TPE 2023 – Mock 1

Theme Park – Guide to Answer

The Test of Professional Expertise multi-discipline case study is designed to encourage students to provide alternative creative answers and there is no single "right answer" at TPE level. This Guide to Answer illustrates the structure and the depth of analysis and explanation the examiners are seeking.

In assessing candidates' scripts, credit is always given for appropriate answers even if not contained in this published guide.

ICAS is providing this Guide to Answer to provide direction for your own learning. Do not use this example for any other purposes.

MORNING PAPER

Briefing Paper for Lee

"I need you to evaluate my proposal for the new pricing model. I want you to determine if the new pricing model will be more or less profitable than pay-as-you-ride and also consider the practical consequences of making this change"

1.1 One price versus pay-as-you-ride

- Refer to Appendix 1 for the calculations of profit under a one price system.

- Under the current pay-as-you-ride system, gross margin on ride sales is approximately £8.5 million (85% GPP) for the 10 months to 31 October Yr51. Given that the park is closed in November and December, you would not expect this to change significantly for the full year to 31 December Yr51.

- Changing to a one price system will increase absolute gross margin on ride sales to approximately £9.2m million, an increase of £0.7 million in gross profit and GPP will rise to 87.4%.

- The rise in gross margin is driven by two factors. Firstly, the level of ride sales is around £490k higher under the one price system. The expected reduction in staff costs (though partially offset by an additional depreciation charge) also contributes to the gross margin improvement due to introducing the new swipe turnstiles for the one price system.

- Lee's customer figures suggest that under the pay-as-you ride system, each customer on average has 4.3 rides in the park and this translates to around 638,000[1] visitors to the park in a season, suggesting the pay-as-you-ride system is perhaps more appealing to casual visitors wanting a few rides only.

- Under the one price system the average number of visitors is expected to fall significantly to 480,000 (albeit up to 40% of these may opt to pay an additional £5 to allow them to return for an additional day). However, the improved pricing and associated staff cost savings mean that improved sales and gross profits are generated under this model.

- Caution should be applied to Lee's assumed customer figures under the one price system. The figures don't appear to have been researched in detail or linked to theme park research. If there was a 10% reduction in Lee's forecast customer numbers, this would reduce gross profits significantly below existing levels under the pay-as-you-ride system. Similarly, the assumption that 40% will take up the option to stay for an additional day may be optimistic.

- Even though customer numbers over the season are forecast to be lower under the one price system, it is likely they will spend more time in the park and, in turn, there is an opportunity to generate additional profits through other sales (side shows, cafeteria, stalls).

[1] Page 8 morning paper: 2,745,000/4.3

1.2 Practical consequences of pricing change

- The removal of the pay kiosks at each ride and replacement with an automated turnstile swipe mechanism will likely speed up access to the rides. This is likely to increase customer satisfaction for the most part, however, it should be considered that not every customer at Goody's may have a smartphone.

- As a consequence of removing the pay kiosks, it is likely that many existing staff will be surplus to requirements and will be made redundant. There will still be a need for some staff retention for health and safety purposes and encouraging social distancing, even if not collecting cash on rides anymore.

  There will be various costs involved in making these staff redundant, the relevant employment laws will need to be followed and consideration given to the reputation of the business.

- Switching to the automated turnstile system is not without risk. For example, if the technology fails, customers won't be able to access rides and consideration should be given to contingency planning in case this happens.

- Removal of the existing pay kiosks and replacement with automated turnstiles will involve a lot of work and would be best undertaken when the park is closed during the winter.

- The removal of the pay kiosks and centralisation of cash payments to one large kiosk at the entrance to the park will result in much better control over cash and will reduce the need for cash to be moved around the park.

- Lee's analysis would suggest that a single price system will encourage customers to stay in the park for longer to get value for money and, in turn, there is likely to be a higher demand for more substantial catering and restaurant facilities, which the park currently lacks. There may be scope to develop the existing café facilities given the available adjacent space.

- The average number of customer rides is likely to increase as they aim to get value for money under the new price system, which will result in more repairs and maintenance. This will have an impact on down time of rides and additional costs being incurred.

"I would like you to consider the group's hotel business and outline what the potential impact might be on that business as a result of implementing the proposed pricing model at Goody's……..use your commercial awareness and let me know of any other general improvements we could make to the hotel business"

1.3 Impact on hotel business

- The single price system provides an option to customers to upgrade their access to the park for an additional day for only £5. There may be a knock-on increase in customers seeking overnight accommodation as a result.

- The change to the pricing system at the park and the proximity of the hotel may give Goody's more of a 'resort' feel about it and consideration should be given as to how the two businesses can work together to maximise returns e.g. mutual advertising, shuttle bus between park and hotel.

- The hotel could consider offering packages which tie into a two-day stay at the park e.g. a one night stay at the hotel plus breakfast and two day access to the park for a single price.

- The new pricing system could encourage more corporate team building events or larger parties visiting the park and the hotel should work with Goody's to ensure they are well placed to offer hospitality services.

1.4 General improvements to hotel business

- GOPPAR is around £36[2] representing the gross operating profit per available room. Given the hotel charges at least £100 per night per room, this suggests occupancy levels are poor.

- Corporate packages and leisure facilities contributions are significantly behind plan. This may be due to minimal expenditure on marketing, which is surprising given the recent refurbishment. Consideration should be given to increasing marketing spend to highlight to potential customers the recent improvements and facilities available.

- Hotel bookings are only taken over the phone. This is restricting the number of potential customers. An on-line booking system should be implemented to widen the number of potential customers.

- The hotel offers an extensive menu of up to 45 dishes. This would appear to be excessive and, in turn, is resulting in large stock holdings, some of which are being written off when they go out of date. Scaling back of the menu to a sensible number of quality dishes should be undertaken.

- There have been recent complaints by customers regarding the cleanliness of the hotel rooms. The current cleaning contractors should be replaced, or alternative steps taken to ensure standards are improved.

- The hotel leisure facilities can be used by residents, but only if they book in advance and pay a deposit. This may put people off and there should be more flexibility over using the facilities.

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[2] GOPPAR represents hotel contribution divided by number of available rooms in the 7month period: (£350k/(50*28wksx7days)

- The car parking provision is inadequate for the size of the hotel and consideration should be given to extending the existing parking to allow more cars to park.

- Despite a luxurious refurbishment, the working practices and general management of the hotel appear to be weak. It would be recommended that a full review is undertaken of existing practices to maximise the potential of the asset and get it on track in terms of financial performance.

"I need you to review the proposals for the rides, considering key financial and non-financial factors and recommend which ride we should proceed with"

2.1 DCF Assessment

- Refer to Appendix 2 for DCF calculations.

2.2 Non-financial factors

- The Zipper Ripper ride will be built by a US-based contractor and the Wild Horse ride by a local contractor using reclaimed timber. Use of the latter contractor will likely generate a level of goodwill from customers that the former may not.

- A specialist bat survey is required to be undertaken in order to build the Wild Horse ride. There is a risk that that this will delay construction of the ride and it is possible the planning permission may be refused entirely, depending on the outcome of the survey.

- Consideration will need to be given to health and safety at the park during construction of a new ride.

- Upfront financing will be required to fund the construction of either ride and will be a significant consideration for the group given the amounts involved in building either ride.

- The Kiddies Corner Tea Cup ride will need to be removed to build the Wild Horse ride. This ride is a favourite for visitors and its removal from the park may upset some visitors. It may be possible to relocate the Tea Cup ride to another part of the park rather than permanent closure of the ride.

- The Zipper Ripper ride would likely need decommissioning after 10 years due to metal fatigue. However, the Wild Horse ride appears to have a potentially longer useful life, but requires replacement track every three years and therefore would be subject to regular closure. Which of these is a better match to the rides already in place, and the plans over the next decade?

2.3 Recommendation

- The Wild Horse ride generates a higher NPV of £1,295k over a five-year period compared to a NPV of £400k generated by the Zipper Ripper ride over a 10-year period.

- The Wild Horse ride could continue to operate beyond Yr56 provided repairs are undertaken every three years, whilst the Zipper Ripper ride would need decommissioning after 10 years, presumably at a significant cost.

- As the Wild Horse ride could continue for a significant period of time if relevant repairs are made, then there is scope for the NPV of this project to increase substantially. However, regular repair work to the Wild Horse would need to be scheduled but this could be done when the park is closed in the winter.

- There could be delays in constructing the Wild Horse ride due to the bat survey and removal of the Tea Cup ride may prove unpopular. However, if these issues can be overcome then it would be recommended that the Wild Horse ride is selected.

AFTERNOON PAPER

"I, therefore, need you to provide an earnings-based valuation for the company, explaining any assumptions you make."

3.1 PE valuation

- Refer to Appendix 3 for the calculation of a reasonable valuation for the franchise.

- Some adjustments have been made to Katherine's figures to provide a better reflection of projected earnings:
  - Katherine has assumed passenger income will rise in line with inflation of 3% per annum. However, it is noted in the franchise agreement that passenger numbers are expected to decline by 10% in Yr56 when the new dual carriageway is opened.
  - No amount is included in operating costs for rolling stock maintenance. It would be expected that a cost should be included for 3rd party maintenance.
  - Performance claw back has not been included in Katherine's projections. However, it may be challenging to improve performance levels and, therefore, some claw back would be expected.

- The valuation based on earnings after tax is approximately £20 million and is the amount which should be the starting point for any bid.

- It should be remembered that the valuation is highly subjective and, based on the forecasts, the franchise is expected to earn approximately £22.9 million over a seven-year period after tax but this excludes additional financing costs (e.g., on loans taken out to finance the purchase).

- The valuation does not consider the fact that project will only be in place for 7 years. Generally, the earnings-based valuation considers indefinite periods, while in the case of NYTOC generation of profits will cease after 7 years. This could decrease the valuation of the company.

- Therefore, it would be recommended that a bid significantly lower than £20 million is offered given interest will need to be paid on any funding to purchase the franchise and to enable Lee and Katherine to generate a return on their investment.

"I would also like you to advise on the key commercial issues I need to be aware of when running this venture. I expect there are a number of points to consider."

3.2 Change of focus

- Operating a rail franchise is a significant diversification for Lee and Katherine. Currently they run a group which operates a theme park and hotel. However, the running of a rail franchise will require different skills and capabilities.

- The rail industry is a highly regulated sector and often comes under scrutiny by the public for its on-time train performance and levels of customer service. The group will need to be prepared to deal with required regulations and possible high levels of customer complaints.

3.3 People

- The franchise specification states that all existing train drivers, guards and crew will be transferred from the prior franchisee entity to NYTOC.

- As a result of the transfer, TUPE regulations will apply and the group should seek legal advice as to how these are adhered to. The basic principle is that the rights of the employees should not change as a result of the new ownership.

- The franchise agreement states that management of the existing franchisee will not transfer to the new franchisee. It is unlikely that Lee and Katherine can manage the rail franchise in addition to fulfilling their existing responsibilities at the Park and Hotel without additional management support being brought in.

3.4 Performance

- The franchise agreement sets a specific KPI in relation to the on time arrival of trains. Performance against this KPI will be critical as it will be monitored closely by the Department for Transport.

- The performance levels set out in the franchise agreement appear to be very challenging for the next few years compared to those achieved historically and the group will need to implement measures to improve on historic performance.

3.5 Leasing

- Payments for the rolling stock lease are denominated in Euros which gives rise to significant potential foreign exchange exposure for the group given the size of the lease payments.

- The company could eliminate the foreign exchange rate risk by entering a forward contract to buy Euro's at a specific rate or consider a foreign exchange option contract where the company has the option, but not obligation, to exchange GBP for Euros at a specific rate at some point in the future.

- The nine small retail units spread across the leased stations on the line will need to be managed to ensure they remain sub-let and successful.

3.6 Subsidy and penalties

- The franchise agreement sets out that the Department for Transport will make subsidy payments of £7.1 million per annum to the group for operating the franchise, however, they have power to claw-back significant amounts.

- The group's earnings may be significantly impacted by claw-backs which may be up to £1.775m per annum.

3.7 Maintenance of rolling stock

- The franchise agreement does not specify how the group is required to maintain the rolling stock. This is a potentially complex area that would need expert advice and close management.

- The rolling stock is over 25 years old and had been previously overhauled. As such, it would be expected that it will require regular ongoing maintenance at significant cost.

- The group will need to ensure it identifies a contractor to undertake the required maintenance otherwise there is a risk of train failure and service disruption which could have financial and reputational consequences.

3.8 Recommendation

- There are significant operational risks in running the rail franchise and the projected earnings over the franchise period have a finite life and are uncertain. As a result, it is recommended that the bid for NYTOC does not proceed.

"I therefore need your advice as to which offer is preferable from a tax point of view."

4.1 Trade and asset sale

- Refer to Appendix 4 for the tax calculation.

- The gain will be subject to corporation tax at 19% resulting in a tax charge on the company of £4.5m on disposing of the assets of the company.

- To be able to extract the cash from Goody Attractions Limited, a dividend will need to be paid to Fred first and in turn he can pass the cash to Lee and Katherine.

- The dividend will be taxable as Fred's personal income and, depending on whether he is a basic, higher or additional rate taxpayer, it will be taxed at 8.75%, 33.75% or 39.35%. We have assumed Fred is an additional rate taxpayer.

- The maximum amount of cash Fred would have to give to Lee and Katherine would be £18.5m.

4.2 Share sale

- Refer to Appendix 4 for the tax calculation.

- The share sale would be subject to capital gains tax giving rise to a taxable gain of around £19m.

- Assuming the share sale qualifies for business asset disposal relief, the first £1m is taxed at 10% and the remaining amount is taxed at 20%.

- The maximum amount of cash Fred would have to give to Lee and Katherine would be £15.4m.

4.3 Recommendation

- The total tax on a trade and asset sale will be approximately £16.48m[3], including corporation tax and income tax paid by Fred.

- This is significantly higher than the total tax on the share sale of approximately £3.97m.

- The share sale is far more tax efficient, in part due to the availability of business asset disposal relief on the taxable gain.

- It is recommended that a share sale is undertaken as although there is approximately £3.1 million less free cash available, the tax charges arising are significantly less and a 51% stake in the business is retained which appears to be Fred's wish.

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[3] £4,465,000 + £12,014,735 = £16,479,735

4.4 IHT consideration of gift

- The gift of cash proceeds by Fred to Lee and Katherine is a potentially exempt transfer ('PET') and, therefore, no immediate tax charge arises.
- If Fred were to die within seven years from making the cash transfer to Lee and Katherine, the transfer would become a chargeable lifetime transfer and would be subject to IHT at 40%, after applying available exemptions and reliefs.
- Given the age of Fred, there is a risk that a tax liability of several million pounds could potentially arise, should Fred die within seven years, which would need to be settled by Lee and Katherine. They should consider insuring Fred's life for a period of seven years to cover any potential tax liability which might arise.

"I also need you to consider how we could deal with any funding shortfall."

4.5 Funding alternatives

- Assuming the share sale is taken up, there would be a shortfall in funding required to bid for NYTOC. The maximum amount of cash Lee and Katherine could receive from Fred would be £15.4m, leaving a shortfall of approximately £4.6m, based on a valuation of £20m.
- The first option would be personal investment from Lee or Katherine or perhaps further investment from Fred, although it is not clear if any are able to invest the significant sums required.
- A more likely scenario is to source investment by way of a term loan from a bank.
- Bank lending would require a robust business plan and would likely be subject to financial covenants to ensure interest and capital repayments are safeguarded.
- Additionally, it is likely some level of security would be required, which may prove challenging given the low value of assets associated with NYTOC.
- Other possible sources of finance include venture capitalists and other private equity investors who could be open to such investments where asset security available is low, but returns are potentially high.

"Please can you also briefly set out the practical implications on the remaining group if we decide to go through with one of the offers from Scarborough."

4.6 Impact of sale

- Lee has incorrectly assessed that a share sale would result in control resting with his family, as a result of them retaining the majority of the shares, as control is governed by the shareholder agreement rather than the percentage of shares held.

- Scarborough would in fact have control of the company and, in the event of a deadlock on a board resolution, Scarborough would have the power to decide the course of action, meaning effective loss of control for the Goody family.

- Either sale would result in rental income from the land on which the park is situated and Fred will have a tax liability for this.

- The rental income amount is not defined in the sale and purchase agreement and will need to be agreed before any sale is concluded.

- The fate of Lee and Katherine as managers of the park is not clear under either sale scenario and should be clarified.

- Any benefits of the hotel and park being under common control could be lost upon a sale to Scarborough.

Example Executive Summary for Report

- The estimated total earnings of NYTOC over the 7-year period of the franchise are approximately £22.9m with an earnings-based valuation for NYTOC of approximately £20m. It is recommended an amount significantly less than £20m is used in any negotiation;

- The operation of a rail franchise is a significant diversification for the group. This industry is highly regulated, and this presents substantial risk as the group currently lacks experience in this industry;

- The share sale offer from Scarborough is the most tax efficient route releasing cash of £15.4m towards any potential bid for NYTOC but results in a funding shortfall of approximately £4.6 based on the earnings valuation;

- The funding shortfall could potentially be met through a bank term loan potentially secured in part against the Clifftop hotel and/or personal investment from the Goody family;

- Both the share sale offer, and trade & asset sale would result in a loss of control of the park, which is contrary to the wishes of the Goody family;

- Based on the factors noted above, it is not recommended to proceed with a bid for NYTOC.

Email to whistleblowing hotline

"…go back to reading an email from Ian……details of the whistleblowing helpline available to all employees…. consider this further during the afternoon".

Prepare an email to the whistleblowing hotline setting out ethical matters…

Email

To: whistleblowing@goodyattractions.com

From: Eric

I have noted a number of ethical issues which I wish to bring to your attention:

Fraudulent financial reporting in revenue recognition

The most significant issue that I have identified is what appears to be fraudulent financial reporting with regards to the revenue recognition at Goody's.

It has been alleged, by Ian, that Lee has been depositing cash sums on a weekly basis into Goody's pay stations. It is alleged that he has then coerced Ian into recording this cash as additional revenue for Goody's. This allegation raises a serious question about Lee's integrity and may indicate illegal activity within the group.

Although there is no direct evidence of money laundering, the source of this cash must be determined. Lee does operate other cash-operated businesses within Whitby, including a taxi firm and several fish and chip shops.

This fraudulent financial reporting increases earnings and, therefore, could lead to Scarborough paying a higher price for Goody's – be it trade and assets or shares.

If the source of the cash is determined as illegal, then there are far greater implications under the Money Laundering Regulations.

Although Ian does not have exact amounts, it can be estimated that the fraud could amount to as much as £270k[4].

A full investigation into the fraud is required with adjustments required to financial statements. This will lead to additional tax charges and penalties as well as criminal proceedings – more so if the source of the cash is found to be illegal.

Intimidation

To follow on from the first point, Ian alleges that he has been intimated and threatened by Lee not to raise issue with the fraudulent financial reporting. This is not professional behaviour.

[4] (1.5 years x 52 weeks x £1,000) + (0.25 years x 52 weeks x £15,000)

This is a serious allegation and is possibly the cause of Ian being signed off work with stress. This allegation could result in various potential employment law issues for the group.

A separate investigation on Lee's conduct should be carried out and employment law experts should be consulted.

Misappropriation of stock

Further fraud may have been committed by Lee – specifically at the Clifftop. This is a further example of where Lee may not be acting with integrity.

A stock write-off has arisen in the year due to several cases of Norwegian cod fillets going missing and the narrative in the management accounts infers that these have been transferred to Lee's fish and chip shop business without payment.

If the stock is being used by a related party business, then it would be appropriate to create a debtor due from a related party, rather than expensing the costs of the stock in the accounts of the Clifftop. There may also be tax consequences due to the transfer not being accounted for correctly.

Again, an investigation is required to determine the monetary impact on the financial statements – including tax consequences.

Data protection

It is alleged, again by Ian, that Katherine has shared sensitive and confidential personal data of the Clifftop's customers with a bank – her former employer. If found to be true, this is a breach in confidentiality and a breach of the General Data Protection Regulations – the information has not been used for the purpose it was collected.

The sharing of sensitive personal data without permission also demonstrates a lack of professional behaviour and integrity by Katherine. If Katherine and the group are found to have breached the regulations, they could face investigation by Information Commissioner's Office (ICO) and a substantial fine. In addition, the company would suffer reputational damage if the breach became public knowledge.

Again, a thorough investigation should take place and, if found to be true, a report must be made to the ICO.

Unprofessional behaviour

The actions of Lee and Katherine are not those normally expected of the directors of a company. They would be expected to set the 'tone at the top' and demonstrate both professional behaviour and ethical judgement which would, in turn, cascade through the group.

Their lack of integrity and unprofessional behaviour sets a worrying tone for the rest of the group's employees and this could lead to employees carrying out similar actions to the detriment of the group.

Furthermore, any one of the issues above may deter Scarborough from purchasing Goody's due to the behaviour of the current directors.

Lee and Katherine could perhaps benefit from a management training course and, in particular, one that focuses on appropriate behaviours as well as ethical considerations.

Appendix 1 – Calculation of profit under one price system

Ride sales

	£/day	No		Total (£)		Percentage
Band A	25	187,200	187,000	4,675,000		39%
Band B	18	153,600	154,000	2,772,000		32%
Band C	15	139,200	139,000	2,085,000		29%
		480,000				
		Ride sales		9,532,000		
		Additional sales		960,000		(40% x 480,000 x £5)
				10,492,000	**A**	

Operating costs			
Saving 35% staff costs	280,000		(35% of £800k)
Increased depreciation	(100,000)		(£1,000,000/10)
Net operating cost saving	180,000	**B**	
Operating costs before pricing changes	1,500,000	**C**	
Revised operating costs	1,320,000	**D=C-B**	
Revised gross margin	9,172,000	**A-D**	
Revised gross margin %	87.42%		

Appendix 2 – DCF Calculations

Zipper Ripper

Year	**Yr51 £'000**	**Yr52 £'000**	**Yr53 £'000**	**Yr54 £'000**	**Yr55 £'000**		**Notes**
Down payment	(4,000)	0	0	0	0		(80% x £5m)
Balance of payment	0	(1,000)	0	0	0		(20% x £5m)
Cash flow - opening season	0	591	0	0	0		(12 rides per ride x £4 x 10 rides per hour x 8 hours per day x 7 days per week x 22 weeks)
Cash flow - season 2 and 3	0	0	941	941	0		(12 rides per ride x £4 x 10 rides per hour x 8 hours per day x 7 days per week x 35 weeks)
Cash flow - season 4 onwards	0	0	0	0	753		(£941k x 80%)
Sub-total	(4,000)	(409)	941	941	753		
Discount factor	1.0	0.9302	0.8653	0.8050	0.7488		DF 7.5%
NPV (Yr51- Yr55)	(4,000)	380	814	757	564	(2,245)	
NPV (Yr56 – Yr61)						2,645	(£753k x 6 discounted to PV)
NPV						**400**	

Wild Horse

Year	Yr51 £'000	Yr52 £'000	Yr53 £'000	Yr54 £'000	Yr55 £'000	Yr56 £'000		Notes
Down payment	(2,000)	0	0	0	0	0		
Cash flow - season 1 and 2	0	988	988	0	0	0		(112 rides per hour x £4.5 x 8 hours per day x 7 days per week x 35 weeks)
Cash flow - season 3	0	0	0	741	0	0		(As above but only for 6 out of 8 months due to track repairs in March and April)
Cash flow - season 4 and 5	0	0	0	0	988	988		
Capex - track replacement	0	0	0	(500)	0	0		(Replacement capex for track)
Closure of Tea Cup ride	(100)	0	0	0	0	0		(Removal cost of Tea Cup ride)
Sub-total	(2,100)	988	988	241	988	988		
Discount factor	1.0	0.9302	0.8653	0.8050	0.7488	0.6966		
NPV (Yr51 – Yr56)	**(2,100)**	**919**	**855**	**194**	**740**	**688**	**1,295**	

Appendix 3 – Revised profit projection 7 Years

NYTOC

	Note	Yr52 £'000	Yr53 £'000	Yr54 £'000	Yr55 £'000	Yr56 £'000	Yr57 £'000	Yr58 £'000
Unadjusted earnings before tax		4,590	5,998	7,444	8,926	10,449	12,009	13,614
Adjustments								
Remove Yr56-Yr58 ticket income	1	-	-	-	-	(55,150)	(56,804)	(58,509)
Revised Yr56-Yr58 ticket income	1	-	-	-	-	48,190	49,636	51,125
Remove Yr56-Yr58 catering	2	-	-	-	-	(552)	(568)	(585)
Revised Yr56-Yr58 catering	2	-	-	-	-	482	496	511
Performance claw-back	3	(1,775)	(1,775)	(1,775)	-	-	-	-
Maintenance	4	(1,000)	(1,030)	(1,061)	(1,093)	(1,126)	(1,159)	(1,194)
Adjusted earnings before tax		1,815	3,193	4,608	7,833	2,293	3,610	4,962
Taxation (19%)	5	(345)	(607)	(876)	(1,488)	(436)	(686)	(943)
Adjusted earnings		1,470	2,586	3,732	6,345	1,857	2,924	4,019

Notes

Credit awarded for correctly reflecting the adjustment in the profit and loss projection above.

1 Ticket sales expected to reduce by 10% in Yr56 after opening of new dual carriageway.
2 Train catering assumed to be at 1% of passenger ticket income.
3 Assume that in first 3 years, performance levels are maintained but not improved, resulting in stated claw backs of £1.775m per annum.
4 Maintenance charge assumed to be £1m plus inflation each year
5 Tax charge of 19% on earnings before tax applied.

Valuation of NYTOC		**£'000**	
PE Ratio			
PE ratio CQC	10		
Adjust for:			
- lack of marketability *	(2)		
- lack of transferability*	(2)		
PE ratio	**6**		
FME		**3,276**	(Average earnings after tax over 7 years)
Calculation		**19,656**	
Valuation (rounded)		**20,000**	

Appendix 4 – Tax calculations

Sale of Goody's

Trade and asset sale Tax calculations

	£
Taxable gain	23,500,000
Corporation tax on gain at 19%	4,465,000
Cash proceeds	35,000,000
Less: Corporation tax	(4,465,000)
Cash from sale (cash proceeds less corporation tax)	30,535,000
Dividend	30,535,000
Tax on dividend (note 1)	(12,014,735)
Free cash	18,520,265

Note 1: Tax on dividend
£30,535,000 dividend
£2,000 x 0%
£30,533,000 x 39.35% £12,014,735

Share sale Tax calculation

	£
Gross proceeds	20,000,000
Selling costs (3%)	(600,000)
Net sale proceeds	19,400,000
Cost	(2,500)
Gain	19,397,500
Annual exemption	(12,300)
Taxable gain	19,385,200
Tax thereon:	
£1,000,000 @ 10% (Entrepreneurs relief)	100,000
£18,385,200 @ 20%	3,877,040
CGT	3,977,040
Net sale proceeds	19,400,000
CGT	(3,977,040)
Free cash	15,422,960