1.7%	1.6%	1.5%	1.3%	1.9%
	I&E surplus margin	1.6%	1.1%	1.1%	1.3%	1.9%
	Liquid ratio	34	23	21	34	41
Continuity of Service Risk Rating (CoSRR)	Liquidity ratio	2	1	1	4	4
	Capital servicing capacity ratio	3	3	3	3	3
	Weighted average	3	2	2	4	4

Scenario 3 - Prudential Borrowings to Tier 1 followed by PDC funding

10.4.25 In previous versions of the OBC this scenario was not modelled because the Trust had insufficient headroom within its Tier 1 Prudential Borrowings Assessment (PBA). Previously the Trust had £70.1m and non-3Ts requirements meant there was little remaining for 3Ts.

10.4.26 The table below uses the latest LTFM which shows that the Tier 1 PBA has increased and shows that the planned capital investment activities over the next 3 years total £39.2m. Together with current PFI arrangements for the RACH, the commitments total £73m.

10.4.27 To ensure the Trust maintains a level of flexibility, the below includes a contingent buffer of £8.1m for other buildings and sites which are not part of the 3Ts development e.g. the Thomas Kemp Tower which is over 40 years old and the Princess Royal Hospital at Haywards Heath. Repayment of existing loans will naturally augment this buffer to around 10% of the current Tier 1 PBA.

Figure 10.20: Potential Prudential Borrowings available

Potential Prudential Borrowing Plans	
Tier 1 Threshold based on 2013/14	**113.6**
Less Trust Capital projects to be funded by PB :-	
- existing PFI arrangements	-33.8
- Working Capital Loan	-14.4
- Cardiac Theatre	-7.3
- St Marys Decant plan	-6.8
- Other approved Decant schemes (13/14 spend)	-10.7
Sub-Total - Current commitments	**-73.0**
Contingent buffer for non 3Ts requirements	-8.1
Balance of PB available to 3Ts	**32.5**

Note: all figures are in £millions.

10.4.28 This means that £32.5m is available for 3Ts and the balance of funding is assumed to be Public Dividend Capital. The effect on the Trust's income and expenditure is summarised in the table below and the detailed schedule can be found in **Appendix 10E.**

Figure 10.21: I&E impact of PB to Tier 1

	2013/14	2014/15	2015/16	2020/21	2021/22
Total Income	493.5	494.8	499.7	554.5	569.1
Total Operating Expenditure	-453.5	-454.3	-454.9	-496.7	-505.2
- of which CIPs	31.0	33.1	25.0	26.9	28.6
EBITDA	**40.0**	**40.5**	**44.8**	**57.8**	**63.9**
Depreciation/P&L on disposal	-21.7	-23.8	-25.3	-27.6	-29.1
Interest Payable / (Receivable)	-3.4	-3.6	-3.8	-4.8	-4.6
PDC Dividend	-7.1	-7.6	-9.9	-18.5	-19.1
Surplus / (Deficit) before impairments	**7.8**	**5.5**	**5.8**	**6.9**	**11.1**

Note: all figures are in £millions. Some figures may not exactly add in the table due to rounding. This table excludes the effects of impairments but includes transitional costs.

10.4.29 The Trust would have delivered £257.7m of savings including £22.3m to fund the accounting anomaly mentioned earlier in the chapter. In addition to this EPR and Pathology savings would be delivered.

10.4.30 The Trust's Risk Rating would be 3 until 2018/19 and then be maintained at 4 from 2019/20. The Trust would generate a cash surplus at the end of this period, Surpluses from 2018/19 would be in excess of the Trust's target of 1% Surplus Margin. As with the Public Funded scheme the Trust would have grown underlying income by 15.3%. Assuming savings can be delivered this demonstrates that the development is affordable if this scenario is utilised.

10.4.31 This scenario has been based on a series of loans, each one having repayment terms of 25 years.

10.4.32 It is assumed that each loan would be taken out as the Principle Supply Chain Partner's invoice falls due and this transaction would be supported by an element of Public Dividend Capital.

10.4.33 Taking sunk costs of £26.5m (design costs up to March 2013) into account and allowing for existing Decant loans which have already approved and factored into Trust's commitments, a total of £336.8m PDC would be required. Some of this requirement would fall into 2022/23 which is outside the LTFM planning period.

10.4.34 As agreed with the SHA at time of approval of OBC in May 2012, a risk factor has been included in calculating the interest rates and this has been added to those rates obtained from the Debt Management Office.

10.4.35 The full schedule identifying Cashflow, Balance Sheet and Risk ratings for this comparator is attached as **Appendix 10N**. The tables below summarise the impact on these financial statements over the period:

Figure 10.22: Cashflow Statement of PB to Tier 1 scenario

All figures £'ms	**2013/14**	**2014/15**	**2015/16**	**2020/21**	**2021/22**
Surplus/(Deficit) from operations	40.0	40.5	44.8	57.7	63.9
Non cash adjustments	-2.6	0.0	0.0	0.0	0.0
Op cashflows before working capital movement	**37.4**	**40.5**	**44.8**	**57.7**	**63.9**
Increase/(decrease) in working capital/Provisions	-12.2	4.9	-5.3	-4.6	-5.0
Net cash from operating activities	**25.2**	**45.4**	**39.5**	**53.1**	**58.9**
Net cash from investing activities - 3Ts capex	-29.1	-28.3	-89.5	-41.7	-12.4
Net cash from investing activities - Other	-22.4	-25.0	-15.9	-21.2	-22.9
Cashflow before Financing	**-26.3**	**-7.9**	**-65.9**	**-9.7**	**23.6**
Net cash from financing - 3Ts PDC received	0.0	25.7	77.8	37.9	11.3
Net cash from financing - 3Ts New Loans	24.8	2.6	7.8	3.8	1.1
Net cash from financing - PDC dividend paid	-7.1	-7.6	-9.9	-18.5	-19.1
Net cash from financing - Repayment of Loans	-5.8	-6.6	-6.7	-5.2	-5.2
Net cash from financing - Other	-2.9	-3.7	-3.9	-4.7	-4.6
Net cash (outflow)/inflow	**-17.3**	**2.5**	**-0.8**	**3.6**	**7.1**

Figure 10.23: Balance Sheet of PB to Tier 1 scenario

All figures £'ms		2013/14	2014/15	2015/16	2020/21	2021/22
Assets	3Ts	43.8	60.2	145.2	296.8	270.5
	Other	279.0	283.0	280.9	259.1	248.7
	Total Assets	**322.8**	**343.2**	**426.1**	**555.9**	**519.2**
Current Assets	Cash	20.4	22.9	22.1	18.2	25.3
	Other	29.0	36.0	34.8	43.3	45.5
	Total Current Assets	**49.4**	**58.9**	**56.9**	**61.5**	**70.8**
Total Assets		**372.2**	**402.1**	**483.0**	**617.4**	**590.0**
Liabiilities	3Ts loans	-23.2	-23.7	-29.0	-35.0	-32.8
	Other	-110.8	-119.1	-114.2	-90.3	-83.6
	Total Liabilities	**-134.0**	**-142.8**	**-143.2**	**-125.3**	**-116.4**
Total Assets Employed		**238.2**	**259.3**	**339.8**	**492.1**	**473.6**
Tax Payers Equity	PDC 3Ts	20.0	45.7	123.5	333.5	344.8
	PDC other	215.5	215.6	215.5	215.5	215.5
	Total PDC	235.5	261.3	339.0	549.0	560.3
	Retained Earnings	-23.1	-27.7	-25.0	-82.6	-112.5
	Other Reserves	25.8	25.7	25.8	25.7	25.8
Total Tax Payers Equity		**238.2**	**259.3**	**339.8**	**492.1**	**473.6**

Figure 10.24: Risk Ratings of PB to Tier 1 scenario

		2013/14	2014/15	2015/16	2020/21	2021/22
Financial Risk Ratings	EBITDA margin	7.6%	8.2%	9.0%	10.4%	11.2%
	EBITDA, % achieved	99.6%	100.0%	100.0%	100.0%	100.0%
	NRAF (Net return after financing)	1.7%	1.6%	1.5%	1.3%	2.0%
	I&E surplus margin	1.6%	1.1%	1.1%	1.3%	1.9%
	Liquid ratio	34	23	20	31	36
Continuity of Service Risk Rating (CoSRR)	Liquidity ratio	2	1	1	4	4
	Capital servicing capacity ratio	3	3	3	3	3
	Weighted average	3	2	2	4	4

10.4.36 Due to borrowings being relatively low, these risk ratings are similar to the Public funding scenario.

10.4.37 Included in **Appendix 10F** are calculations and summary I&E statements, using 30, 35, 40, 45 and 50 year repayment terms and interest rates. The PBL has been recalculated for each scenario and the interest rates used are shown in following table.

Figure 10.25: Interest Rates used in Prudential Borrowing modelling

Term of loan	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
25 years	3.23%	3.23%	3.23%	3.73%	4.23%	4.73%	4.73%	4.73%	4.73%
30 years	3.50%	3.50%	3.50%	4.00%	4.50%	5.00%	5.00%	5.00%	5.00%
35 years	3.70%	3.70%	3.70%	4.20%	4.70%	5.20%	5.20%	5.20%	5.20%
40 years	3.86%	3.86%	3.86%	4.36%	4.86%	5.36%	5.36%	5.36%	5.36%
45 years	3.98%	3.98%	3.98%	4.48%	4.98%	5.48%	5.48%	5.48%	5.48%
50 years	4.07%	4.07%	4.07%	4.57%	5.07%	5.57%	5.57%	5.57%	5.57%

Scenario 4 - Fully funded by Prudential Borrowings

10.4.38 This scenario assumes that the Trust could borrow all of the 3Ts future Capital requirements via Prudential Borrowings. This scenario assumes that 2013/14 cashflows are funded by Public Dividend Capital. The effect on the Trust's income and expenditure is summarised in the table below and the detailed schedule can be found in **Appendix 10G**.

10.4.39 The LTFM shows that the Tier 2 is breached at £467m which is above the requirement of 3Ts. However, interest rate changes of +0.9% above those assumed (average 4.9%) also breach the Tier 2 checks within the LTFM.

Figure 10.26: I&E impact of Prudential Borrowings funding for 3Ts

	2013/14	2014/15	2015/16	2020/21	2021/22
Total Income	493.5	494.8	499.7	554.5	569.1
Total Operating Expenditure	-453.5	-454.7	-453.8	-494.1	-503.4
- of which CIPs	31.0	32.7	26.5	26.8	27.6
EBITDA	**40.0**	**40.1**	**45.9**	**60.4**	**65.7**
Depreciation/P&L on disposal	-21.7	-23.8	-25.3	-27.6	-29.1
Interest Payable / (Receivable)	-3.4	-3.7	-7.2	-17.7	-17.5
PDC Dividend	-7.1	-7.1	-7.6	-8.2	-8.0
Surplus / (Deficit) before impairments	**7.8**	**5.5**	**5.8**	**6.9**	**11.1**

Note: all figures are in £millions. Some figures may not exactly add in the table due to rounding. This table excludes the effects of impairments but includes transitional costs.

10.4.40 The same Surpluses and growth assumptions are maintained as the publicly funded scenario. Under this scenario Interest would be charged to Revenue in advance of Assets being brought into use as NHS accounting rules do not allow Interest to be capitalised. The Trust would have delivered £259.3m of savings including an estimated £24.2m to fund the accounting anomaly. In addition to this EPR and Pathology savings would be delivered.

10.4.41 The Trust's Risk Rating would fall from 3 to 2 from 2015/16 as the Liquid Ratio reduces from 4 in 2013/14 to 1 to reflect reduction in bank balances.

10.4.42 An important aspect of this scenario is what happens to the Trust's liquidity. The cash balance at 2021/22 would be an overdraft of £39.5m and this would grow each year as loan repayment (£16.3m) would continue to be greater than targeted Surpluses (1% of Turnover or £5-6m).

10.4.43 Again this scenario has been based on a number of loans with repayment terms of 25 years. It is assumed that each loan would be taken out as the Principle Supply Chain Partner's invoices fall due.

10.4.44 Its assumed that there would be no interest receivable on deposits and similarly no hedging arrangements would be made by the Trust. A PFI arrangement would no doubt take advantage of low interest rates and hedge accordingly.

10.4.45 The full schedule identifying Cashflow, Balance Sheet and Risk ratings for this comparator is attached as **Appendix 10O**. The tables below summarise the impact on these financial statements over the period:

Figure 10.27: Cashflow Statement of 100% PB scenario

All figures £'ms	2013/14	2014/15	2015/16	2020/21	2021/22
Surplus/(Deficit) from operations	40.0	40.1	45.8	60.4	65.6
Non cash adjustments	-2.6	0.0	0.0	0.0	0.0
Op cashflows before working capital movement	**37.4**	**40.1**	**45.8**	**60.4**	**65.6**
Increase/(decrease) in working capital/Provisions	-12.2	5.0	-5.5	-4.5	-4.9
Net cash from operating activities	**25.2**	**45.1**	**40.3**	**55.9**	**60.7**
Net cash from investing activities - 3Ts capex	-29.1	-28.3	-89.5	-41.7	-12.4
Net cash from investing activities - Other	-22.4	-25.0	-21.1	-20.9	-20.3
Cashflow before Financing	**-26.3**	**-8.2**	**-70.3**	**-6.6**	**28.0**
Net cash from financing - 3Ts PDC received	0.0	0.0	0.0	0.0	0.0
Net cash from financing - 3Ts New Loans	24.8	28.3	85.6	41.7	12.4
Net cash from financing - PDC dividend paid	-7.1	-7.1	-7.6	-8.2	-8.0
Net cash from financing - Repayment of Loans	-5.8	-7.7	-10.8	-17.7	-18.2
Net cash from financing - Other	-2.9	-3.7	-7.3	-17.7	-17.5
Net cash (outflow)/inflow	**-17.3**	**1.6**	**-10.4**	**-8.5**	**-3.3**

Figure 10.28: Balance Sheet of 100% PB scenario

All figures £'ms		2013/14	2014/15	2015/16	2020/21	2021/22
Assets	3Ts	43.8	60.2	145.2	296.8	270.5
	Other	279.0	283.0	280.9	259.1	248.7
	Total Assets	**322.8**	**343.2**	**426.1**	**555.9**	**519.2**
Current Assets	Cash	20.4	21.9	11.6	-36.3	-39.5
	Other	29.0	36.1	34.9	43.3	45.5
	Total Current Assets	**49.4**	**58.0**	**46.5**	**7.0**	**6.0**
Total Assets		**372.2**	**401.2**	**472.6**	**562.9**	**525.2**
Liabiilities	3Ts loans	-23.2	-48.4	-127.3	-295.3	-291.4
	Other	-110.8	-119.1	-108.9	-89.0	-84.9
	Total Liabilities	**-134.0**	**-167.5**	**-236.2**	**-384.3**	**-376.3**
Total Assets Employed		**238.2**	**233.7**	**236.4**	**178.6**	**148.9**
Tax Payers Equity	PDC 3Ts	20.0	20.0	20.0	20.0	20.0
	PDC other	215.5	215.5	215.5	215.5	215.5
	Total PDC	235.5	235.5	235.5	235.5	235.5
	Retained Earnings	-23.1	-27.7	-24.9	-82.6	-112.5
	Other Reserves	25.8	25.9	25.8	25.7	25.9
Total Tax Payers Equity		**238.2**	**233.7**	**236.4**	**178.6**	**148.9**

Figure 10.29: Risk Ratings of 100% PB scenario

		2013/14	2014/15	2015/16	2020/21	2021/22
Financial Risk Ratings	EBITDA margin	7.6%	8.1%	9.2%	10.9%	11.5%
	EBITDA, % achieved	99.6%	100.0%	100.0%	100.0%	100.0%
	NRAF (Net return after financing)	1.7%	1.7%	1.5%	1.4%	2.2%
	I&E surplus margin	1.6%	1.1%	1.1%	1.3%	1.9%
	Liquid ratio	34	23	16	-8	-11
Continuity of Service	Liquidity ratio	2	1	1	1	1
Risk Rating (CoSRR)	Capital servicing capacity ratio	3	3	3	2	2
	Weighted average	3	2	2	2	2

10.4.46 Due to borrowings being high and cash position being low or negative, the liquidity ratio is low. Capital servicing recognises the Surpluses delivered in period and the high EBITDA margin.

10.4.47 As with the Tier 1 scenario, different repayment terms have been modelled using the appropriate interest rates. **Appendix 10H** shows the outputs of this modelling and the table below provides an overview.

Figure 10.30: Overview of different loan terms

Term of loan (years)	Cash / (Overdraft) at end of 2021/22	CIPs in period	Loan Repayment 2021/22	Overall Financial Risk Rating (FRR) at 2021/22	Liquid Ratio FRR at 2021/22
25	-32.0	253.6	-14.3	2	1
30	-20.0	254.9	-11.9	2	1
35	-11.4	255.9	-10.2	2	1
40	-4.9	256.7	-8.9	2	1
45	0.1	257.3	-7.9	3	2
50	4.1	257.7	-7.1	4	3

Note: Cash balances and CIPs are in £millions.

Scenario 5 - PFI Funding of the 3Ts Programme

10.4.48 The Trust commissioned Ernst & Young to calculate a Shadow Unitary Payment based on the preferred option, but updated for Department of Health guidance on Capital Costs (an increase of 4%) and Life Cycle costs (a reduction of 15%). This was modelled at mid 2000s bank rate and margins and also for rates in the current market conditions and modelled using partial indexation per Department of Health instructions. The report is appended as Appendix 10K. It shows a wide range and a degree of uncertainty with a lack of heath sector terms being available, so for the purposes of this analysis the Trust has taken the current rate.

10.4.49 Partial indexation is common basis for PFI contracts in the Public Sector. However, it is understood to be new to the Health Sector and for modelling purposes the Unitary Payment which is based on Partial Indexation (30%) has not been uplifted for any market adjustments that might arise from this change in terms.

10.4.50 The modelling assumes that the capital requirements for the majority of the 3Ts Programme will be met from a PFI procurement.

10.4.51 Decant, Design and Enabling works for Stage 1 of the development are not part of the PFI Unitary Payment and it is assumed that Public Dividend Capital would be available to fund these elements of the scheme.

10.4.52 With an extended programme additional Transitional Costs relating to project management and Trust side Fees would be incurred at an estimate of £1.65m pa for each year added to the programme.

10.4.53 The effect on the Trust's income and expenditure is summarised in the table below and the detailed schedule can be found in **Appendix 10I**.

Figure 10.31: I&E impact of PFI funding for 3Ts

	2013/14	2014/15	2015/16	2020/21	2021/22
Total Income	491.9	493.9	499.6	543.6	547.1
Total Operating Expenditure	-451.9	-453.6	-457.1	-481.9	-473.3
- of which CIPs	33.2	32.0	20.1	59.9	41.8
EBITDA	**40.0**	**40.3**	**42.5**	**61.7**	**73.8**
Depreciation/P&L on disposal	-21.7	-23.9	-25.3	-27.5	-28.2
Interest Payable / (Receivable)	-3.4	-3.6	-3.5	-3.0	-1.4
Unitary Payment	0.0	0.0	0.0	-15.7	-24.7
PDC Dividend	-7.1	-7.3	-7.9	-8.6	-8.4
Surplus / (Deficit) before impairments	**7.8**	**5.5**	**5.8**	**6.9**	**11.1**

Note: all figures are in £millions. Some figures may not exactly add in the table due to rounding.
This excludes the effects of impairments.

10.4.54 The above Table assumes Trust maintains the level of Surpluses generated under a publicly funded development. The development is only affordable under PFI, if the Trust could generate significant further savings each year including an additional £30.9m when Stage 1 would be fully operational (under a PFI this would be in 2020/21 and not 2018/19). The Unitary charge in the above table would increase further on completion of Stage 2 in 2024/25.

10.4.55 Under this scenario the Trust would not have opened Stage 2 within the 10 year planning horizon, but delivered £279.4m of savings. In addition to this EPR and Pathology savings would be delivered. As the bottom line Surpluses mirror the publicly funded scenario the Trust's Risk Rating would be maintained at 4 from 2020/21.

10.4.56 Using the same Surpluses as the publicly funded scenario and assuming Unitary Charge climbs when Stage 2 opens, EBITDA under PFI would need to average close to 14% pa which is 2.6% (£14.8m) above a publicly funded development.

10.4.57 The key difference between the scenarios remains the level of flexibility the Trust has in managing its non operating expenditure. Under a PFI route the level of fixed cost within the Trust's non operating expenses increases with the Trust's contractual obligation to make a Unitary Payment each year.

10.4.58 The full schedule identifying Cashflow, Balance Sheet and Risk ratings for this comparator is attached as **Appendix 10P**. The tables below summarise the impact on these financial statements over the period:

Figure 10.32: Cashflow Statement of PFI scenario

All figures £'ms	**2013/14**	**2014/15**	**2015/16**	**2020/21**	**2021/22**
Surplus/(Deficit) from operations	40.0	40.2	42.4	61.7	73.9
Non cash adjustments	-2.6	0.0	0.0	0.0	0.0
Op cashflows before working capital movement	**37.4**	**40.2**	**42.4**	**61.7**	**73.9**
Increase/(decrease) in working capital/Provisions	-12.2	5.0	-5.1	-6.1	-4.4
Net cash from operating activities	**25.2**	**45.2**	**37.3**	**55.6**	**69.5**
Net cash from investing activities - 3Ts capex	-12.1	-14.3	-5.2	0.0	0.0
Net cash from investing activities - Other	-29.4	-17.9	-25.2	-20.8	-20.2
Cashflow before Financing	**-16.3**	**13.0**	**6.9**	**34.8**	**49.3**
Net cash from financing - 3Ts PDC received	0.0	7.2	5.2	0.0	0.0
Net cash from financing - 3Ts New Loans	24.8	0.0	0.0	0.0	0.0
Net cash from financing - PDC dividend paid	-7.1	-7.3	-7.9	-8.6	-8.4
Net cash from financing - Repayment of Loans	-5.8	-6.5	-6.3	-11.6	-4.4
Net cash from financing - Other	-2.9	-3.7	-3.5	-18.7	-26.2
Net cash (outflow)/inflow	**-7.3**	**2.7**	**-5.6**	**-4.1**	**10.3**

Figure 10.33: Balance Sheet of PFI scenario

All figures £'ms		**2013/14**	**2014/15**	**2015/16**	**2020/21**	**2021/22**
Assets	3Ts	20.0	17.8	17.2	8.5	8.2
	Other	292.8	298.5	301.7	469.8	545.0
	Total Assets	**312.8**	**316.3**	**318.9**	**478.3**	**553.2**
Current Assets	Cash	20.4	23.1	17.6	5.5	15.8
	Other	29.0	35.9	34.7	43.6	44.4
	Total Current Assets	**49.4**	**59.0**	**52.3**	**49.1**	**60.2**
Total Assets		**362.2**	**375.3**	**371.2**	**527.4**	**613.4**
Liabiilities	3Ts loans	-23.2	-21.2	-19.2	-8.9	-6.9
	Other	-110.8	-119.0	-109.1	-277.7	-357.7
	Total Liabilities	**-134.0**	**-140.2**	**-128.3**	**-286.6**	**-364.6**
Total Assets Employed		**228.2**	**235.1**	**242.9**	**240.8**	**248.8**
Tax Payers Equity	PDC 3Ts	20.0	27.2	32.4	32.4	32.4
	PDC other	215.5	215.5	215.5	215.5	215.5
	Total PDC	235.5	242.7	247.9	247.9	247.9
	Retained Earnings	-23.1	-23.3	-20.6	-22.8	-14.8
	Other Reserves	15.8	15.7	15.6	15.7	15.7
Total Tax Payers Equity		**228.2**	**235.1**	**242.9**	**240.8**	**248.8**

Figure 10.34: Risk Ratings of PFI scenario

		2013/14	**2014/15**	**2015/16**	**2020/21**	**2021/22**
Financial Risk Ratings	EBITDA margin	7.6%	8.1%	8.5%	11.4%	13.5%
	EBITDA, % achieved	100.0%	100.0%	100.0%	100.0%	100.0%
	NRAF (Net return after financing)	1.7%	1.7%	1.8%	1.4%	2.0%
	I&E surplus margin	1.6%	1.1%	1.1%	1.3%	2.0%
	Liquid ratio	34	31	28	32	39
Continuity of Service Risk Rating (CoSRR)	Liquidity ratio	3	2	2	4	4
	Capital servicing capacity ratio	3	3	3	2	3
	Weighted average	3	3	3	3	4

Summary

10.4.59 The Table below provides a summary of the five modelled scenarios.

Figure 10.35: Scenario Summary

	Do Nothing	Public funding (Preferred Option)	Maximum Debt (Sensitivity)	Tier 1 Prudential borrowing & PDC	100% Prudential borrowing	PFI (Partial Indexation)
Term of loan used in scenario	N/A	N/A	25 Years	25 Years	25 Years	N/A
Income growth to 2021/22 (excluding KSS Deanery)	9.10%	15.30%	15.30%	15.30%	15.30%	11.20%
In Year Savings peak	£31.6m 2014/15	£32.3m 2014/15	£32.3m 2014/15	£33.1m 2014/15	£32.7m 2014/15	£59.9m 2020/21
Cumulative Savings required including accounting anomaly	£237.0m	£251.7m	£251.7m	£257.7m	£259.3m	£279.4m
EBITDA at 2021/22	8.7%	11.2%	11.2%	11.2%	11.5%	13.5%
Cash balance at 2021/22	£20.6m	£31.8m	£14.2m	£25.3m	Overdraft (£39.5m)	£15.8m
Overall FRR of 4 delivered	2020/21	2019/20	2021/22	Never	Never	2020/21
Transitional Costs (assumes no redundancy cost for existing Project Team)	Zero beyond 2013/14	£34.3m	£34.3m	£34.3m	£34.3m	£41.6m (includes legal & financial advice & project team for further 2 years)

Note – the Maximum Debt Sensitivity based on the maximum debt the Trust could carry whilst maintaining criteria similar to the Public Funding preferred option. EPR and Pathology savings are **excluded** from the above and would be the same in all scenarios.

Other Comments on Trust Balance Sheet

10.4.60 The Trust is required to achieve a rate of return of 3.5% on average net relevant assets. This calculation is shown as a note to the Balance Sheet and is shown to be achieved for each financial year. This also applies to the PFI option, which it is assumed, will need to be shown on the Trust's balance sheet, but will be offset by the Trust's long term debt.

10.5 SENSITIVITY ANALYSIS AND MITIGATIONS FOR RISK

10.5.1 The Trust has examined a series of sensitivity scenarios with regard to activity growth (or the absence of it) and the impact on affordability of additional efficiencies which the Trust might be required to make. This work is based on the Base Case, which is the preferred option funded by Public Dividend Capital.

10.5.2 These sensitivity scenarios were:

- Intermediate Case 1: 2% growth in Activity

- Intermediate Case 2: 1.5% growth in Activity
- Worse Case : Trust's Downside reflecting Monitor's Downside

10.5.3 Whilst not considered a plausible downside scenario, the impact on affordability of zero activity growth across all years was modelled at the time of the SHA review of OBC (September 2009) and this produced deficits across all years. The Trust and its commissioners (including NHS England) have committed to work collaboratively on the development of the Full Business Case and a specific commissioner/Trust forum is being established to do this. This will allow further scenarios to be generated and mitigations developed to ensure overall programme affordability and organisational financial sustainability are maintained after the Trust moves into a Foundation Trust regime. This collaborative commitment is underlined in the CCG support letters received by the Trust and attached as Appendices 10R to 10V.

10.5.4 It is assumed that up to 2016/17 the intermediate cases are equal to the Base Case. The Worse Case is based on the Trust's view of Monitor's Downside and the impact is measured from 2014/15. Table below shows the assumptions used for the scenario modelling.

Figure 10.36: Assumptions used in sensitivity modelling

ASSUMPTION	SCENARIO ASSUMPTIONS			
	OBC Base Case	**Case 1 2% Growth**	**Case 2 1.5% Growth**	**Worse Case**
General Activity Growth :				
2013/14	Various	Various	Various	Activity
2014/15 - 2016/17	1.00%	1.00%	1.00%	assumed
2017/18 onwards	1.00%	2.00%	1.50%	flat
Tariff Inflation :				
2013/14	-1.50%	-1.50%	-1.50%	-1.50%
2014/15 - 2015/16	-1.30%	-1.30%	-1.30%	-2.30%
2016/17 onwards	0.00%	0.00%	0.00%	-1.00%

10.5.5 In addition to the above sensitivities, the Trust considered a maximum level of Prudential Borrowings (Maximum Debt sensitivity), with Public Dividend Capital (PDC) meeting the balance of Capital expenditure, whilst maintaining certain criteria and metrics.

10.5.6 The criteria and metrics maintained in the LTFM modelling were :

- Keeping Cost Improvement Plans (CIPs) at same level as the Base Case;
- Maintaining a minimum score of '3' on the Financial Risk Ratings;
- Keeping sufficient cash to meet 10 days of Operating Expenses;
- Maintaining the same programme as used in Base Case.

10.5.7 Compared against the preferred option of a Public funding scenario, the resulting changes in CIPs occurred in the modelling :-

- 2% Growth : total CIPs of £237.2m (£14.5m reduction over planning period)
- 1.5% Growth : total CIPs of £250.4m (£1.3m reduction over planning period)

10.5.8 Both the intermediate scenarios had the same healthy cash balance at the end of the period :-

- 2% Growth : Cash position at 2021/22 was £31.7m
- 1.5% Growth : Cash position at 2021/22 was £31.7m

10.5.9 The following tables show the impact of the 2% Growth sensitivity on the Trust's Financial Statements and the full Income and Expenditure, Cashflow and Balance Sheet together with Risk ratings can be found in Appendix 10W.

Figure 10.37: I&E impact of 2% Growth sensitivity

	2013/14	2014/15	2015/16	2020/21	2021/22
Total Income	493.5	497.7	505.5	575.9	593.8
Total Operating Expenditure	-453.5	-457.2	-460.8	-518.4	-530.1
- of which CIPs	31.1	30.3	22.3	24.8	26.5
EBITDA	**40.0**	**40.5**	**44.7**	**57.5**	**63.7**
Depreciation/P&L on disposal	-21.7	-23.8	-25.3	-27.6	-29.1
Interest Payable / (Receivable)	-3.4	-3.6	-3.5	-3.4	-3.3
PDC Dividend	-7.1	-7.6	-10.1	-19.5	-20.2
Surplus / (Deficit) before impairments	**7.8**	**5.5**	**5.8**	**7.0**	**11.1**

Figure 10.38: Cashflow Statement of 2% Growth sensitivity

All figures £'ms	**2013/14**	**2014/15**	**2015/16**	**2020/21**	**2021/22**
Surplus/(Deficit) from operations	40.0	40.5	44.6	57.5	63.7
Non cash adjustments	-2.6	0.0	0.0	0.0	0.0
Op cashflows before working capital movement	**37.4**	**40.5**	**44.6**	**57.5**	**63.7**
Increase/(decrease) in working capital/Provisions	-12.2	5.0	-5.1	-4.7	-5.1
Net cash from operating activities	**25.2**	**45.5**	**39.5**	**52.8**	**58.6**
Net cash from investing activities - 3Ts capex	-29.1	-28.3	-89.5	-41.7	-12.4
Net cash from investing activities - Other	-22.4	-25.0	-15.3	-21.3	-23.2
Cashflow before Financing	**-26.3**	**-7.8**	**-65.3**	**-10.1**	**23.0**
Net cash from financing - 3Ts PDC received	0.0	28.3	89.5	41.7	12.4
Net cash from financing - 3Ts New Loans	24.8	0.0	0.0	0.0	0.0
Net cash from financing - PDC dividend paid	-7.1	-7.6	-10.1	-19.5	-20.2
Net cash from financing - Repayment of Loans	-5.8	-6.5	-6.3	-3.9	-3.9
Net cash from financing - Other	-2.9	-3.7	-7.4	-3.5	-3.4
Net cash (outflow)/inflow	**-17.3**	**2.7**	**0.4**	**4.7**	**7.9**

Figure 10.39: Balance Sheet of 2% Growth sensitivity

All figures £'ms		**2013/14**	**2014/15**	**2015/16**	**2020/21**	**2021/22**
Assets	3Ts	43.8	60.2	145.2	296.8	270.5
	Other	279.0	283.0	280.9	259.1	248.7
	Total Assets	**322.8**	**343.2**	**426.1**	**555.9**	**519.2**
Current Assets	Cash	20.4	23.0	23.4	23.7	31.7
	Other	29.0	36.2	34.9	43.9	46.2
	Total Current Assets	**49.4**	**59.2**	**58.3**	**67.6**	**77.9**
Total Assets		**372.2**	**402.4**	**484.4**	**623.5**	**597.1**
Liabiilities	3Ts loans	-31.6	-29.6	-27.6	-17.6	-15.6
	Other	-102.4	-110.8	-106.6	-82.4	-75.4
	Total Liabilities	**-134.0**	**-140.4**	**-134.2**	**-100.0**	**-91.0**
Total Assets Employed		**238.2**	**262.0**	**350.2**	**523.5**	**506.1**
Tax Payers Equity	PDC 3Ts	20.0	48.3	137.8	369.0	381.4
	PDC other	215.5	215.6	211.6	211.4	211.4
	Total PDC	235.5	263.9	349.4	580.4	592.8
	Retained Earnings	-23.1	-27.7	-25.0	-82.6	-112.5
	Other Reserves	25.8	25.8	25.8	25.7	25.8
Total Tax Payers Equity		**238.2**	**262.0**	**350.2**	**523.5**	**506.1**

Figure 10.40: Risk Ratings of 2% Growth sensitivity

		2013/14	**2014/15**	**2015/16**	**2020/21**	**2021/22**
Financial Risk Ratings	EBITDA margin	7.6%	8.1%	8.8%	10.0%	10.7%
	EBITDA, % achieved	99.6%	100.0%	100.0%	100.0%	100.0%
	NRAF (Net return after financing)	1.7%	1.6%	1.5%	1.3%	1.9%
	I&E surplus margin	1.6%	1.1%	1.1%	1.2%	1.9%
	Liquid ratio	34	23	20	33	39
Continuity of Service Risk Rating (CoSRR)	Liquidity ratio	2	1	1	4	4
	Capital servicing capacity ratio	3	3	3	3	3
	Weighted average	3	2	2	4	4

10.5.10 The following tables show the impact of the 1.5% Growth sensitivity on the Trust's Financial Statements and the full Income and Expenditure, Cashflow and Balance Sheet together with Risk ratings can be found in Appendix 10X.

Figure 10.41: I&E impact of 1.5% Growth sensitivity

	2013/14	**2014/15**	**2015/16**	**2020/21**	**2021/22**
Total Income	493.5	496.1	502.2	563.4	579.3
Total Operating Expenditure	-453.5	-455.6	-457.6	-506.0	-515.6
- of which CIPs	31.1	31.9	23.9	26.4	28.1
EBITDA	**40.0**	**40.5**	**44.6**	**57.4**	**63.7**
Depreciation/P&L on disposal	-21.7	-23.8	-25.3	-27.6	-29.1
Interest Payable / (Receivable)	-3.4	-3.6	-3.5	-3.4	-3.3
PDC Dividend	-7.1	-7.6	-10.1	-19.5	-20.2
Surplus / (Deficit) before impairments	**7.8**	**5.5**	**5.7**	**6.9**	**11.1**

Figure 10.42: Cashflow Statement of 1.5% Growth sensitivity

All figures £'ms	2013/14	2014/15	2015/16	2020/21	2021/22
Surplus/(Deficit) from operations	40.0	40.5	44.7	57.5	63.7
Non cash adjustments	-2.6	0.0	0.0	0.0	0.0
Op cashflows before working capital movement	**37.4**	**40.5**	**44.7**	**57.5**	**63.7**
Increase/(decrease) in working capital/Provisions	-12.2	5.0	-5.2	-4.6	-5.0
Net cash from operating activities	**25.2**	**45.5**	**39.5**	**52.9**	**58.7**
Net cash from investing activities - 3Ts capex	-29.1	-28.3	-89.5	-41.7	-12.4
Net cash from investing activities - Other	-22.4	-25.0	-15.3	-21.3	-23.2
Cashflow before Financing	**-26.3**	**-7.8**	**-65.3**	**-10.0**	**23.1**
Net cash from financing - 3Ts PDC received	0.0	28.3	89.5	41.7	12.4
Net cash from financing - 3Ts New Loans	24.8	0.0	0.0	0.0	0.0
Net cash from financing - PDC dividend paid	-7.1	-7.6	-10.1	-19.5	-20.2
Net cash from financing - Repayment of Loans	-5.8	-6.5	-6.3	-3.9	-3.9
Net cash from financing - Other	-2.9	-3.7	-7.4	-3.5	-3.4
Net cash (outflow)/inflow	**-17.3**	**2.7**	**0.4**	**4.8**	**8.0**

Figure 10.43: Balance Sheet of 1.5% Growth sensitivity

All figures £'ms		2013/14	2014/15	2015/16	2020/21	2021/22
Assets	3Ts	43.8	60.2	145.2	296.8	270.5
	Other	279.0	283.0	280.9	259.1	248.7
	Total Assets	**322.8**	**343.2**	**426.1**	**555.9**	**519.2**
Current Assets	Cash	20.4	23.0	23.3	23.7	31.7
	Other	29.0	36.1	34.8	43.5	45.8
	Total Current Assets	**49.4**	**59.1**	**58.1**	**67.2**	**77.5**
Total Assets		**372.2**	**402.3**	**484.2**	**623.1**	**596.7**
Liabiilities	3Ts loans	-31.6	-29.6	-27.6	-17.6	-15.6
	Other	-102.4	-110.7	-106.4	-82.0	-75.0
	Total Liabilities	**-134.0**	**-140.3**	**-134.0**	**-99.6**	**-90.6**
Total Assets Employed		**238.2**	**262.0**	**350.2**	**523.5**	**506.1**
Tax Payers Equity	PDC 3Ts	20.0	48.3	137.8	369.0	381.4
	PDC other	215.5	215.6	211.6	211.4	211.4
	Total PDC	235.5	263.9	349.4	580.4	592.8
	Retained Earnings	-23.1	-27.7	-24.9	-82.6	-112.5
	Other Reserves	25.8	25.8	25.7	25.7	25.8
Total Tax Payers Equity		**238.2**	**262.0**	**350.2**	**523.5**	**506.1**

Figure 10.44: Risk Ratings of 1.5% Growth sensitivity

		2013/14	2014/15	2015/16	2020/21	2021/22
Financial Risk Ratings	EBITDA margin	7.6%	8.2%	8.9%	10.2%	11.0%
	EBITDA, % achieved	99.6%	100.0%	100.0%	100.0%	100.0%
	NRAF (Net return after financing)	1.7%	1.6%	1.5%	1.3%	1.9%
	I&E surplus margin	1.6%	1.1%	1.1%	1.2%	1.9%
	Liquid ratio	34	23	21	34	40
Continuity of Service Risk Rating (CoSRR)	Liquidity ratio	2	1	1	4	4
	Capital servicing capacity ratio	3	3	3	3	3
	Weighted average	3	2	2	4	4

10.5.11 The following tables show the impact of the 'maximum level of Prudential Borrowing' sensitivity on the Trust's Financial Statements and the full Income and

Expenditure, Cashflow and Balance Sheet together with Risk ratings can be found in Appendix 10Y.

Figure 10.45: I&E impact of Maximum Prudential Borrowings sensitivity

	2013/14	2014/15	2015/16	2020/21	2021/22
Total Income	493.5	494.8	499.7	554.5	569.1
Total Operating Expenditure	-453.5	-454.3	-455.0	-497.1	-505.4
- of which CIPs	31.1	32.3	24.1	26.5	28.2
EBITDA	**40.0**	**40.5**	**44.6**	**57.5**	**63.7**
Depreciation/P&L on disposal	-21.7	-23.8	-25.3	-27.6	-29.1
Interest Payable / (Receivable)	-3.5	-3.7	-4.1	-9.1	-9.4
PDC Dividend	-7.1	-7.3	-9.4	-15.6	-15.5
Surplus / (Deficit) before impairments	**7.8**	**5.7**	**5.8**	**5.2**	**9.7**

Figure 10.46: Cashflow Statement of Maximum Prudential Borrowings sensitivity

All figures £'ms	**2013/14**	**2014/15**	**2015/16**	**2020/21**	**2021/22**
Surplus/(Deficit) from operations	40.0	40.5	44.6	57.5	63.7
Non cash adjustments	-2.6	0.0	0.0	0.0	0.0
Op cashflows before working capital movement	**37.4**	**40.5**	**44.6**	**57.5**	**63.7**
Increase/(decrease) in working capital/Provisions	-11.7	4.9	-5.5	-2.6	-5.5
Net cash from operating activities	**25.8**	**45.5**	**39.2**	**54.9**	**58.2**
Net cash from investing activities - 3Ts capex	-29.1	-28.3	-89.5	-41.7	-12.4
Net cash from investing activities - Other	-22.4	-25.0	-15.4	-21.2	-23.2
Cashflow before Financing	**-25.8**	**-7.9**	**-65.7**	**-8.0**	**22.6**
Net cash from financing - 3Ts PDC received	0.0	28.3	85.6	41.7	12.4
Net cash from financing - 3Ts New Loans	24.8	19.0	0.0	36.0	12.4
Net cash from financing - PDC dividend paid	-7.1	-7.3	-9.4	-15.6	-15.5
Net cash from financing - Repayment of Loans	-5.8	-7.3	-7.0	-9.0	-9.5
Net cash from financing - Other	-2.9	-3.7	-4.2	-9.1	-9.3
Net cash (outflow)/inflow	**-16.8**	**2.2**	**-0.7**	**-0.1**	**0.5**

Figure 10.47: Balance Sheet of Maximum Prudential Borrowings sensitivity

All figures £'ms		**2013/14**	**2014/15**	**2015/16**	**2020/21**	**2021/22**
Assets	3Ts	43.8	60.2	145.2	296.8	270.5
	Other	279.0	283.0	281.0	259.1	248.7
	Total Assets	**322.8**	**343.2**	**426.1**	**555.9**	**519.2**
Current Assets	Cash	20.9	23.1	22.4	13.6	14.2
	Other	28.5	35.5	34.4	42.0	44.9
	Total Current Assets	**49.4**	**58.6**	**56.8**	**55.6**	**59.1**
Total Assets		**372.2**	**401.8**	**482.9**	**611.5**	**578.3**
Liabiilities	3Ts loans	-31.6	-47.8	-45.0	-132.2	-136.9
	Other	-102.4	-110.7	-106.3	-88.4	-81.7
	Total Liabilities	**-134.0**	**-158.5**	**-151.3**	**-220.6**	**-218.6**
Total Assets Employed		**238.2**	**243.3**	**331.6**	**390.9**	**359.7**
Tax Payers Equity	PDC 3Ts	20.0	48.3	133.9	365.1	377.5
	PDC other	215.5	196.6	196.5	86.8	74.4
	Total PDC	235.5	244.9	330.4	451.9	451.9
	Retained Earnings	-23.1	-27.3	-24.5	-86.7	-117.9
	Other Reserves	25.7	25.7	25.7	25.7	25.7
Total Tax Payers Equity		**238.2**	**243.3**	**331.6**	**390.9**	**359.7**

Figure 10.48: Risk Ratings of Maximum Prudential Borrowings sensitivity

		2013/14	2014/15	2015/16	2020/21	2021/22
Financial Risk Ratings	EBITDA margin	7.6%	8.2%	8.9%	10.4%	11.2%
	EBITDA, % achieved	99.6%	100.0%	100.0%	100.0%	100.0%
	NRAF (Net return after financing)	1.7%	1.8%	1.5%	0.9%	1.8%
	I&E surplus margin	1.6%	1.2%	1.2%	0.9%	1.7%
	Liquid ratio	34	23	20	23	24
Continuity of Service Risk Rating (CoSRR)	Liquidity ratio	2	1	1	2	3
	Capital servicing capacity ratio	3	3	3	2	3
	Weighted average	3	2	2	2	3

10.5.12 The Downside was considered by members of the Executive team with the assistance of KPMG in May 2013 and the mitigation actions formed part of a package shared with the NHS Trust Development Authority. A summary of these sensitive schemes is provided in the table below.

Figure 10.49: Mitigating Actions available

Action type	Description of Mitigating Action	Potential Annual Value (Recurrent)	Potential Annual Value (non-recurrent)
A1-3	Vacate existing properties	£0.1m to £0.7m	£0.3m
A4-5	Manage Workforce and other local cost pressures	£7.5m	N/A
B1-3	Significant Estate rationalisation	£1.3m	£0.1m
B4	Service disinvestment	£0.4m	N/A
B5-6	Change to 3Ts design and decant	£0.5m	N/A
C1-2	Significant Service disinvestment	£1.7m	N/A
C3	Considered but not used	N/A	N/A
C4-7	Change to nature and use of 3Ts buildings	£2.8m	N/A
D	Extreme measures open to Trust	£14.5m	£0.3m

10.5.13 The Action Type referred to in table can be described as :-

- "A" rated schemes are those that would be implemented first and are seen as palatable to implement because they would not affect the Trust's ability to capture referrals from key markets
- "B" rated schemes are more difficult but still assessed as practicable
- "C" rated are more involved and challenging to deploy and would effect the Trust's clinical strategy
- "D" rated schemes are those which would be available in the case of significant variation to the Trust's planning assumptions. These are

technically achievable but may have significant impact on workforce engagement

10.5.14 The above Potential Annual Values of mitigation factors are aggregated and applied to the forecast Surplus/Deficit for the Downside scenario and the recurrent I&E impact is measured as £40.6m. Not all mitigation factors were utilised in the modelling. The I&E for this scenario is shown in below table.

Figure 10.50: I&E impact of Worse Case/Downside

	2013/14	2014/15	2015/16	2020/21	2021/22
Total Income	493.5	483.0	477.6	484.8	490.5
Total Operating Expenditure	-453.5	-441.4	-433.3	-446.1	-449.0
- of which CIPs	31.1	32.8	26.9	26.6	30.0
EBITDA	**40.0**	**41.7**	**44.2**	**38.7**	**41.5**
Depreciation/P&L on disposal	-21.7	-23.7	-24.8	-19.7	-18.5
Interest Payable / (Receivable)	-3.4	-3.7	-3.5	-3.4	-3.4
PDC Dividend	-7.1	-7.5	-9.6	-18.4	-19.1
Surplus / (Deficit) before impairments	**7.8**	**6.8**	**6.3**	**-2.9**	**0.5**

Note: all figures are in £millions. Some figures may not exactly add in the table due to rounding.
This excludes the effects of impairments.

10.5.15 The full schedule identifying Cashflow, Balance Sheet and Risk ratings for this comparator is attached as **Appendix 10Q**. The tables below summarise the impact on these financial statements over the period:

Figure 10.51: Cashflow Statement of Worse Case/Downside

All figures £'ms	2013/14	2014/15	2015/16	2020/21	2021/22
Surplus/(Deficit) from operations	40.0	41.7	44.2	38.7	41.5
Non cash adjustments	-2.6	0.0	0.0	0.0	0.0
Op cashflows before working capital movement	**37.4**	**41.7**	**44.2**	**38.7**	**41.5**
Increase/(decrease) in working capital/Provisions	-11.7	4.7	-5.9	-4.2	-4.5
Net cash from operating activities	**25.8**	**46.4**	**38.3**	**34.5**	**37.0**
Net cash from investing activities - 3Ts capex	-28.5	-27.8	-83.9	-40.8	-12.2
Net cash from investing activities - Other	-22.4	-16.4	-6.6	-16.0	-12.8
Cashflow before Financing	**-25.2**	**2.2**	**-52.1**	**-22.4**	**12.1**
Net cash from financing - 3Ts PDC received	0.0	28.6	83.9	40.8	12.2
Net cash from financing - 3Ts New Loans	24.8	0.0	0.0	0.0	0.0
Net cash from financing - PDC dividend paid	-7.1	-7.5	-9.6	-18.4	-19.1
Net cash from financing - Repayment of Loans	-5.8	-6.5	-6.3	-3.9	-3.9
Net cash from financing - Other	-2.9	-11.3	-13.1	-3.4	-3.4
Net cash (outflow)/inflow	**-16.2**	**5.5**	**2.8**	**-7.3**	**-2.1**

Figure 10.52: Balance Sheet of Worse Case/Downside

All figures £'ms		2013/14	2014/15	2015/16	2020/21	2021/22
Assets	3Ts	43.2	59.6	143.5	296.0	270.3
	Other	279.0	273.9	259.0	208.1	197.4
	Total Assets	**322.2**	**333.5**	**402.4**	**504.1**	**467.7**
Current Assets	Cash	21.5	27.0	29.8	18.0	15.8
	Other	28.5	35.1	34.5	41.2	42.8
	Total Current Assets	**50.0**	**62.1**	**64.3**	**59.1**	**58.7**
Total Assets		**372.2**	**395.5**	**466.7**	**563.2**	**526.3**
Liabiilities	3Ts loans	-31.6	-29.6	-27.6	-17.6	-15.6
	Other	-102.4	-110.0	-105.5	-81.1	-74.2
	Total Liabilities	**-134.0**	**-139.6**	**-133.1**	**-98.7**	**-89.8**
Total Assets Employed		**238.2**	**255.9**	**333.6**	**464.5**	**436.5**
Tax Payers Equity	PDC 3Ts	20.0	48.6	132.5	358.3	370.5
	PDC other	215.5	207.9	198.4	190.0	190.0
	Total PDC	235.5	256.5	330.9	548.3	560.5
	Retained Earnings	-23.1	-26.3	-23.0	-109.6	-149.7
	Other Reserves	25.7	25.7	25.7	25.7	25.7
Total Tax Payers Equity		**238.2**	**255.9**	**333.6**	**464.5**	**436.5**

Figure 10.53: Risk Ratings of Worse Case/Downside

		2013/14	2014/15	2015/16	2020/21	2021/22
Financial Risk Ratings	EBITDA margin	7.6%	8.6%	9.3%	8.0%	8.5%
	EBITDA, % achieved	99.6%	100.0%	100.0%	100.0%	100.0%
	NRAF (Net return after financing)	1.7%	2.1%	1.7%	-0.6%	0.1%
	I&E surplus margin	1.6%	1.4%	1.3%	-0.6%	0.1%
	Liquid ratio	34	24	25	43	40
Continuity of Service Risk Rating (CoSRR)	Liquidity ratio	2	1	2	4	4
	Capital servicing capacity ratio	3	3	3	2	2
	Weighted average	3	2	3	3	3

10.5.16 Once the mitigation factors are taken into account all scenarios including the "Worst case" show sufficient Surpluses by 2021/22 to meet the Trust's breakeven duty.

Affordability – Conclusions
• The Trust has carefully examined the proposed increase in activity coming to the Trust through the 3Ts programme and it continues to regularly update income and activity assumptions through discussion and agreement with local and regional commissioners • The Trust has projected the cost of meeting this activity and the cost of the 3Ts development, funded through public funding, PFI and Prudential Borrowings. • Under both a publicly funded and a Prudential Borrowings scenario an "accounting adjustment" would mean Revenue costs of £22-24 million would be incurred before any Asset is brought into use. Under a PFI funded route IFRS accounting rules allow such costs to be capitalised. Affordability modelling includes these Revenue costs, but its assumed that this accounting anomaly would in reality not result in an additional cost pressure or additional savings requirements for the Trust. However, with the passage of time £1.1m of PDC has been incurred by end of 2012/13 and this has been funded by Trust savings schemes. • The costs associated with the development are lower under public funding, are affordable in that it allows the Trust to deliver a year on year Surplus whilst asking for a reasonable change to existing savings requirements. • The costs associated with PFI are higher and would require the Trust to generate higher, less sustainable levels of savings to generate a year on year Surplus. • The Trust has considered the impact on its balance sheet of both funding alternatives in modelling the financial impacts and has used Monitor's Long Term Financial Model wherever possible. • The development is affordable and the preferred option is to draw down £420m of Public Dividend Capital