

3Ts Hospital Redevelopment Programme

Full Business Case

Financial Case



February 2016, v21

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Purpose & History

1. This chapter summarises the affordability of the scheme. It also sets out the financials of the Base Case and considers the Downside scenarios and sensitivities to test the robustness of the case.
2. It describes the underlying financial position of the Trust, sets out the key assumptions and methodologies employed in deriving projected income and expenditure, and reviews changes from the Outline Business Case (OBC).
3. The first version of the OBC was approved by the Trust Board of Directors and submitted to NHS South East Coast (Strategic Health Authority) in July 2009. The OBC was refreshed a number of times before final approval in May 2014, including approval by NHS South of England (Strategic Health Authority Cluster) in March 2012. The Full Business Case (FBC) was approved by the Trust Board of Directors in October 2014 and by Department of Health and HM Treasury in December 2015 following recommendation from the NHS Trust Development Authority (TDA) in July 2015 and a separate assurance exercise by NHS England (NHSE) in Summer 2015.

Introduction

4. As set out in the Strategic Case, the 3Ts development is a critical part of the Trust's strategic vision: the replacement of outdated and functionally unsuitable estate and the increase in capacity will enable it to meet continued demand/growth (net of demand management, initiatives such as the Better Care Fund, and internal Trust efficiencies) and provide clinical services from a more flexible and functionally suitable operating environment.
5. The Trust moved towards financial sustainability over a number of years, with in-year performance consistently delivering surpluses in line with targets and plans. It also delivered significant levels of cost improvements. Although the 3Ts investment creates additional cost pressures, the Trust is confident that it will be able to deliver the associated Cost Improvement Programme (CIPs) in order to realise the step-change in quality, safety and patient experience set out in this FBC. More recently, significant pressures on staffing and other costs has led to a planned deficit of £19.2m in 2015/16.
6. The efficiency target is driven by the overall requirement to deliver a surplus each year, with the long term target being a 1% Surplus Margin. For the purposes of this FBC, the element driven by 3Ts is separately identified, however operationally this forms part of an integrated Trust-wide programme and will be managed accordingly. The efficiency (Cost Improvement) programme has a robust governance structure to manage and monitor the planning, impact, implementation and evaluation of all workstreams and projects within the programme.
7. The Trust's analysis of affordability utilises the Trust Long-Term Financial Model (LTFM) and is aligned to and dovetails with the Clinical Strategy published in the June 2014 and Integrated Business Plan (IBP). The LTFM covers the period to 2024/25. Data is based on real prices and converted to nominal prices using the Trust's view on tariff changes and inflation assumptions. The LTFM has been refreshed in July 2015 in advance of TDA approval and will continue to be updated regularly as activity/income and efficiency assumptions for the Local Health Economy (LHE) are agreed with Clinical Commissioning Groups (CCGs), NHS England and (where relevant) the Local Authority. The LTFM has also been amended and updated through the FBC approval process in line with discussions with the CCGs, NHSE and the TDA.
8. Letters of support are appended and show that joint working is underway and is working well through forums such as the Sussex Finance Directors Group, the 3Ts Commissioner Oversight Forum and the National Programme Board (whose membership includes TDA, NHS England and the Department of Health).
9. The OBC (version 17 dated January 2012, approved May 2014) assumed a Public Dividend Capital funding solution, and the FBC continues to do so. This chapter sets out the rationale for continuing this funding strategy. Future funding will be reviewed regularly and will take into consideration both the Trust's

Operational Capital needs and the EBITDA (Earnings Before Taxation Interest Depreciation and Amortisation) Margin to assess the Trust's ability to fund loans.

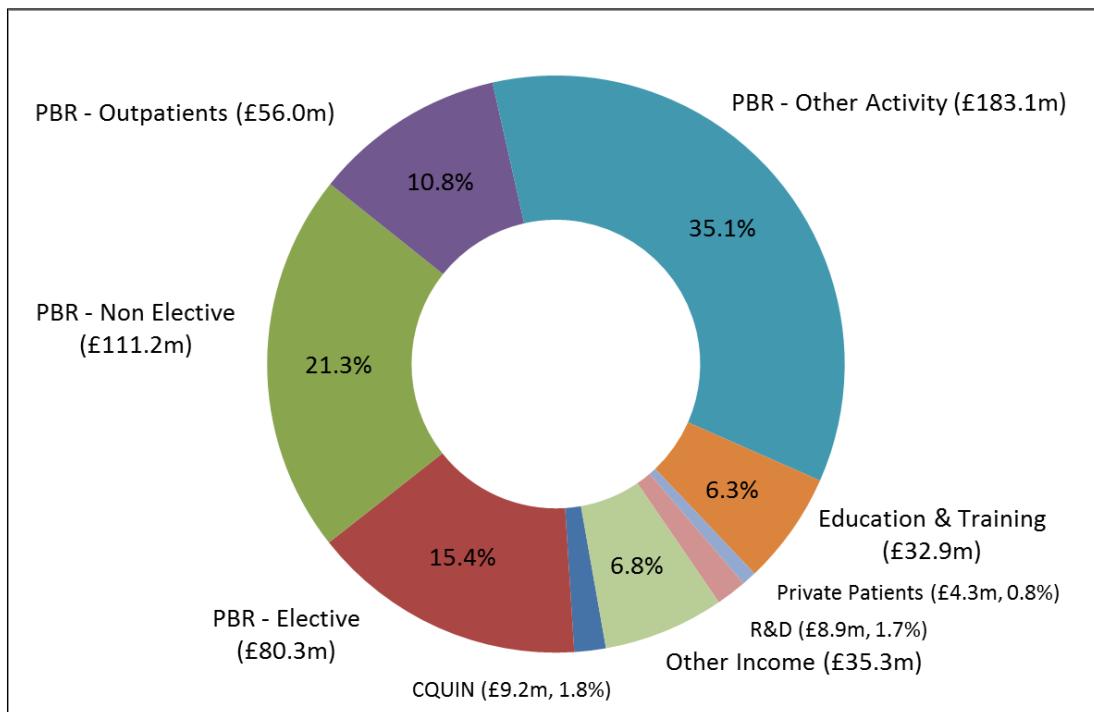
10. The Trust expects to realise an appropriate EBITDA Margin and remain financially viable over the LTFM planning period by delivering a 1% surplus and an overall Continuity of Service Risk Rating (CoSRR) score of 3. This is in line with the Trust's medium term plan to become a Foundation Trust, and the maintenance of the EBITDA and CoSRR ratings are key to this ambition. The plans reflect significant improvement on 2015/16 performance.

Trust Financial Context

Analysis of Trust Income 2014/15

11. The chart below provides an analysis of 2014/15 Trust Income by Point of Delivery (POD), including Payment by Results (PBR) Income. The majority of Elective Income is generated from the Princess Royal Hospital at Haywards Heath. The balance of activity is generated predominantly from the Royal Sussex County Hospital in Brighton; as set out in the Case for Change, this site is heavily congested and is the site for the 3Ts redevelopment.

Figure 1 – Analysis of Trust Income 2014/15 (£m)



Activity & Income Assumptions - Outlook

12. In summary, the activity projections the Trust uses in its modelling include the following principal elements:
 - demographic changes;
 - morbidity/disease prevalence and service take-up;
 - Demand Management schemes, including Better Care Fund;
 - internal Trust efficiencies, including inpatient Length of Stay.
13. The Trust has undertaken detailed modelling of future activity (described in the Strategic Case) in collaboration with commissioners. Income assessments for future years are aligned with this and have been calculated for both PBR and non-PBR activity, using national definitions. This includes a range of scenarios/sensitivities to assess the impact on activity/income and capacity/occupancy of both over- and

under-performance against demand management/Better Care Fund and internal Trust efficiency assumptions.

14. The LTFM Base Case and activity and income modelling include existing Best Practice Tariffs (BPTs) and assume that current Trust performance is maintained. No assumptions have been made about future BPTs. Modelling for activity, income and capacity is undertaken at speciality level and therefore reflects changes in casemix. The table below shows the expected growth across the Trust's main Points of Delivery before Demand Management.

Table 1 – Forecast Activity Growth (before Demand Management)

Point of Delivery (POD)	2016/17	2017/18	2022/23	2023/24	2024/25
A&E	0.8%	0.8%	0.8%	0.9%	0.9%
Day Case	0.9%	0.9%	0.9%	0.9%	0.9%
Elective	1.3%	1.3%	1.3%	1.4%	1.4%
Non Elective	1.2%	1.2%	1.3%	1.3%	1.3%
Out Patients	1.2%	1.2%	1.2%	1.2%	1.2%

15. There is an anticipated increase in activity in specific specialties above the increases due to demographic growth, which reflects the growing incidence of particular conditions within the population – the Trust refers to this as 'prevalence'. The projected prevalence growth rates are shown in the following table.

Table 2 – Forecast Activity Growth (Prevalence)

Specialty	2016/17	2017/18	2022/23	2023/24	2024/25
Cancer	2.5%	2.5%	2.5%	2.5%	2.5%
Renal	3.8%	3.8%	3.8%	3.8%	3.8%
HIV	3.4%	3.4%	3.4%	3.4%	3.4%
Breast Care	2.8%	2.8%	2.8%	2.8%	2.8%

16. The activity/income modelling includes repatriated activity from London and other providers, which enables care to be delivered closer to the patient's home. (Details on other providers are included in the Demand & Capacity Plan section of the Strategic Case).
17. In addition to the patient benefits from providing services closer to home, there is a financial benefit in repatriating activity from London: the Market Forces Factor (MFF) added by London providers could be between 21.25% and 29.76% compared to 7.44% locally. The business case assumes that this benefit accrues solely to commissioners.
18. The following table shows the incremental 3Ts PBR Income by POD (Note: partial year in 2019/20 when Stage 1 opens, and in 2022/23 when Stage 2 opens).

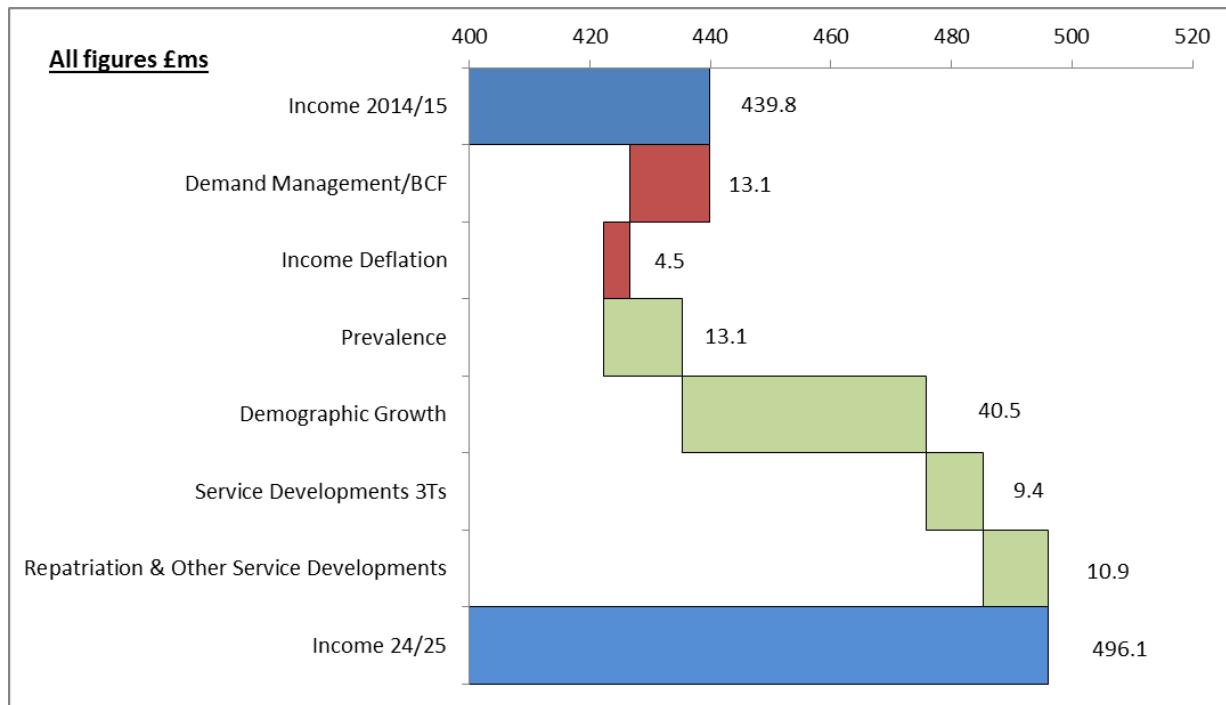
Table 3 – 3Ts Incremental Forecast PBR Income (Nominal Prices)

Point of Delivery (POD)	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Elective	0.4	1.7	1.7	1.8	2.0	2.0
Non Elective	0.3	1.1	1.1	1.1	1.1	1.1
Out Patients	0.3	1.2	1.2	1.3	1.7	1.7
Other	0.7	2.7	2.7	3.2	4.5	4.5
Total	1.7	6.7	6.7	7.4	9.3	9.4

Note: All figures shown are in £'millions

19. The approach to activity assumptions is consistent with the 3Ts OBC and the Trust's Clinical Strategy, published in its IBP in July 2014, and assumptions have been shared with commissioners. In Summer 2015, prior to TDA approval of the FBC, NHSE undertook an assurance exercise to check alignment of commissioners' long-term plans against the 3Ts and LTFM assumptions. This assurance work included a review of Transitional Support by commissioner – the table produced by the lead commissioner (Brighton & Hove CCG) was central to this exercise and is appended.
20. As at 2024/25 (using nominal prices), 3Ts Service Development PBR Income amounts to £9.4m, or 1.9% of PBR Income. The bridge chart below, which covers the period from 2014/15 to 2024/25 (after the opening of Stage 2) shows the changes in Protected (PBR and PBR Exclusions) Income.

Figure 2 – Protected Income Bridge 2014/15 to 2024/25 (Nominal Prices)



Commissioning Impact

21. It is recognised that alignment with commissioning intentions is an ongoing process, and the Trust's activity/income and activity/capacity models continue to be updated to reflect evolving planning assumptions. The delivery profile for the benefits/outcomes that are achieved by the investment in 3Ts (eg. patient quality & safety, operational efficiencies, CIPs) is aligned with this.
22. Income modelling is based on the national tariffs 2015/16 for services within the scope of PBR, and 2015/16 local tariffs for activity excluded from PBR. The model reflects the impact of the Better Care Fund

(£6.5m in 2015/16) and a level of CCG demand management (£2.0m from 2016/17, rising to £6.0m by 2023/24). Baseline modelling has also factored in changes in commissioning arrangements for the Musculoskeletal (MSK) and Dermatology pathways. At this stage the Trust does not have the detail on the level and composition of these services and has therefore assumed it does not affect the income quantum reported in the FBC and LTFM.

23. The change in Income is shown in the following table in terms of reimbursement type. This covers the period from 2015/16 to 2024/25 and is stated using Nominal Prices, ie. including inflation.

Table 4 – Income reimbursement type (Nominal Prices)

£ millions	2015/16	2016/17	2017/18	2023/24	2024/25
Tariff	318.4	321.6	320.7	329.1	329.9
Non-Tariff	61.9	62.6	63.8	65.0	65.2
PbR exclusions & Other Directly Re-imbursed contract income	55.2	57.3	59.7	77.2	80.7
Service Developments (Mixture of Tariff/Non-Tariff)	0.0	5.2	7.2	20.3	20.3
Total	435.4	446.8	451.4	491.6	496.1

Note: All figures shown are in £'millions

24. The above data can then be analysed to show the anticipated change in income received from each commissioner.

Table 5 – Income Inflated/(Deflated) to Nominal Prices

£ millions	2015/16	2016/17	2017/18	2023/24	2024/25
Local Authority	3.2	3.2	3.2	3.2	3.2
Non Commissioned Activity (NCA)	4.5	4.6	4.6	5.0	5.0
NHS Brighton and Hove CCG	121.6	122.3	121.9	125.3	125.9
NHS Coastal West Sussex CCG	14.7	15.0	15.2	16.2	16.3
NHS Crawley CCG	2.9	3.0	3.0	3.2	3.3
NHS Eastbourne, Hailsham and Seaford CCG	8.9	9.0	9.2	9.7	9.8
NHS England	147.0	154.7	157.8	184.4	187.5
NHS Hastings and Rother CCG	3.6	3.7	3.8	4.1	4.1
NHS High Weald Lewes Havens CCG	40.9	41.8	42.4	44.7	44.9
NHS Horsham and Mid Sussex CCG	59.0	60.4	61.2	64.8	65.1
MSK and Dermatology	29.1	29.1	29.1	31.0	31.0
Total	435.4	446.8	451.4	491.6	496.1

Note: All figures shown are in £'millions

25. Income growth is assumed to be relatively flat, apart from for NHSE; this recognises that the activity to be repatriated through the 3Ts investment is predominantly in specialist/tertiary services. There was a notable change in 2015/16 for Brighton & Hove CCG to recognise changes in the MSK and Dermatology patient pathways. The profile of repatriated activity and wider activity assumptions have been agreed with CCG and NHSE commissioners (letters of support are appended), and as stated NHSE undertook an assurance exercise in advance of TDA approval in July 2015 to ensure alignment of plans.

The Base Case

Capital Funding

26. The Base Case model continues to assume Public Dividend Capital. The table below shows how the overall funding is to be structured.

Table 6 –Source of Funding for Capital

	OBC	FBC
Total Capital requirement	420.1	484.8
Trust Operational Capital		7.7
Trust Loans		45.1
Public Dividend Capital - Advanced	20.0	20.0
Public Dividend Capital - New	400.1	412.0
Total Funding	420.1	484.8

Note: All figures are in £millions

27. Trust Operational Capital represents sunk costs. Trust Loans will be fully drawn down in 2015/16.
28. No land sales have been assumed as part of the 3Ts business case.
29. Once the Trust's finances are stable, the funding will be reviewed regularly and will take into consideration both the Trust's Operational Capital needs and the EBITDA Margin to assess the Trust's ability to fund loans.

Revenue Funding

30. The table below identifies the source of Revenue Funding specific to 3Ts at key points in its development.

Table 7 – Revenue Source and Application

£millions	Decant 2015/16	Stage 1 Opening 2019/20	Stage 2 Opening 2022/23	Stage 3 Opening 2023/24
Costs :-				
- Transitional Costs	0.8	5.6	2.4	0.1
- Relevant Operating Costs (Pay, Drugs, Clinical Supps & Other)	0.0	1.0	4.8	6.5
- Facilities Management Costs of new buildings	0.1	2.6	10.5	12.8
- Capital Charges (Depreciation and Public Dividend Capital)	2.1	9.4	14.7	16.4
Total Costs	3.0	18.6	32.4	35.8
Funding :-				
- Operating Income - Repatriated income	0.0	1.7	7.7	9.8
- Operating Income - Private Patient income	0.0	0.3	2.6	3.9
- Other Operating Income (Retail and Car Parking Income)	0.0	0.1	1.4	2.2
- Capital Charges saved on demolished buildings	0.1	0.6	1.1	1.2
- Facilities Management costs saved on demolished buildings	0.0	0.9	1.8	2.2
Sub Total	0.1	3.6	14.6	19.3
- Transitional Support	0.9	5.6	2.4	0.1
- CIPs (cumulative effect)	2.0	9.4	15.4	16.4
Total Funding	3.0	18.6	32.4	35.8

Note: All figures shown are in £'millions

31. As can be seen, the change in Capital Charges (net £15.2m) and FM costs (net £10.6m) are the main cost pressures (total of £25.8m) facing the Trust. These are unavoidable and are typical for modern, fit-for-purpose estate. Further analysis of these costs is appended.
32. Since CIPs of £16.4m are delivered on a recurrent basis and there is a positive contribution from surpluses on Repatriated Income, the change in CIPs requirement between Stages 2 and 3 is relatively small.
33. Capital Charges comprise PDC Dividend payments and Depreciation. Depreciation is a non-cash item, but the Base Case model assumes that an equivalent cash amount is reinvested in Trust Capital.

Key Financials of Base Case

34. At OBC stage the Trust modelled the delivery of at least an overall 1% Surplus Margin in the future, even during the period of exceptional change. At FBC stage the Trust continues to work on this target Surplus Margin.
35. The table below shows the Income & Expenditure in the Base Case model (analysis for the full ten year planning period is appended).

Table 8 – I&E impact of 3Ts

	2015/16	2016/17	2017/18	2023/24	2024/25
Total Income	507.9	520.9	523.8	566.8	571.2
Total Operating Expenditure	-491.0	-490.1	-482.6	-514.7	-519.6
- of which CIPs	25.0	27.3	28.8	18.1	16.8
- of which CIPs (% per LTFM)	4.9%	5.5%	6.0%	4.3%	4.0%
EBITDA	16.9	30.9	41.2	52.1	51.6
Depreciation/P&L on disposal	-23.3	-26.3	-24.2	-27.0	-27.1
Interest Payable / (Receivable)	-4.1	-4.4	-4.3	-4.1	-3.4
PDC Dividend	-8.7	-10.2	-12.7	-15.4	-15.5
Surplus / (Deficit) before impairments	-19.2	-10.0	0.0	5.7	5.7
Non Operational adjustments	-15.5	-5.8	-3.0	-12.1	-3.0
Net Surplus / (Deficit) per LTFM	-34.7	-15.8	-3.0	-6.4	2.7

Note: All figures are in £millions

36. As set out above, growth in Total Income over the ten year period of £63.3m (12.47%) is mainly PBR related (£35.9m) and PBR Exclusions (£24.7m). The balance of change is primarily driven by 3Ts changes (£6.6m):
 - Private Patients – £3.9m
 - Research Income – £1.5m
 - Additional car parking spaces (and therefore income) – £0.6m
 - Retail rents – £0.6m.
37. All ‘profits’ (operating surpluses) from these 3Ts income streams will be reinvested within the Trust and therefore contribute to the Trust’s Operating Costs, overall CIP programme and, in the longer term, help to fund the increase in Capital Charges.
38. The Base Case LTFM assumes a reduction in Education Income (£3.3m). Changes in Research and Other Income account for the difference. A full reconciliation is appended.
39. The reported deficits for 2015/16 and 2016/17 reflect increased operating expenses; the CIP programmes are designed to improve the position to break even in 2017/18.

40. The compound inflation rates on the Operating Costs are as follows:
- Pay +25%
 - Drugs +42%
 - Clinical Supplies +20%
41. Each year's CIP requirement is driven by the tariff efficiency requirements, an assumed level of local cost pressures and the impact of stranded costs from Demand Management schemes.
42. Changes in Depreciation and PDC Dividend payments are the result of the 3Ts investment: this represents the cost of modern estate. Such changes in Capital Charges were historically considered 'unavoidable costs' and their funding is primarily through normal efficiency savings coupled with 3Ts-specific CIPs.
43. The Trust's Operational Capital programme is currently significantly over-subscribed and the increased depreciation from 3Ts will help with this and the longer term requirement for 3Ts lifecycle costs. Lifecycle costs are appended to the Economic Case but there will be some minor costs in first 10 years after buildings open (average of £0.6m pa), with a gradual ramp up to peak at £7.0m in 2040/41.
44. Unlike loans or PFI arrangements, PDC funding does not require repayment. The PDC dividend in the above table is based on Net Relevant Assets and therefore takes advantage of the written-down value of the Asset. Loans cannot be written off and the additional Interest payable above the dividend rate (3.5%) would add to the Trust CIP requirement. As set out in the approved OBC, 100% PDC funding therefore remains the Trust's preferred method.
45. Non Operational adjustments relate to Fixed Asset impairments, which are mainly driven by 3Ts, and costs are incurred when the underlying Asset is brought into use. The table below shows the Normalised Position, and Fixed Asset impairments relate to those described above.

Table 9 – Normalised Position

	2015/16	2016/17	2017/18	2023/24	2024/25
Reported Surplus / (deficit)	-34.7	-15.8	-3.0	-6.4	2.7
Less non recurrent Income	-3.3	-3.3	-3.2	-3.4	-3.2
Add back Non recurring expenses	3.3	3.3	3.2	3.4	3.2
Adjust for (Profit)/loss on asset disposals	-1.2	0.0	0.0	0.0	0.0
Add back Fixed Asset impairments	15.5	5.8	3.0	12.1	3.0
Normalised Net Surplus / (deficit)	-20.4	-10.0	0.0	5.7	5.7

Note: All figures are in £millions

46. This analysis shows a return to breakeven in 2017/18 and a positive position at the end of the planning period. This is after taking into consideration non-recurrent items and impairments and non-recurrent income; the non-recurring expenses comprise 3Ts Core Team costs and Clinical Excellence Awards.
47. The table below shows the Balance Sheet for the Base Case model (analysis over the full ten year period is appended).

Table 10 – Balance Sheet

All figures £'ms		2015/16	2016/17	2017/18	2023/24	2024/25
Assets	3Ts	57.2	117.0	206.8	251.1	243.8
	Other	313.0	312.2	304.8	291.3	296.7
	Total Assets	370.2	429.2	511.6	542.4	540.5
Current Assets	Cash	1.4	7.8	12.3	36.5	38.3
	Other Current Assets	70.7	66.2	66.2	31.9	31.0
	Total Current Assets	72.1	74.0	78.5	68.4	69.3
Total Assets		442.3	503.2	590.1	610.8	609.8
Liabilities	3Ts loans	-41.7	-39.9	-38.1	-27.3	-25.5
	Other loans	-31.2	-29.0	-26.8	-13.6	-11.4
	Other Long term liabilities	-34.4	-32.9	-32.4	-21.8	-20.1
	Other Liabilities	-72.5	-73.2	-77.1	-70.5	-72.5
	Total Liabilities	-179.8	-175.0	-174.4	-133.1	-129.4
Total Assets Employed		262.5	328.2	415.7	477.7	480.3
Tax Payers Equity	PDC 3Ts	29.0	100.5	190.9	432.0	432.0
	PDC other	236.1	246.1	246.1	246.1	246.1
	Total PDC	265.1	346.6	437.0	678.1	678.1
	Retained Earnings	-52.6	-68.4	-71.3	-250.5	-247.8
	Other Reserves	50.0	50.0	50.0	50.0	50.0
Total Tax Payers Equity		262.5	328.2	415.7	477.7	480.3

Note: All figures shown are in £'millions

48. As illustrated, in Net Book Value terms and after impairments the 3Ts development is a similar value to the rest of the Trust Estate.
49. Once the Trust returns to producing an annual Surplus, the Cash balance is held constant over the remaining years and represents over 10 days of Operating Expenses. Loans for 3Ts represent the remaining outstanding liability on the following:
 - St Mary's – £6.8m
 - 3Ts Decant tranche 1 – £17.5m
 - 3Ts FBC and Decant support – £20.8m.
50. The last 3Ts loan was approved by the Independent Trust Financing Facility (ITFF) in August 2014. Other Long-Term Liabilities include the PFI for the Royal Alexandra Children's Hospital (RACH) and other Trust loans.
51. There are no Contingent Liabilities within the Trust's 2014/15 Annual Accounts and the Trust foresees no reasons for recording such liabilities or indeed Contingent Assets in the ten year period.
52. The adverse movement in Retained Earnings is mainly due to 3Ts impairments, which cannot be charged to Revaluation Reserves since no carried-forward reserves will exist for this new asset being brought into use.
53. The increase in 3Ts funding in 2015/16 is a mix of loan draw-downs and PDC. Generally the Trust will look to draw down PDC to ensure that funds are available to pay the PSCP invoices in a timely fashion; the Trust's underlying operational cashflows must not be affected by the 3Ts development.
54. The table below shows the Cashflow Statement for the Base Case model (analysis for the full ten years is appended).

Table 11 – Cashflow Statement

All figures £'ms	2015/16	2016/17	2017/18	2023/24	2024/25
Surplus/(Deficit) from operations	16.9	30.9	41.2	52.1	51.6
Non cash adjustments	0.0	-0.5	-0.5	-0.6	-0.6
Op cashflows before working capital movement	16.9	30.4	40.7	51.5	51.0
Increase/(decrease) in working capital/Provisions	-10.6	4.7	5.7	2.9	2.6
Net cash from operating activities	6.3	35.0	46.4	54.5	53.6
Net cash from investing activities - 3Ts capex	-27.4	-61.5	-90.4	-7.5	0.0
Net cash from investing activities - Other	-49.1	-29.0	-18.6	-27.7	-27.5
Cashflow before Financing	-70.2	-55.5	-62.6	19.3	26.0
Net cash from financing - 3Ts PDC received	8.9	71.5	90.4	2.0	0.0
Net cash from financing - 3Ts Loan drawdown	13.5	0.0	0.0	0.0	0.0
Net cash from financing - PDC dividend paid	-9.0	-10.2	-12.7	-15.5	-15.5
Net cash from financing - 3Ts Repayment of Loans	-1.8	-1.8	-1.8	-1.8	-1.8
Net cash from financing - Repayment of other Loans	-2.7	-3.7	-3.7	-4.6	-3.5
Net cash from financing - Interest paid on 3Ts Loans	-0.9	-1.0	-0.9	-0.7	-0.6
Net cash from financing - Interest paid on other Loans	-3.1	-2.9	-4.2	-3.4	-2.7
Net cash from financing - Other	41.2	10.0	0.0	0.0	0.0
Net cash (outflow)/inflow	-24.0	6.4	4.5	-4.6	1.8

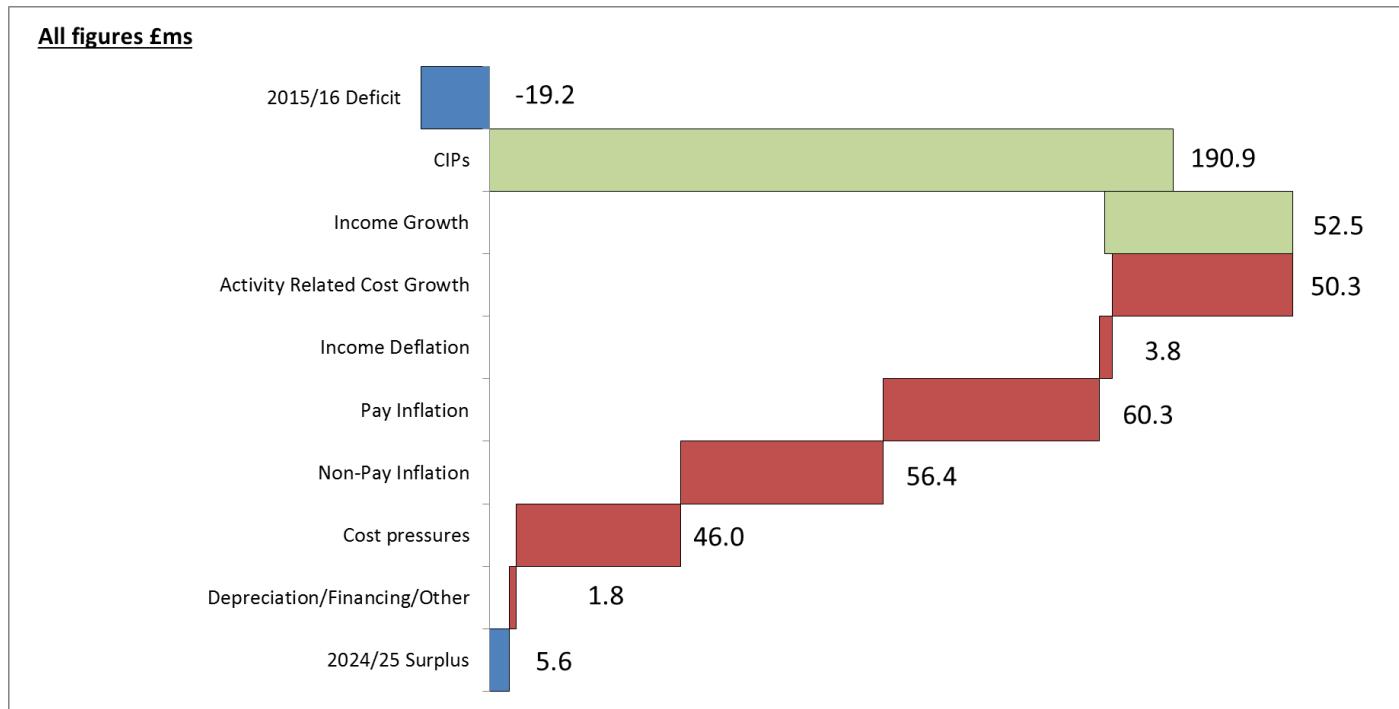
Note: All figures shown are in £'millions

55. As shown, 3Ts capital expenditure is funded in early years by loans, and in 2015/16 this switches to PDC funding. Analysis over the full ten year period is appended.
56. The items included in the ‘Net Cash from Investing activities – Other’ relate to:
 - Trust Estate requirements, eg. backlog maintenance
 - Trust equipment replacement programme
 - Other Capital projects
 - PFI Unitary Payments.
57. The items included in the ‘Net Cash from Financing – Other’ relate to loan funding of the Other Capital projects mentioned above and also include PDC received to fund the Deficit positions in 2015/16 and 2016/17.
58. It should be noted as the resources are limited, any increase in the Trust’s borrowings would result in loan repayments and this additional outflow of funds would need to be funded either from an increase in surpluses from operations (eg. more income, more CIPs) or by a reduction of the ‘Net Cash from Investing activities – Other’, eg. reduction in backlog maintenance or deferring equipment replacement, which may not therefore be an appropriate option.

Bridge from 2015/16 to 2024/25

59. The following is a bridge analysis showing the key movements from base year to end of planning period.

Figure 3 – I&E Bridge



Note: All figures shown are in £'millions

60. The above analysis shows how the Surplus changes across the LTFM planning period and illustrates the contribution CIPs make to financing the Trust's needs – this is regardless of the 3Ts investment. The CIPs are based on 2015/16 prices and on average are 4.7% pa, with lowest being 4.0% in 2024/25 and highest being 6.4% in 2017/18.
61. The cost pressures relate to national and local cost pressures including quality improvements. The elements included in the bridge are not unique to the Trust: the same pressures through tariff, cost inflation and quality improvement issues exist for most NHS and Foundation Trusts.

Financial Risk Ratings

62. The table below shows the Risk Rating (CoSRR) for the Base Case model (analysis for the full ten year period is appended).

Table 12 – Financial Risk Ratings

		2015/16	2016/17	2017/18	2023/24	2024/25
Continuity of Service	Liquidity ratio	4	2	2	3	2
Risk Rating (CoSRR)	Capital servicing capacity ratio	1	2	3	3	3
	Weighted average	3	2	3	3	3

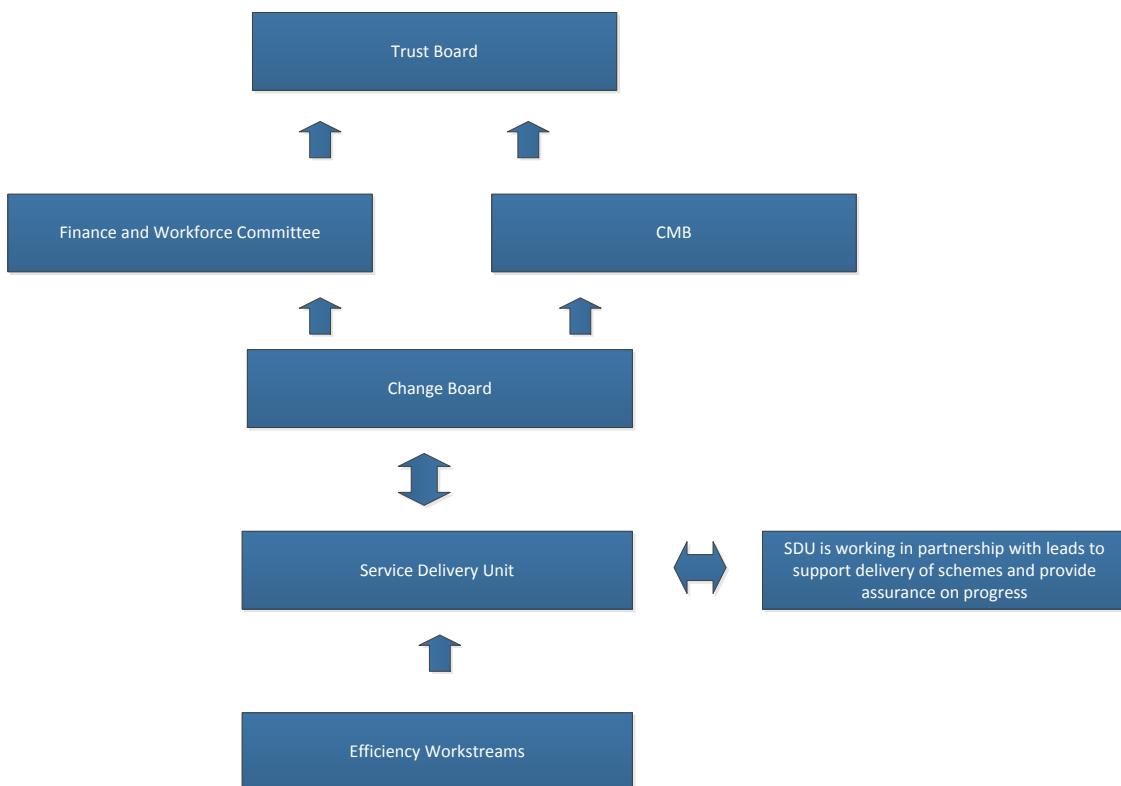
63. Once the Trust returns to a breakeven position, it intends to deliver year-on-year Surpluses – through a significant period of change. This approach scores well on both the Liquidity Ratio and the Capital Servicing Capacity Ratio, with a weighted average score of 3 in 9 out of the 10 years in the LTFM.

64. The Trust will seek to maintain healthy cash positions across most of the planning period and will ensure that balances represent more than 10 days of Operating Expenses.
65. Maintaining the Trust's historic Tier 1 borrowings will ensure the Capital Servicing Capacity Ratio is controlled, but delivering an EBITDA margin of +9% remains the key to 3Ts affordability under a PDC funded route.

Trust Cost Improvement Plans (CIPs)

66. Achieving year-on-year efficiency gains and delivering Cost Improvement Plans is a long-standing NHS requirement. The Trust has a strong track record of delivery, and this is against the backdrop of increased demand for services, increasing patient acuity and the implementation of national guidance such as minimum nurse to patient ratios and supernumerary Band 7s on wards.
67. The Trust has a well-developed CIPs process and the governance framework is set out below.

Figure 4 – CIPs Governance



68. The Service Delivery Unit (SDU), overseen by a Programme Director, is responsible for:
 - leading the development of the three-year rolling CIPs programme, aligned with the Trust's strategic vision and developed in collaboration with other major Trust programmes (eg. 3Ts, Electronic Patient Record);
 - supporting the development of detailed project plans and providing project support through a team of specialist Change Consultants;
 - ensuring that Quality and 'Due Regard' (Equality) impacts have been considered and appropriately mitigated; and
 - monitoring and reporting on project delivery against the range of outcome and Quality & Safety metrics.

69. The table below shows CIPs assumed in the Base Case model (analysis for the full ten years is appended).

Table 13 – Cost Improvement Plans (Real Prices)

	2015/16	2016/17	2017/18	2023/24	2024/25
Non-Recurrent Savings	0.0	0.0	0.0	0.0	0.0
Recurrent Savings	25.0	27.3	28.8	18.1	16.8
Total savings planned	25.0	27.3	28.8	18.1	16.8
- % per LTFM	4.9%	5.5%	6.0%	4.3%	4.0%

Note: All figures shown are in £'millions

70. Over the ten year planning period including 2015/16, the total CIP requirement is £211.5m at 2015/16 prices. The below table shows the percentages planned for each year.

Table 14 – Cost Improvement Plan percentages per LTFM

Year	CIP %
2015/16	4.9%
2016/17	5.5%
2017/18	6.0%
2018/19	4.4%
2019/20	4.1%
2020/21	4.4%
2021/22	4.2%
2022/23	4.3%
2023/24	4.3%
2024/25	4.0%

71. The level of CIPs as shown in the above table is not significantly changed by the 3Ts development, and this aligns with the original concept approved under the SOC and OBC that minimal CIPs would be required above the normal efficiency requirement. The average CIPs planned across the 10 year period equates to 4.6% pa. Once Stage 1 is open in 2019/20 this falls to 4.2%, which is in line with planning guidance. As shown earlier in chapter the 3Ts development is calculated to account for £16.4m of these CIPs.

Quality Impact Assessment (QIA)

72. The Trust considers that the quality of patient services can be protected, and even enhanced, while at the same time efficiency is increased and cost reduced. The Trust Quality Impact Assessment (QIA) process has been developed in line with National Quality Board guidance^{1,2} to provide assurance that any potential risks to patient quality and safety arising from the CIPs programme are appropriately assessed and mitigated and, in the final analysis, are considered acceptable. The Trust Quality & Safety Strategy is described in the Commercial Case.
73. QIAs require approval by the Chief Nurse and Medical Director. The QIA on the 3Ts CIPs is appended to the Management Case and has additionally been approved by the Trust Chief of Safety & Quality. Their joint assessment concludes, '*the QIA appears comprehensive and robust and... the CIPs as currently defined/quantified would not be expected to have any deleterious effect on the quality or safety of patient care.*'

¹ National Quality Board (2012) *How to: Quality Impact Assess Provider Cost Improvement Plans*

² National Quality Board (2011) *Quality Governance in the NHS: a Guide for Provider Boards*

Historic Trust Performance

General Outlook

74. The Trust had a strong track record in delivering CIPs to plan and achievement of operational surpluses for three of the last five years. The next sections provide some historic data on the Trust and where relevant 3Ts aspects are commented upon.

Income & Expenditure: Past Five Years

75. The Trust delivered a significant Income & Expenditure (I&E) Operational Surplus in 2010/11, with small deficits or surpluses since then. The table below summarises the financial performance. The step-change in 2011/12 relates to the Trust's hosting the Kent, Surrey & Sussex Deanery; this arrangement continued until the Deanery transferred to Health Education Kent, Surrey & Sussex (HEKSS) in September 2013.

Table 15 – Historic EBITDA and I&E Trend

	2010/11	2011/12	2012/13	2013/14	2014/15
Total Income	439.4	574.2	606.1	558.6	521.1
Total Operating Expenditure	-409.7	-545.9	-573.7	-522.9	-489.1
EBITDA	29.7	28.3	32.4	35.6	32.0
Depreciation/P&L on disposal	-15.1	-18.2	-19.3	-19.9	-21.6
Interest Payable / (Receivable)	-2.8	-2.5	-2.6	-2.9	-3.5
PDC Dividend	-7.7	-7.8	-7.3	-7.5	-7.9
Surplus / (Deficit)	4.1	-0.2	3.2	5.3	-1.0
Non Operational adjustments	-16.0	-16.0	-3.2	-14.3	-0.2
Net Surplus / (Deficit) per LTFM	-11.9	-16.2	0.0	-9.0	-1.2

Note: All figures shown are in £'millions

76. The Trust has seen steady growth across all Points of Delivery, but in particular:

- Elective inpatient market share grew significantly (£15.3m) in 2012/13 as a result of the absorption of the Sussex Orthopaedic Treatment Centre (SOTC), previously managed by Care UK; and
- Other Non-Tariff: there has been significant growth in 'PBR Exclusions & Drugs' between 2010/11 and 2014/15 (£29.9m), for which Trust receives matched revenue funding and therefore does not make a contribution to the overall bottom line.

Normalised Position: Past Two Years

77. The table below sets out the normalised position for the Trust for the past two years.

Table 16 – Historic Normalised Position

	2013/14	2014/15
Reported Surplus / (deficit)	-9.0	-1.2
Less non recurrent Income	-70.5	-3.3
Add back Non recurring expenses	67.4	3.3
Adjust for (Profit)/loss on asset disposals	-0.7	-1.1
Add back Fixed Asset impairments	14.3	0.2
Normalised Net Surplus / (deficit)	1.4	-2.1

Note: All figures shown are in £'millions

78. The changes in Non-Recurrent Income and Non-Recurring Expenses were driven principally by the Trust's hosting the KSS Deanery, which had a part-year impact on 2013/14. Other Non-Recurrent Income included Clinical Excellence Awards and revenue support for strategic projects.

79. Part of the Non-Recurrent Income (identified as revenue support for strategic projects above) includes the support for the 3Ts Core Team, which is responsible for progressing the 3Ts design (Main Scheme and Decant), the OBC/FBC and associated planning/documentation, procurement (including identification of risk transfer), VAT planning, equipping and the overall change management programme required to fully realise the benefits set out in the business case, including workforce and service modernisation.
80. Previously this funding was provided by NHS South East Coast. The commitment to continue funding for the team's costs over the lifetime of programme was reconfirmed in March 2012 by the Board of Directors of NHS South of England, and this formed part of the Department of Health's approval of the 3Ts OBC. Future funding of Core Team is dealt with later in this chapter.

Reference Costs

81. The Reference Cost Index (RCI) provides a comparison of Trust costs using a mean index score of 100. The RCI is a broad indication of relative efficiency. The table below sets out the Trust's historic RCIs including the position for 2014/15.

Table 17 – Historic Reference Costs

Year	Reference Cost
2010/11	95.49
2011/12	95.79
2012/13	99.09
2013/14	98.94
2014/15	103.00

82. As this table shows, the Trust has maintained an overall position below average RCI for four of the last five years. Increased reference costs in 2014/15 reflect increased operational costs. At a more granular level there will inevitably be areas where individual Trust costs are higher or lower than average.

Cost Improvement Plans (CIPs): Past Three Years

83. Continued reduction in tariff and general inflation over the past three years have created challenges across the NHS. The Trust has delivered a total of £92.3m in savings over that period and of this £90m are recurrent. The Trust has fully met its target in two of the past three years.

Table 18 – Historic Savings

	2012/13	2013/14	2014/15
Non-Recurrent Savings	0.4	0.7	1.2
Recurrent Savings	31.6	29.7	28.7
Total savings delivered	32.0	30.4	29.9
Total Planned CIPs	32.0	30.4	32.4
% of Planned CIPs achieved	100.0%	100.0%	92.3%

Note: All figures shown are in £'millions.

84. The impact of a historic deficit and the SHA's planning requirement to achieve a minimum 1% surplus meant that savings significantly above the normal efficiency requirement had to be achieved in both 2012/13 and 2013/14. This demonstrates a strong track record in achieving recurrent savings. Non-Recurrent Savings in 2012/13, 2013/14 and 2014/15 were profits made on asset disposals (mainly residential accommodation adjacent to the RSCH site).

Balance Sheet: Past Five Years

85. The historic Statement of Financial Position (Balance Sheet) within the LTFM shows a stable organisation with an increasing cash position in four out of five years. This has enabled the Trust to commit to and manage a portfolio of short- and long-term loans.

Table 19 – Historic Balance Sheet

All figures £'ms		2010/11	2011/12	2012/13	2013/14	2014/15
Assets	3Ts	14.4	11.7	14.8	17.3	39.9
	Other	285.5	277.7	272.5	285.5	292.8
	Total Assets	299.9	289.4	287.3	302.8	332.7
Current Assets	Cash	10.0	14.7	35.7	22.2	25.4
	Other	43.9	47.1	33.8	45.7	48.7
	Total Current Assets	53.9	61.8	69.5	67.9	74.1
Total Assets		353.8	351.1	356.8	370.7	406.8
Liabilities	3Ts loans	0.0	0.0	-6.8	-7.5	-30.0
	Other	-104.7	-111.6	-113.2	-114.5	-108.5
	Total Liabilities	-104.7	-111.6	-120.0	-122.0	-138.5
Total Assets Employed		249.1	239.5	236.8	248.7	268.3
Tax Payers Equity	PDC 3Ts	20.0	20.0	20.0	20.0	20.0
	PDC other	210.4	214.7	214.9	216.0	216.1
	Total PDC	230.4	234.7	234.9	236.0	236.1
	Retained Earnings	-8.8	-23.9	-22.3	-18.9	-17.8
	Other Reserves	27.5	28.7	24.2	31.6	50.0
Total Tax Payers Equity		249.1	239.5	236.8	248.7	268.3

Note: All figures shown are in £'millions

86. The table above shows 3Ts loans of £30m within the 2014/15 Balance Sheet, and within Other Liabilities is a further £11.5m of loans (total borrowings of £41.5m).
87. The £30m 3Ts loan balance mainly relates to Decant schemes:
- £6.8m for partial refurbishment of the former St Mary's Hall School (a strategic asset acquired in 2010/11).
 - £17.5m relating to acquisition of modular buildings. The loan was recommended for funding by the ITFF Committee in January 2014.
 - The balance relates to amounts drawn-down on a further loan of £20.8m, which was taken out to advance the design of 3Ts buildings and further develop the Decant schemes. This was recommended by the ITFF Committee and Trust received confirmation of approval in December 2014.
88. The significant reduction in retained earnings in 2011/12 is driven by a net impairment charge of £14.8m: this arose because there was not a sufficient revaluation reserve to charge for the assets being impaired (the £16.0m charged to I&E was reduced by £1.2m transfer to revaluation reserve).
89. Public Dividend Capital of £20m was received in 2010/11 to advance the 3Ts business case to OBC stage and achieve Full Planning Consent from Brighton & Hove City Council (awarded in January 2012).

Cashflow Statement: Past Five Years

90. The Trust's historic cashflow statement is shown in the table below. 3Ts Capital Expenditure over the period was funded through a combination of PDC, Trust Operational Capital and loans. Further analysis of Capital funding is included later in the chapter.

91. The 2014/15 cashflows included a loan repayment of £1.8m and an interest payment of £0.6m on the 3Ts loans.

Table 20 - Historic Cashflow Statement

All figures £'ms	2010/11	2011/12	2012/13	2013/14	2014/15
Surplus/(Deficit) from operations	29.7	28.3	32.4	35.5	31.9
Non cash adjustments	-1.1	-1.4	2.9	-0.5	-0.1
Op cashflows before working capital movement	28.6	26.9	35.3	35.0	31.8
Increase/(decrease) in working capital/Provisions	-15.6	17.3	15.8	-13.5	-1.6
Net cash from operating activities	13.0	44.2	51.1	21.5	30.2
Net cash from investing activities - 3Ts capex	-11.7	-11.7	-3.1	-2.5	-22.6
Net cash from investing activities - Other	-18.8	-33.3	-26.7	-19.5	-11.4
Cashflow before Financing	-17.5	-0.8	21.3	-0.5	-3.8
Net cash from financing - 3Ts PDC received	20.0	0.0	0.0	0.0	0.0
Net cash from financing - 3Ts New Loans	0.0	0.0	6.8	0.7	22.5
Net cash from financing - PDC dividend paid	-7.7	-7.8	-7.6	-6.9	-7.7
Net cash from financing - 3Ts Repayment of Loans	0.0	0.0	0.0	-0.3	-1.8
Net cash from financing - Repayment of other Loans	-19.1	-3.2	-4.7	-5.0	-3.8
Net cash from financing - Interest paid on 3Ts Loans	0.0	0.0	0.0	-0.2	-0.6
Net cash from financing - Interest paid on other Loans	0.0	0.0	-2.7	-2.8	-2.9
Net cash from financing - Other	28.1	16.7	8.0	1.5	1.4
Net cash (outflow)/inflow	3.8	4.9	21.0	-13.5	3.3

Note: All figures shown are in £'millions

Overview of 3Ts OBC

History & Context

92. The scope of the redevelopment and the strategic case for investment have changed little since the OBC was first submitted. Although the OBC development and approval period has straddled the implementation of the Health & Social Care Act 2012 and restructure of the NHS, the development has enjoyed consistent support from all stakeholder organisations as a strategic and operational imperative of local and regional importance.
93. The following table shows the history of the 3Ts Business Case, which was considered during a very difficult period for both the UK economy and the NHS.

Table 21 - History of 3Ts Business Case

Date	Event
Jul-08	SOC approved by South East Coast SHA
Jul-09	OBG approved by BSUH Trust Board
Nov-09	OBG approved by South East Coast SHA
Dec-09	OBG submitted to DH by South East Coast SHA
Jul-11	Refreshed OBG approved by South East Coast SHA and resubmitted to DH
Sep-11	Application for Full Planning Consent submitted to Brighton & Hove City Council
Jan-12	Full Planning Consent granted by Brighton & Hove City Council (subject to completion of Section 106 legal agreement)
Mar-12	Full Planning Consent released by Brighton & Hove City Council
Mar-12	Refreshed OBG re-approved by NHS South of England
Mar-12	OBG passed to DH
Jul-12	OBG passed to HMT
May-13	OBG supplementary submission to TDA
May-14	OBG approval announced by DH and HMT

94. Since the OBC was originally submitted, the financial context has changed. For example, Tariff Inflation has moved from a positive outlook of +0.7% pa in 2009/10 to -1.6% for 2014/15.
95. To meet these challenges, changes to the Trust's cost base have become more urgent and the Trust has therefore developed a programme for a significant level of CIPs. This is required independent of the 3Ts investment, which will begin to contribute to efficiencies once the Stage 1 building opens (currently expected in 2019/20).

OBC Funding Recommendation & Alternatives Considered

96. The OBC recommended public funding for the redevelopment, and in the absence of significant borrowing capacity the preferred method was 100% Public Dividend Capital (PDC). This was the basis of version 17 of the OBC, which was recommended for approval by NHS South of England (SHA Cluster) in March 2012, and approved by the Department of Health following the Chancellor of Exchequer's announcement on 1st May 2014 (letters of approval are appended to Strategic Case).
97. At OBC stage, comparison between the 100% PDC option and Do Nothing scenario showed the following:
- Increase in CIPs of £14.7m;
 - Increase in patient activity over 10 year period of 6.2%. (This is not additional activity but demographic growth enabled by 3Ts capacity, net of demand management and Trust efficiencies);
 - Increase in EBITDA of 2.5%, improving Risk Ratings score for EBIDA Margin;
 - Increase in Cash position of £11.2m.
98. The OBC also considered different funding arrangements. This included a 100% Prudential Borrowings (PB) scenario, which increased the CIPs requirement and created a £39.5m overdraft position for the Trust. The table below provides the key financial data for each of the scenarios modelled in the OBC.

Table 22 – OBC 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: All figures shown are in £'millions

99. The Maximum Debt scenario assumed the same level of CIPs as the Preferred Option (100% PDC) but assumed it was delivered through a mixture of PDC and PB that could be used flexibly over the construction period. Part of the conditions of approval was for the Trust and TDA to re-examine the mix of loans and PDC at the FBC stage.

Changes Since OBC

Borrowings Capacity

100. At OBC stage the level of Tier 1 borrowings available to the Trust was £113.6m, but due to existing commitments only £32.5m was available to support 3Ts and other strategic service developments. This reflected the existing PFI contract for the RACH and several short- to medium-term loans for service developments.
101. Although Tier 1 is no longer used as a measure, the borrowings level had increased to £157m in August 2014 (assessed as part of loan application). In August 2014 further loans (totalling £27.0m) were approved by the TDA and ITFF. Of these, £20.8m related to 3Ts workstreams (Decant £7.0m and Main Scheme £13.8m), with the balance (£6.2m) being a loan for Radiotherapy Asset Replacement, which is required to support the implementation of offsite linked radiotherapy facilities.

102. The following table shows the loans that have been approved for 3Ts-related schemes and work.

Table 23 - Current 3Ts Loans

3Ts Worksteam	Value
- St Marys Decant plan	6.8
- Decant schemes tranche 1	17.5
- Decant schemes tranche 2	7.0
- Main Scheme loans	13.8
Total	45.1

Note: All figures are in £millions

103. The table below shows all the loans that are reflected in the LTFM and includes the above 3Ts loans.

Table 24 – All loans reflected in LTFM

Loan Reference	Purpose of Loan	Loan Start	Term of Loan	Interest Rate	Total Loan Amount
WCL/11-12/RXH/01	Working Capital Loan	15/09/2011	5 years	0.96%	15,000
CIL/12-13/RXH/1	Capital Investment Loan	17/09/2012	15 years	1.40%	7,639
CIL/12-13/RXH/3	Capital Investment Loan	15/03/2013	25 years	2.78%	6,800
ITFF/CILFF/RXH/2013-12-19/A	Capital Investment Loan	24/03/2014	25 years	3.14%	17,478
ITFF/CILFF/RXH/2014-08-19/A	Capital Investment Loan	22/12/2014	25 years	2.20%	20,800
ITFF/CILFF/RXH/2014-08-19/B	Capital Investment Loan	13/07/2015	10 years	1.67%	6,238
ITFF/CILFF/RXH/2014-08-19/B	Interim Revolving Working Capital Support	13/07/2015	5 years	1.67%	16,704
Sub Total					90,659
New loan 2015/16	Radiotherapy Satellite : East	Q4 2015/16	25 years	*	14,889
Total Loans reflected in LTFM					105,548
* Interest rates modelled in LTFM based on estimates					

Note: All figures are in £000s

104. In 2015/16 the Trust will be seeking to borrow a further £14.9m to support the radiotherapy business case. Facilities will be based in Eastbourne and linked to (and with staff provided from) the Sussex Cancer Centre. These investment proposals are currently at Full Business Case stage and will be reviewed by the ITFF in Q4 2015/16. This is part of an overall strategy to develop the network of Linear Accelerators (Linacs) along the South Coast.
105. The Trust has pipeline schemes totalling £20.0m at a feasibility stage (Pathology Hub £8.0m and Energy Centre £12.0m) which are not yet reflected in the LTFM. Historically, the Trust Board has looked to maintain a ‘contingency buffer’ of at least 10% of Tier 1 borrowings (£15.7m using the August 2014 data) for minor service developments and emergency needs.
106. Given the above position the Trust Board has determined that there is currently no further scope to support investment in 3Ts from borrowings. The planned deficits in 2015/16 and 2016/17 would also make it difficult to increase borrowings.

Inflation Impact on Capital Costs

107. The most significant change since OBC submission is the estimated Capital Costs and Guaranteed Maximum Price (GMP), which the Trust received in July 2015. Details of variances are shown in the

Economic Case, but the principal factor is the change in construction inflation³ from PUBSEC 173 to PUBSEC 202. This is illustrated in the table below, which shows what the OBC would look like if today's costing assumptions (ie. PUBSEC 202) were applied.

Table 25 – Comparison of OBC Capital Costs

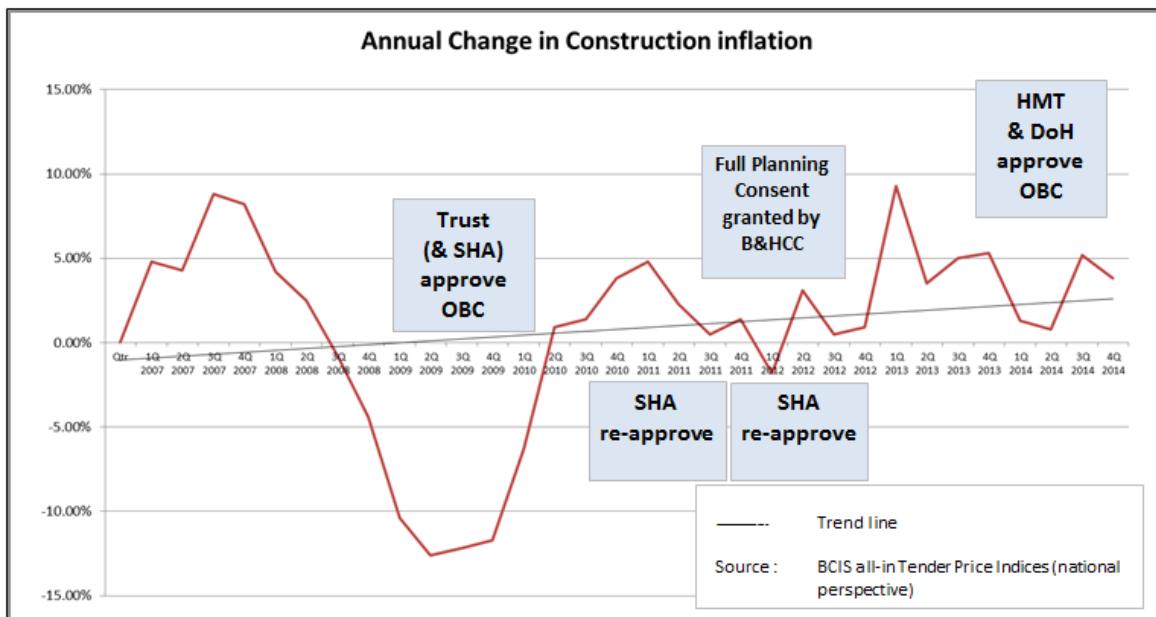
	OBC (Pubsec 173)	OBC (Pubsec 202)	FBC Contract Cost
Works	207,665	265,351	291,075
Fees	40,182	51,345	55,614
Non Works	28,102	29,248	28,102
Equipment	29,700	31,694	27,629
Contingencies	17,650	22,555	15,313
Optimism Bias	6,852	5,399	0
Inflation adjustments	28,752	35,298	4,725
Sub-Total	358,903	440,890	422,458
VAT	61,210	75,375	62,329
TOTALS	420,113	516,265	484,787

Note: All figures shown are in £'000s

108. The Capital Costs have been market tested through the PSCP's management of their supply chain, and as can be seen in the above table, the expected Capital Costs sit below the PUBSEC 202 position. No Optimism Bias is present in the above since it represents the GMP and in theory no scope change should therefore arise. Some aspects of inflation are fixed and are within the PSCP's Works Cost. The reduction in equipment from OBC stage is mainly due to fewer Linear Accelerators being required following a change in the national DH formula for calculating Linac workloads.
109. The graph below shows the change in Construction Inflation since the original OBC was approved by the Trust Board in July 2009.

³ The Tender Price Index of Public Sector Building Non-Housing (PUBSEC) measures the movement of prices in tenders for building contracts in the public sector in Great Britain. It excludes contracts for housing, civil engineering, mechanical engineering, electrical engineering, minor alterations projects or repair and maintenance work. The PUBSEC index and associated location and function adjustment factors are produced by the Building Cost Information Service (BCIS) on behalf of the Department of Business, Innovation & Skills (BIS).

Figure 5 – Construction Inflation Over Time



110. Change in construction prices are driven by demand for services and materials, but also by the capacity, experience and capability of contractors and their supply chain. In a rising market, contractors will have limited capacity to take on more work and will focus on projects with less inherent risk. As a result, the market has seen a significant reduction in competition for work since the start of 2014. The expectation is that as the UK economy recovers and demand on the construction sector increases, Construction Inflation will increase further.

Inflation Impact on Revenue Costs

111. Tariff deflation has been modelled per Monitor guidance. The deflator rates are due to the continuing downward pressure on public sector spending. Monitor does not issue guidance for all years and therefore a constant deflator has been assumed. The tariff increase of +0.4% in 2016/17 recognises an increase in pay expenditure relating to employer pension contributions.

Table 26 – Assumptions on Income Inflation (OBC vs FBC)

Year	OBC %	FBC %
2012/13	-1.50%	
2013/14	-1.30%	
2014/15	-1.30%	
2015/16	0.00%	
2016/17	0.00%	0.40%
2017/18	0.00%	-0.60%
2018/19	0.00%	-0.70%
2019/20	0.00%	-0.70%
2020/21	0.00%	-0.70%
2021/22		-0.70%
2022/23		-0.70%
2023/24		-0.70%
2024/25		-0.70%

112. These tariff inflation rates differ from those used at OBC stage, when it was assumed that negative tariff inflation would cease after three years and plateau at 0%. Other inflation assumptions have not changed significantly from OBC and therefore the adverse changes in tariff inflation will further impact upon efficiency and CIPs requirements.

Transitional Costs & Support

113. Transitional Costs comprise two distinct elements:
- the recurrent but time-limited cost of the internal project team supporting the development programme ('Core Team'); and
 - other one-off costs ('Other Transitional Costs') associated with bringing the new facilities into operational use (eg. removals, short-term double running while patients are transferred into the new facilities, backfill for clinical staff undertaking training and orientation).
114. NHS South of England approval in 2012 assumed that Transitional Costs constituted a legacy commitment for continuing funding by NHS England.
115. The Core Team costs in the OBC (as approved by NHS South of England in March 2012) totalled £16.0m. This represented costs from start of Decant to end of the project (at the time of approval, this period was assumed as 2012/13 to 2020/21), resulting in projected average run rate of £1.78m pa.
116. The period covering Decant to end of the project is now assumed to be 2014/15 to 2024/25. Using the above average run rate, the Core Team costs should total £19.6m for this period. However the latest view (details appended) is that Core Team costs will total £15.1m.
117. Core Team 'sunk costs' from 2012/13 to 2013/14 total £2.8m. The requirement is therefore assumed to be £17.9m (£15.1m plus £2.8m) – this is a reduction against the theoretical budget of £19.6m.
118. The table below summarises the second element (ie. Other Transitional Costs) at OBC and FBC stages (detailed costs are appended).

Table 27 – Comparison of 3Ts Other Transitional Costs

All figures £000s	OBC	FBC	Variance FBC vs OBC
Decant	4,246	4,183	-63
Stage 1	7,309	6,539	-770
Stage 2/3	3,602	3,203	-399
TOTALS	15,157	13,925	-1,232

119. Planning for commissioning has been informed by specialist advice provided by Sweett Group healthcare planners and this has been factored into the Building Commissioning section of the Management Case. The above costs reflect this work, and the change in Other Transitional Costs is attributable largely to a reduction in the assumed costs of removals.
120. The total funding requirement for Transitional Costs is therefore £29.0m (£15.1m for Core Team plus £13.9m for Other Transitional Costs). Including the sunk costs this totals £31.8m.
121. NHSE's confirmation of funding for Core Team was received as part of the FBC approval process. Funding for Other Transitional Costs from 2015/16 will be via the CCGs. As part of the assurance work completed before approvals, NHSE ensured all CCGs had factored 3Ts support into their five-year plans. Given the profile is over a 10 year period, NHSE and CCGs will need to regularly sign off the precise figures as 3Ts progresses through implementation.

Workforce Planning

122. The table below compares pay cost assumptions at OBC stage with those modelled in the LTFM supporting the FBC. FBC workforce planning takes PBR activity/income assumption and applies a specialty-specific marginal rate. Costs are based on the year after Stage 2 is fully operational (Stage 3 works have no effect on workforce requirements).

Table 28 – Comparison of 3Ts Workforce Costs

All figures £000s	OBC	FBC
Radiotherapy	324	430
Neurosurgery	725	744
Haematology	395	499
Neurology	114	305
HIV	34	39
Critical Care	891	935
Total	2,483	2,953

123. The costs of £2.9m equate to an additional 71 WTE clinical staff. Since it will take several months from opening of the buildings to full operation, a proportion of pay cost will in effect be unfunded during this period, eg. commissioning. Transitional Support will therefore be required and these costs are included within the Transitional Costs set out above.

Operating Costs

124. Analysis of changes in operating costs has also assumed specialty-specific marginal rates and cost profiles for the particular POD, eg. Elective. Changes in Facilities Management costs (including incremental ‘hotel’ costs of additional beds, eg. catering and linen) are considered separately.

Table 29 – Comparison of 3Ts Operating Costs

All figures £000s	OBC Marginal Rates	FBC Operating costs
Pay	2,483	2,953
Drugs	607	718
Clinical	302	348
Other	474	577
Total	3,866	4,596

Change in Facilities Management Costs

125. At OBC stage, Facilities Management (FM) Costs were calculated based on ‘removed’ space (ie. buildings demolished) and ‘added’ space (ie. new 3Ts buildings), using a simple rate of £194/m². For the FBC a more detailed analysis has been undertaken, differentiating costs by type of space (Clinical vs Non Clinical) and intensity of usage (eg. the cost of cleaning theatre space would be at one end of scale, and cleaning car parking space at the other). This approach provides the Trust with a usage map for the buildings, to which differential costs rates can then be applied, eg. for maintenance, cleaning.
126. Some costs do not lend themselves to a space-driven approach (eg. patient catering or linen costs, where number of beds would be the key driver). Where available, benchmarking data has been used. The Trust’s Estates & Facilities management team has also been involved in the assessment and planning process, including planning for staffing changes, eg. reception and security.

127. A further refinement of cost modelling at FBC stage has been to recognise that FM costs ramp-up differently, eg. maintenance costs will ramp up more slowly because of the effect of warranty periods, defect management, absence of backlog maintenance on the new estate (so less painting and decorating etc).
128. Some building-related cost increases are unavoidable, eg. the significant increase in Council Business Rates, which are inevitably higher in modern buildings than outdated estate.
129. The Trust commissioned specialist independent consultancy from EC Harris to help refine the understanding of cost drivers and cost estimates, including use of NHS benchmarking data extracted from the Estates Return Information Collection (ERIC) database. EC Harris reports are appended and confirmed the Trust's work to differentiate cost drivers, particularly cleaning costs.
130. A contingency has been included within the 3Ts FM costs because ERIC benchmark data suggests the current Hard FM rates used by the Trust may be understated.
131. The overall effect of the above, including the phasing-in of costs, is to reduce the overall FM costs at FBC stage to below the level at OBC stage (a net position of £10.6m post Stage 3 opening compared with OBC of £11.5m).

Risk Included in Capital Costs

132. Capital costs at OBC stage included a contingency of £17.65m, which represented a joint assessment by the Trust, PSCP and independent Cost Advisors. This has been subject to ongoing refinement and a reassessment of the Risk Register. The Cost Forms appended to the Economic Case show a revised contingency of £15.31m.
133. The Risk Workshop held in September 2014 was able to close more risks than were added, reflecting the increasing levels of certainty in the design and programme. The Trust's independent Cost Advisors consider the level of contingency as typical for a scheme of this size and nature.
134. The Economic Case sets out each element of the Capital Cost, including the recosted Risk Register (appended to the Economic Case). The approach to Risk Management is described in the Management Case.

Decant Programme Status

135. A separate FBC was approved by the Trust Board of Directors in July 2012 and by NHS South of England in November 2012 for a series of investments to transfer some services out of functionally unsuitable estate (eg. the transfer of paediatric audiology from mixed adult/paediatric accommodation into the dedicated paediatric environment of the Royal Alexandra Children's Hospital). This investment was approved and realises benefits independent of the 3Ts investment (eg. quality and safety, patient experience) but in addition contributes to the overall decant programme (ie. the works required to transfer services out of the construction area prior to demolition and redevelopment).
136. These schemes were funded by £17.5m of loans, approved by the TDA and ITFF in January 2014. As part of a loan approved in August 2014, a further programme of works (£7.0m), which will also contribute to 3Ts decant programme, was agreed. Including a loan received in 2012/13 for decant work on the Trust's St Mary's Hall site (£6.8m), a total of £31.3m of loans has now been approved. Total spend on decant is estimated at £33.7m, therefore £2.4m of Decant plans were approved as part of this FBC. However for completeness and comparative purposes the Cost Forms show the full £33.7m as part of Non Works.
137. The table below sets out the decant workstreams and assumed completion dates. The Main Scheme programme assumes an early 2016 start on site, but demolitions are late 2016 and the decant workstreams enables this.

Table 30 - Status of Decant Workstreams

Decant Workstream	Completion Date
RSCH - Courtyard (currently on site)	Q1 16/17
RSCH - Front Car Park (on site)	Q2 16/17
RSCH - North Road Building	Q3 16/17
RSCH - Building 545	Q2 16/17
RSCH - Sussex Cancer Centre	Q2 16/17
RSCH - Other	Q2 16/17

138. As this table shows, decant schemes will be completed within the 2016/17 Financial Year. This ensures business continuity and minimises the requirement for Transitional Support: services will transfer out of the Stage 1 site into their decant location and stay in this temporary accommodation until Stage 1 opens. The decant programme therefore assumes no loss of PBR Income.
139. Decant is to be delivered through several commercial contracts. The St Mary's Hall works were delivered through a P21+ contract with Kier Construction, and a Phase 4 P21 construction contract with the 3Ts Principal Supply Chain Partner (Laing O'Rourke) is in place for the schemes currently on site.

International Financial Reporting Standards (IFRS) Anomaly

140. As set out in the OBC, an anomaly was identified in how Public Dividend Capital (PDC) payments are calculated – this arose from the change in rules from UK Generally Accepted Accounting Practices (GAAP) to International Financial Reporting Standards (IFRS):
- Under the IFRS calculations PDC payments are made in advance of Assets being brought into use, and under UK GAAP such payments would not exist. Under UK GAAP PDC payments would arise once the Asset was brought into use, so that the benefit being derived from the Asset is matched with the associated cost.
 - Under IFRS (IAS16 Property, Plant and Equipment) such costs would be viewed as Interest payments and would normally be capitalised, however NHS accounting rules preclude such treatment. From an NHS group perspective, the payables and receivables net out to zero. This only therefore becomes an issue for the local Trust.
141. At FBC stage, the anomaly remains to be resolved, so costs still exist in the Trust's Income & Expenditure account and since no relief is given and no Transitional Support is received to fund it, it remains a cost pressure until the buildings open.
142. The PDC payable in advance of buildings' opening (including decant buildings) is estimated at £19.84m. As at the end of 2014/15, a total of £1.47m had been paid in PDC and efficiency savings have been made to fund this.

Impairments

143. An impairment arises from the difference between the market value of an asset at a point in time and the underlying value or its original cost. The market value is provided by the District Valuer (DV). At OBC stage, 25% impairments were assumed on 3Ts assets. This was equivalent to £127.6m.
144. Following a DV assessment in July 2014, a new value has been used for FBC (40%). This recognises that the majority of VAT is unrecoverable, whereas a private sector development, including a PFI scheme, would recover most of the VAT. A total of £61.2m VAT was included at the OBC stage. Other elements

that may not ‘carry value’ include demolitions, preliminaries, service isolations and diversions, temporary services, enabling works and fees.

145. At FBC Stage the increase in Capital Costs and the impact of the 40% impairment increases the total impairments driven by 3Ts development to £204.1m. This is constructed as follows:

- existing buildings – £12.7m
- decant buildings (on opening) – £11.2m
- Stage 1 – £123.8m
- Stage 2 – £38.8m
- Stage 3 – £3.5m
- decant (on closing) – £14.1m.

146. Unrecoverable VAT remains a significant element: as set out in the Cost Forms (appended to Economic Case), this amounts to £62.3m.

KSS Deanery

147. The Trust hosted the KSS Deanery until it transferred to HEKSS in September 2013. This added £117.9m to the Trust’s Income and a similar amount to its Operating Expenses in 2012/13. The partial year impact in 2013/14 was £63.4m and was included in both Income and Operating Costs.

Market Forces Factor

148. The OBC assumed a Trust Market Forces Factor (MFF) of 7.44% for the duration of the ten year planning period. MFF seeks to recognise that some costs (termed ‘unavoidable costs’) vary significantly between regions, eg. salaries tend to be higher in London. To ensure an equitable arrangement across England, each NHS Trust and NHS Foundation Trust has its own MFF rate.

149. MFFs also include other unavoidable costs, such as the cost of Land and Buildings, which help to meet the different levels of Capital Charges across the UK. Historically the MFF would change if there were a significant change to Land and Buildings. The 3Ts redevelopment represents such a change and it could therefore be argued that the Trust’s MFF should be updated.

150. However the Trust’s LFTM and 3Ts FBC continue to assume an unchanged MFF of 7.44%. This MFF is based on historic data from 2008/09-2009/10, when the Net Book Value (NBV) of the Trust’s Assets was £160.0m. Once 3Ts opens, the NBV increases to £540.5m, which clearly demonstrates that a change in MFF should be realised. Each 1% increase in the Trust’s MFF could add £2.6m to Trust PBR Income and would naturally help meet the Trust’s increased unavoidable costs, eg. Council Rates.

Scenarios & Sensitivity Testing

Scenarios

151. As indicated, the OBC considered at various scenarios including funding via a PFI scheme. The approval of the OBC was on the basis of public funding and therefore the PFI is not revisited here. However the Economic Case includes a review of the current PFI market and confirms that a publicly funded route and specifically a continuance of the current Procure21 arrangements, remains the best route to provide value for money.

152. The scenarios the Trust has modelled are as follows:

- P21 scheme 100% funded by borrowings
- Downside: Commissioner Downside (specific scenario agreed with Commissioners)
- Downside: no demographic growth and no 3Ts Repatriation Income
- Downside: slippage in CIPs delivery
- Downside: prolonged construction programme.

153. The Base Case is representative of the ‘maximum debt’ scenario modelled in the OBC since the Trust now has minimal capacity to borrow and what capacity remains is needed for both pipeline schemes and to help the Trust maintain some flexibility, which would include having access to contingency funds in case of emergency.
154. There is a delicate balance to be struck with borrowings and historically the Tier 1 threshold has acted as an effective control; the Base Case scenario of PDC funding recognises this.
155. It should be noted that any increase in the Trust’s borrowings from its current position would result in loan repayments that would need to be funded either:
 - from an increase in Surplus from operations (eg. more income, but more likely more CIPs); or
 - from the limited resources available to meet Operational Capital and existing Financing needs (eg. equipment replacement would have to be deferred or cancelled to fund the additional loan repayments, and this would therefore not be the Trust’s preferred option).
156. One of the key benefits of PDC is that the Capital funding advanced to the Trust does not need to be repaid, whereas loan repayment is a contractual requirement. This provides a clear rationale for the Trust’s preferring PDC funding for 3Ts rather than additional loans.

Scenario: 100% Funded by Borrowings

157. The table below shows the Income and Expenditure account if the 3Ts Capital Costs were all funded by borrowings.

Table 31 – I&E impact of 3Ts (assuming 100% Borrowings)

	2015/16	2016/17	2017/18	2023/24	2024/25
Total Income	507.9	520.9	523.8	566.8	571.2
Total Operating Expenditure	-491.0	-490.5	-482.9	-512.1	-517.3
- of which CIPs	25.0	26.9	28.9	17.5	16.6
- of which CIPs (% per LTFM)	4.9%	5.4%	6.0%	4.1%	4.0%
EBITDA	16.9	30.4	41.0	54.6	54.0
Depreciation/P&L on disposal	-23.3	-26.3	-24.2	-27.0	-27.1
Interest Payable / (Receivable)	-4.2	-5.5	-8.2	-17.7	-16.2
PDC Dividend	-8.7	-8.7	-8.5	-4.4	-5.1
Surplus / (Deficit) before impairments	-19.4	-10.0	0.0	5.6	5.6
Non Operational adjustments	-15.5	-5.8	-3.0	-12.1	-3.0
Net Surplus / (Deficit) per LTFM	-34.9	-15.8	-3.0	-6.4	2.6

Note: All figures are in £millions

158. Under this scenario the main change from the Base Case is that the PDC dividend reduces and Interest Payable increases.
159. Loans use a mix of Interest rates since individual loans would be drawn down in the year capital expenditure occurs. To recognise the resulting interest rate risk, the modelling assumes an interest rate increase over the period: it uses 3.17% on a 25 year loan taken out in 2015/16 and rises so that 25 year loans taken out beyond 2019/20 are based on 4.92%. Equipment loans have assumed a 10 year term and therefore have a lower interest rate of 4.14% for loans beyond 2019/20.
160. Under this scenario CIPs have been increased by £1.8m to £213.3m (real prices) and although a 1% Surplus is delivered in line with Base Case the cash position is a significant overdraft at 2024/25 and liquidity issues arise from 2017/18.

161. The following table shows the Balance Sheet if the 3Ts Capital Costs were all funded by borrowings.

Table 32 – Balance Sheet (assuming 100% Borrowings)

All figures £'ms		2015/16	2016/17	2017/18	2023/24	2024/25
Assets	3Ts	57.2	117.0	206.8	251.1	243.8
	Other	313.0	312.2	304.8	291.3	296.7
	Total Assets	370.2	429.2	511.6	542.4	540.5
Current Assets	Cash	0.9	3.9	1.7	-69.3	-87.3
	Other Current Assets	70.7	66.2	66.2	31.9	31.0
	Total Current Assets	71.6	70.1	68.0	-37.4	-56.3
Total Assets		441.8	499.4	579.5	505.0	484.2
Liabilities	3Ts loans	-50.3	-116.8	-198.6	-333.7	-312.1
	Other loans	-31.2	-29.0	-26.8	-13.6	-11.4
	Other Long term liabilities	-34.4	-32.9	-32.4	-21.8	-20.1
	Other Liabilities	-72.5	-73.1	-77.1	-70.3	-72.4
	Total Liabilities	-188.4	-251.7	-334.9	-439.5	-416.0
Total Assets Employed		253.4	247.6	244.7	65.5	68.2
Tax Payers Equity	PDC 3Ts	20.0	20.0	20.0	20.0	20.0
	PDC other	236.1	246.1	246.1	246.1	246.1
	Total PDC	256.1	266.1	266.1	266.1	266.1
	Retained Earnings	-52.8	-68.5	-71.5	-250.6	-248.0
	Other Reserves	50.0	50.0	50.0	50.0	50.0
Total Tax Payers Equity		253.4	247.6	244.7	65.5	68.2

Note: All figures shown are in £'millions

162. The key change is to convert the PDC receipts into loans and thereby reduce the Total Tax Payers Equity and Total Assets Employed.
163. The impact of loan repayments is that the Bank balance at 2024/25 is an overdraft of £87.3m. A significant increase in the Surpluses delivered each year would be needed to eliminate this overdraft and without further changes to Income this would have to be delivered through additional CIPs.
164. The above means all CoSRR scores fall to 1 from 2019/20. However liquidity falls to a rating of 1 from 2017/18. Such ratings would mean the Trust would not be financially viable under this scenario.

Downside Scenario: Trust Strategic Mitigation Plans

165. In preparing the Trust's IBP for the next five years, the Board of Directors considered at high level the types of mitigations available under a downside scenario. These assumptions were revisited in Summer 2015 as part of the assurance and approval process. They can be grouped as follows:
- consolidating the Trust's estate to a smaller footprint, including vacating rented estate;
 - omitting high cost elements of future service developments;
 - withdrawing from 'unprofitable' services;
 - making global changes to the Trust cost base. (In practice, the largest element of Trust expenditure, and the area with the most discretionary ability, is pay);
 - reducing operational capital expenditure; and/or
 - extending creditor payment terms and improved debt collection.
166. Further information on each of these Strategic Mitigation Plans is appended, including the Income and Expenditure impact of each.
167. The type of mitigation potentially available is driven by which downside risk occurs.

Table 33 – Downside and Mitigation Plans

Downside	Commissioner downside	No Repat & No Growth	Slippage in CIPs	Prolonged Construction
Mitigation :				
Consolidate estate	Yes	Yes	Yes	No
Vacating leased estate	Yes	Yes	Yes	No
Omitting service development costs	Yes	Yes	No	Yes
Withdrawing from services	Possibly	No	No	No
Reducing cost base	Yes	Yes	Yes	No
Reducing capex	Yes	Yes	No	No
Changing payment terms	Yes	Yes	Yes	Yes

168. ‘Withdrawing from services’ was not specifically considered under the Downside scenarios. However, the changes to Trust Estate under the Commissioner Downside depend heavily upon successful bed reductions through Demand Management schemes, the impact of Better Care Fund and Length of Stay reductions, and this could bring some services into play. ‘Changing payment terms’ includes improved debt collection, and in any Downside scenario improved cash management would be a key element of returning the Trust to a healthy position.

Downside Scenario: Commissioner Downside

169. The table below shows the Surplus/(Deficit) position of the Trust pre and post mitigations, together with the financial impact of the chosen mitigation plans. This particular scenario is seen as the ‘Worse Case’ and was agreed with the Commissioners through an assurance review completed by NHSE in advance of TDA approval in July 2015. It reflects a downside of partial funding by Commissioners.

Table 34 – Commissioner Downside I&E pre and post mitigations

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Surplus/(Deficit) - Base Case	-19.2	-10.0	0.0	2.6	5.4	5.5	5.5	5.6	5.7	5.7
Impact of Downside	0.0	-13.8	-12.5	-9.8	-10.7	-15.0	-14.7	-15.2	-16.5	-15.0
Surplus/(Deficit) - Pre-mitigations	-19.2	-23.8	-12.4	-7.2	-5.4	-9.6	-9.2	-9.6	-10.8	-9.3
Mitigations	0.0	13.7	12.8	16.6	17.5	21.9	21.9	22.5	24.3	23.4
Surplus/(Deficit) - Post-mitigations	-19.2	-10.0	0.3	9.5	12.1	12.3	12.7	12.8	13.5	14.1

Note: All figures shown are in £'millions

170. This scenario assumes activity is reduced in line with the loss of Income, but as no specific activity was agreed with Commissioners the mitigations are not speciality-specific. However, as part of the mitigations it has been assumed that up to 141 beds (or 2 floors of 3Ts Stage 1) could be built as ‘shell and core’, ie. not fitted out, and some space could be rented out.
171. As indicated in the table within the Strategic Mitigation Plans section, the Trust would need to utilise all its resources and adopt all schemes to meet this particular Downside scenario. A key element of the mitigation plans is Cost Reduction and costs have been stripped out using the same Marginal Rates employed for activity growth.
172. Under this scenario it is assumed that the impact would be immediate, with significant loss of activity and Income in 2016/17. It is assumed that the Trust would take time to return to a Surplus position and by 2018/19 the full impact of the Estates mitigations would be recognised. By 2024/25 the Surplus Margin would be close to 2.9%, which is nearly three times the Trust’s current operating target. Further information on this Downside is appended.

Downside Scenario: Restricted Growth

173. This scenario reflects a downside of no demographic growth and removal of 3Ts Repatriated Activity. The table below shows the Surplus/(Deficit) position of the Trust pre and post mitigations together with the financial impact of the chosen mitigation plans.

Table 35 – Restricted growth Downside I&E pre and post mitigations

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Surplus/(Deficit) - Base Case	-19.2	-10.0	0.0	2.6	5.4	5.5	5.5	5.6	5.7	5.7
Impact of Downside	0.0	-2.7	-5.6	-8.6	-15.3	-25.5	-30.7	-36.6	-43.9	-48.5
Surplus/(Deficit) - Pre-mitigations	-19.2	-12.7	-5.6	-6.0	-10.0	-20.0	-25.1	-31.0	-38.3	-42.8
Mitigations	0.0	3.1	5.6	8.2	13.3	23.2	29.1	35.6	41.0	44.4
Surplus/(Deficit) - Post-mitigations	-19.2	-9.7	0.0	2.2	3.3	3.2	4.0	4.5	2.7	1.6

Note: All figures shown are in £'millions

174. As with the Worse Case Downside, this scenario assumes activity is reduced in line with the loss of Income, and the mitigations are not speciality-specific. Again as part of the mitigations, it has been assumed that up to 141 beds (or 2 floors of 3Ts Stage 1) could be built as ‘shell and core’, ie. not fitted out.
175. This scenario does not require all the Trust’s schemes to be employed and a significant mitigation is to simply strip out activity growth costs at Marginal Rates. Further information on this Downside is appended.

Downside Scenario: Slippage in CIPs

176. This scenario reflects a downside where CIPs are not delivered to plan and there is slippage in Trust performance (modelling assumes 95% of CIPs are delivered each year). The table below shows the Surplus/(Deficit) position of the Trust pre and post mitigations together with the financial impact of the chosen mitigation plans.

Table 36 – Slippage in CIPs Downside I&E pre and post mitigations

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Surplus/(Deficit) - Base Case	-19.2	-10.0	0.0	2.6	5.4	5.5	5.5	5.6	5.7	5.7
Impact of Downside	0.0	-1.4	-3.0	-4.2	-5.3	-6.6	-7.9	-9.2	-10.6	-12.0
Surplus/(Deficit) - Pre-mitigations	-19.2	-11.4	-2.9	-1.5	0.0	-1.1	-2.4	-3.6	-5.0	-6.3
Mitigations	0.0	1.1	3.1	3.1	3.2	3.2	4.5	6.5	8.6	10.6
Surplus/(Deficit) - Post-mitigations	-19.2	-10.3	0.2	1.6	3.2	2.1	2.1	2.9	3.6	4.3

Note: All figures shown are in £'millions

177. In the earlier years a Deficit is still delivered, but by 2017/18 there is a return to a breakeven position. It would take some time to return to a 1% Surplus and would probably require a further reduction in the pay-bill.
178. No change in Activity is assumed for this scenario, so the 3Ts build remains as per Base Case. However a number of the mitigation plans have to be utilised, including significant recurrent reductions in the Trust’s pay bill in 2017/18 (£2.0m) and then again in 2022/23 (£2.0m). Further reductions in the pay bill help the Surplus position to stabilise and grow towards the 1% Surplus target. Further information on this Downside is appended.

Downside Scenario: Prolonged Construction

179. This scenario reflects a downside where the 3Ts construction programme is delayed by 10% - this equates to Stage 1 opening four to five months late (so fully operational by Summer 2020 rather than Spring 2020). P21 schemes have a good record of delivery on time and to budget: on average just 8% of schemes have experienced extended programmes.
180. The table below shows the Surplus/(Deficit) position of the Trust pre and post mitigations together with the financial impact of the chosen mitigation plans.

Table 37 – Prolonged construction Downside I&E pre and post mitigations

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Surplus/(Deficit) - Base Case	-19.2	-10.0	0.0	2.6	5.4	5.5	5.5	5.6	5.7	5.7
Impact of Downside	0.0	0.4	1.1	1.2	-1.0	-1.7	0.4	0.5	0.2	-0.1
Surplus/(Deficit) - Pre-mitigations	-19.2	-9.6	1.1	3.9	4.3	3.7	5.9	6.1	5.9	5.7
Mitigations	0.0	0.0	0.0	0.0	1.3	1.3	0.0	0.0	0.0	0.0
Surplus/(Deficit) - Post-mitigations	-19.2	-9.6	1.1	3.9	5.6	5.0	5.9	6.1	5.9	5.7

Note: All figures shown are in £'millions

181. As can be seen the Surpluses pre-mitigation actually improve as cashflows are spread over a longer period, which in turn reduces the Asset under Construction balances that are included in the PDC calculations.
182. The delay in opening in 2019/20 means the Asset is not brought into use until 2020/21. As the opening of 3Ts is delayed the activity income does not ramp up as fast as Base Case.
183. Mitigations are simply the Cost Reduction on 3Ts activity measured using Marginal Rates. No other mitigations are necessary.

Downside Scenarios: Summary

184. Overall the Trust is confident that the 3Ts development is sufficiently flexible to meet the healthcare needs of the region and that the above shows that it could comfortably meet the Downside scenarios and in most years stay within the financial parameters of the Base Case and therefore remain financially viable. The scheme remains affordable under a PDC funded route.

Sensitivities

185. The table below shows the switching analysis that has been considered using the Base Model LTFM. The switching points have been taken as the first year in which a deficit is recorded beyond 2017/18. The table also includes key metrics from the LTFM to show the impact on Balance Sheet and Risk in that deficit year.

Table 38 – Sensitivities and Switching Points

Sensitivity	Assumption in Base Case	Switching Point	Year that first Deficit is recorded	Deficit in that Year £m	Bank Balance in that Year £m	CoSRR Overall Score
PBR Income (reduction)	Varies each year	£2.7m reduction	2018/19	-0.1	36.7	2
Tariff (reduction/deflation)	Average -0.7%	-0.7% to avg -1.4%	2019/20	-0.1	31.8	2
Pay Inflation (increase)	Average 2.4%	+1% to avg 3.4%	2018/19	-0.2	35.5	2
CIPs (reduction)	Average 4.6%	-1.3% to avg 3.3%	2018/19	-0.2	36.6	2
Drugs inflation (increase)	Average 4.0%	+4.8% to avg 8.8%	2018/19	-0.1	36.9	2
Capital/Depreciation (increase)	Avg Depreciation £24.8m per year	+£2m to avg £26.8m	2018/19	-0.1	39.3	3

Note: All figures shown are in £'millions

186. The switching point in most years is 2018/19 and this is due to the relatively low Surplus in that year. Looking at the changes required, the most sensitive area would appear to be a reduction in PBR Income, with a reduction of £2.7m creating a Deficit of £0.1m. However there is still a healthy cash position across all sensitivities.
187. For the 3Ts development the most significant element is the change in Capital Costs and its impact on the Trust's unavoidable costs, ie. Capital Charges including depreciation. The switching point above assumes 8% increase in Depreciation. However this change would also be mitigated to some extent by:
- the District Valuer's assessment of the market value of the assets. The resulting increase in impairments is treated as a technical adjustment and therefore does not impinge upon the Trust's breakeven duty;
 - the Guaranteed Maximum Price (GMP), which under Procure21 rules ensures inflationary increases are not passed onto the Trust for the first two years.
188. The Trust is confident that it could meet these switching points with or without invoking the above strategic mitigating actions and therefore the scheme remains affordable under a PDC funded route.

Summary

Summary Points
<ol style="list-style-type: none">1. The increase in capital costs against the financial envelope set at OBC stage in 2009/10 reflects the increase in general construction prices and the upward trend for Construction Inflation indices rather than a change in the scope of the 3Ts development.2. The Capital Cost, which has been market tested, suggests a Target Cost of £484.8m. The benefit of increased impairments protects the Revenue position but still increases the Capital Charges and CIPs requirement in advance of the building's opening.3. The preferred funding route remains PDC. The Trust's preference is that borrowings at Tier 1 are maintained at a level that allows both reasonable debt service during a period of rising interest rates, sufficient headroom for capital reinvestment in the rest of the Trust's ageing estate and an asset replacement programme that allows a safe continuity of service across all the Trust's sites. The scheme should therefore be funded by 100% Public Dividend Capital, which is in line with the approved OBC (version 17 dated January 2012).4. The case demonstrates that the Trust remains financially viable with sufficient surpluses delivered to maintain a CoSRR of 2 in all years.5. As stated in the Commercial Case and Management Case, the expectation is that the Principal Supply Chain Partner (Laing O'Rourke) will provide the Trust with a final Guaranteed Maximum Price by July 2015. Assuming acceptance, this would enable a contract to be signed by Summer 2015.