ANNEX I: FINANCIAL ASSUMPTIONS

1. Inflation

Inflation Rate

1.1 The FA adopted an annual inflation rate of 2% for 2007 and the period of the analysis, to 2059. This assumption is in line with short and medium term forecasts for Hong Kong and international longer term trends.

1.2 Historic inflation in Hong Kong in the last 20 years showed very different trends for the period 1988-1997 at 7.7% per annum and -2.6% for 1998-2007[1]. Neither periods are appropriate references in determining assumptions for long term future trends as the economic situation is expected to be different, with Hong Kong showing trends more akin to international trends than in previous decades. Over the same period, inflation for advanced economies was 3.4% (1988-1997) and 2.0% (1998-2007).

1.3 Inflation, as measured by the composite consumer price index (CCPI) year on year for Hong Kong for 2006 was 2%. The Government medium range forecast, as presented to the public in the 2007-8 Budget Speech anticipates inflation rates in the Composite Consumer Price Index (CCPI) of 1.5% for 2007 and over the medium term up to 2011 of 3.5% per annum.

1.4 A range of independent forecasts produced by third party bodies anticipate inflation in the 2% range in the short term:

- The macroeconomic forecast released by the APEC Study Centre of the University of Hong Kong[2] anticipate inflation for Q1 2007 at 2.5%.
- The International Monetary Fund's World Economic Outlook September 2006 predicted annual inflation rates for Hong Kong of 2.3% for 2006 and 2.5% for 2007.

1.5 Rising inflationary predictions reflect recent GDP growth combined with rising rents, wages and import prices. However, expectations over the medium term are for more moderate increases as predicted contractions in US monetary policy start to bite. Owing to the Linked Exchange Rate System, any appreciation in the dollar following an increase in US interest rates will have to be matched by falls in the Hong Kong dollar to maintain the currency peg. This appreciation would be expected to prevent inflationary pressures from becoming too great, implying a forecast of around 2-2.5% for the longer term.

1.6 In the absence of any robust long term forecasts to suggest otherwise, the FA assumed 2% annual inflation for 2007 and throughout the analysis period. A constant inflation rate is appropriate for long term financial analysis.

[1] International Monetary Fund, World Economic Outlook, September 2006 (includes estimates for 2006 and 2007)
[2] High Frequency Macroeconomic Forecasts 2007 Q1, Asia Pacific Economic Cooperation (APEC) Study Centre, Hong Kong University

Modelling Inflation

1.7 The Microsoft Excel model built for the financial analysis incorporates inflation to provide detailed annual MOD costs and revenues for each CACF and communal facility. The FA designed the model such that, should it be required, the model could be easily adjusted to test different inflation rates or different phasing of facilities and remain internally consistent. For annual costs and revenues estimated as a base cost in 2006, the modeling process is simple – the amounts are simply adjusted for inflation (an inflation factor) to reflect the year in which they occur. A value of $100 in 2006, for example in 2010 is $100*(1+2%)^4.

1.8 However, estimates of prices received by bidders for construction contracts (bid prices) would likely already include some allowance for inflation, if they last more than a few years. An extreme example explains why. If a construction contract lasted 5 years and inflation was 20%, then the bidder would be rather foolish not to anticipate the extra costs he would incur over the 5 year period as prices rise and make allowances for the anticipated rises in his bid price.

1.9 A bid price incorporating some allowance for inflation, depending on the length of the contract and the bidder's inflationary expectations would not need particular attention in the spreadsheet model, if the inflation assumption always remained the same. However, if the bid price were treated as a constant number when inflation assumptions were changed then the calculations would be incorrect. In order to accurately run sensitivity tests for inflation, the FA incorporated an adjustment to the quoted 2006 bid price which effectively 'stripped inflation out' of the 2006 price and 'put it back in' by adjusting the cost or revenue in the model by the relevant inflation factor for the year in which it occurs. In this way, the model correctly adjusts the cost or revenue in MOD when inflation or phasing is changed, – such as in the sensitivity tests[3].

1.10 Figure I.1 provides an illustration of the adjustment calculation. In the example, the bid price is $1,000 (p) in year 1 prices for a 4 year contract. The payment % (b) shows the indicative phasing of the contract. The indicative payment adopts the indicative phasing i.e. the contract bid price x the % phasing. The next line calculates the equivalent contract payments if inflation were zero, which sum to $970. The inflation adjustment is the ratio of total contract payments (without inflation) to the contract price = 0.97. In the model, the contract bid price ($1,000) is multiplied by inflation adjustment to get the price (without inflation). Payments incurred are calculated as in the price (without inflation) x phasing x inflation index – as in line (f). The adjusted payments are marginally lower in the early years and marginally higher in the later years when compared to the indicative phasing but the total is the same.

Figure I.1: Example Inflation Adjustment Factor (4 years)

Assumptions:

Contract Term	4	years
2006 Bid Price, say	1,000	(p)
Price contingency within the Bid	2%	(i)

Year (n)			1	2	3	4	Total	Notes
Inflation Index	(a)		1	1.02	1.04	1.06		(a) = (1+i)^n
Indicative phasing	(b)		7%	46%	44%	3%	100%	(b) as advised by QS
Indicative payments	(c)		70	460	440	30	1,000	(c) = (x) x (b)
Payment (no inflation)	(d)		70	451	423	28	972	(d) = (c) / (a)
Adjustment factor	(e)	0.97						(e) = (total d) / (total c)
Adjusted payments	(f)		68	456	445	31	1,000	(f) = ((e) x (p)) x (a) x (b)

[3] This rigorous approach to incorporating inflation was useful in testing the internal accuracy and consistency of the model by setting inflation and the real discount rate to zero – whereby the NPV = MOD.

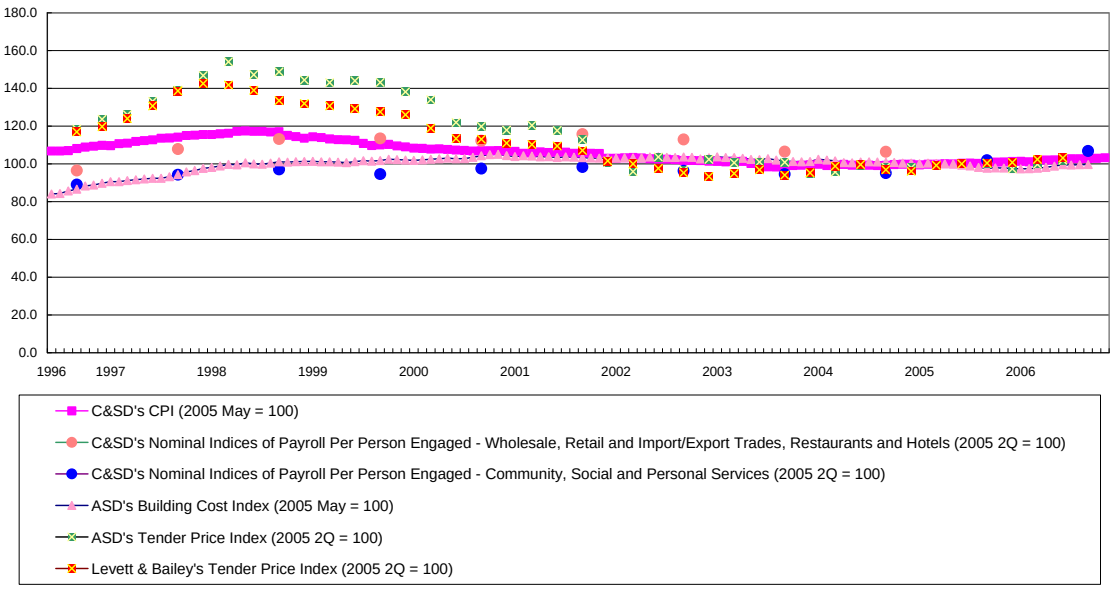
2. Escalation Rates

2.1 The model allows for differential escalation rates in construction costs and staff costs for CACF and communal facilities. The WKCD Base Case assumes that both construction and staff costs will rise by 2% per annum in nominal prices. Given the assumed annual inflation rate of 2%, this means 0% real growth in staff or construction costs over the analysis period.

2.2 This assumption is consistent with recent trends in payroll and building cost indices as shown in Figure I.2. The figure shows convergence between nominal changes in salaries and construction costs and the CPI inflation rate, implying minimal real price changes.

2.3 Two measures of payroll indices are shown: for wholesale, retail, import/export trades, restaurants and hotels, and community, social and personal services. Three measures of construction costs are also presented. The Architectural Services Department's Building Cost Index combines material and labour figures supplied by Census & Statistics Department and the Hong Kong Construction Association on the assumption that a construction costs for a notional building comprise 45% labour and 55% material. The Tender Price Index then presents a quarterly gauge of tender prices for new building works (excluding mechanical and electrical contracts) undertaken by the Architectural Services Department. Finally, the Levett & Bailey Index provides an indication of tender prices for construction contracts in the private sector. After a period of considerable growth and decline in nominal building costs, these indices have recently converged towards the trend rate of inflation.

Figure I.2: Nominal Payroll and Building Cost Indices in Hong Kong, 1996 - 2006



3. Weighted Average Cost of Capital and Real Discount Rate

3.1 The Weighted Average Cost of Capital (WACC) was assumed to be 12.5%. WACC is notoriously difficult to estimate for any industry since there is no published source and it varies from sector to sector, company to company, and project to project as well as over time. Published data from property development company accounts shed little light on WACC. Developer accounts normally include many different aspects of business, such as property management – as well as development for example.

3.2 Reference was made to HK regulation, where required rates of return have been calculated for different industrial sectors. The bus companies (9.7%[4]); electricity (13.5%[5]); tunnels (15-17%[6]). Although none of these sectors are directly relevant, they assist in identifying a broad order range.

3.3 The main source of information for the WACC for developing CACF and communal facilities therefore was the market sentiment exercise which consulted major developers in Hong Kong about the WKCD. The broad range for WACC was in the region of 10% - 20% but WACC will vary, dependent on gearing, timing and by company. 12.5% was adopted as a reasonable assumption given a slight trend towards the lower end of the range and sensitivity tests conducted on 10% and 15%.

3.4 The real discount rate was assumed to be 4%, making reference to the rate used by the Government for public projects. For example, 4% was adopted in the Economic Assessment on Building a Walt Disney Theme Park in Hong Kong as the real social discount rate.

4. Phasing

4.1 Construction of WKCD CACF and communal facilities is assumed to take place in two phases, as recommended by PATAG and MAG.

- Phase 1 comprises all CACF and communal facilities with the exception of Great Theatre 2, Medium Theatre 3, Medium Theatre 4 and the M+ (Phase 2)
- Phase 2 comprises the Great Theatre 2, Medium Theatre 3, Medium Theatre 4 and the M+ (Phase 2)

4.2 The following two figures set out the detailed phasing assumptions that are used as inputs to the financial analysis. Since these assumptions are inputs to the FA modelling exercise, for ease, they are presented in the form in which they appear in the spreadsheet model:

- Figure I.3 sets out the phasing adopted for construction and related costs (including consultancy and contract management) for each facility according to the year in which that cost is expected to be incurred
- Figure I.4 sets out the phasing adopted for major overhaul. The cost of major overhaul is expressed as a % of construction costs (not including the related costs) in the year in which it is incurred. See Annexes A and C to F for the calculation of major overhaul for cultural and community facilities

[4] Bus Fare Adjustment Mechanism, adopted January 2006

5 13.5% of average net fixed assets (ANFA) plus 1.5% of ANFA acquired after Jan 1, 1979

6 In both the arbitrations in 1997 and 2004, the arbitrators determined that the band of reasonable but not excessive remuneration for the New Hong Kong Tunnel Company Limited should be an internal rate of return between 15% and 17%, New Hong Kong Tunnel Limited, Annual Report 2006

Figure I.3: Phasing of Construction and Related Costs as a Percentage of Total Construction and Related Costs

		Total	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032 - 59
PHASE 1																													
1	**Management and Masterplanning**																												
1.1	Masterplanning	100%	0%	0%	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1.2	Area and Project Management	100%	0%	0%	13%	13%	13%	13%	13%	13%	13%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2	**Museum and Exhibition Space**																												
2.1	M+	100%	0%	0%	0%	0%	0%	0%	7%	23%	42%	25%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2.2	Exhibition Centre	100%	0%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3	**Performing Arts Facilities**																												
3.1	Mega Performance Venue	100%	0%	0%	0%	0%	7%	23%	42%	25%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3.2	Great Theatre 1	100%	0%	0%	0%	0%	7%	23%	42%	25%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3.3	Concert Hall and Chamber Music Hall	100%	0%	0%	0%	0%	7%	23%	42%	25%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3.4	Xiqu Centre	100%	0%	0%	0%	0%	7%	23%	42%	25%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3.5	Medium Theatre 1	100%	0%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3.6	Medium Theatre 2 and Black Box Theatre 1	100%	0%	0%	0%	0%	7%	23%	42%	25%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3.7	Black Box Theatres 2 and 3	100%	0%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3.8	Black Box Theatre 4	100%	0%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3.9	Piazzas*	100%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
4	**Other Arts and Cultural Uses**	100%	0%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5	**Transport Facilities**																												
5.1	Automated People Mover	100%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5.2	Road Works and Pedestrian Connections	100%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5.3	Public Pier	100%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5.4	Car parks	100%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
6	**Communal Facilities**																												
6.1	Public Open Space	100%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
6.2	Fire Station, Police Post and RCP	100%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
6.3	Public Toilets	100%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
7	**Engineering Works**																												
7.1	Deck Over WHC Tunnel Portal	100%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
7.2	Build Over Ventilation Buildings	100%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
7.3	Other Site Engineering Works	100%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SubTotal																													
PHASE 2																													
8	**Performing Arts Facilities (Phase 2)**																												
8.1	Great Theatre 2 and Medium Theatre 3	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	23%	42%	25%	3%	0%	0%	0%	0%	0%	0%
8.2	Medium Theatre 4	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	46%	44%	3%	0%	0%	0%	0%	0%	0%
9	**M+ (Phase 2)**	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	46%	44%	3%	0%
Subtotal																													
TOTAL CAPITAL EXPENDITURE																													
10	**Residential and Commercial Land Sales**																												
10.1	Villa Houses	100%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10.2	Apartments	100%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10.3	Hotels	100%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10.4	Retail/Dining/Entertainment	100%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10.5	Office	100%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
TOTAL CAPITAL REVENUE																													

* include a small canopy

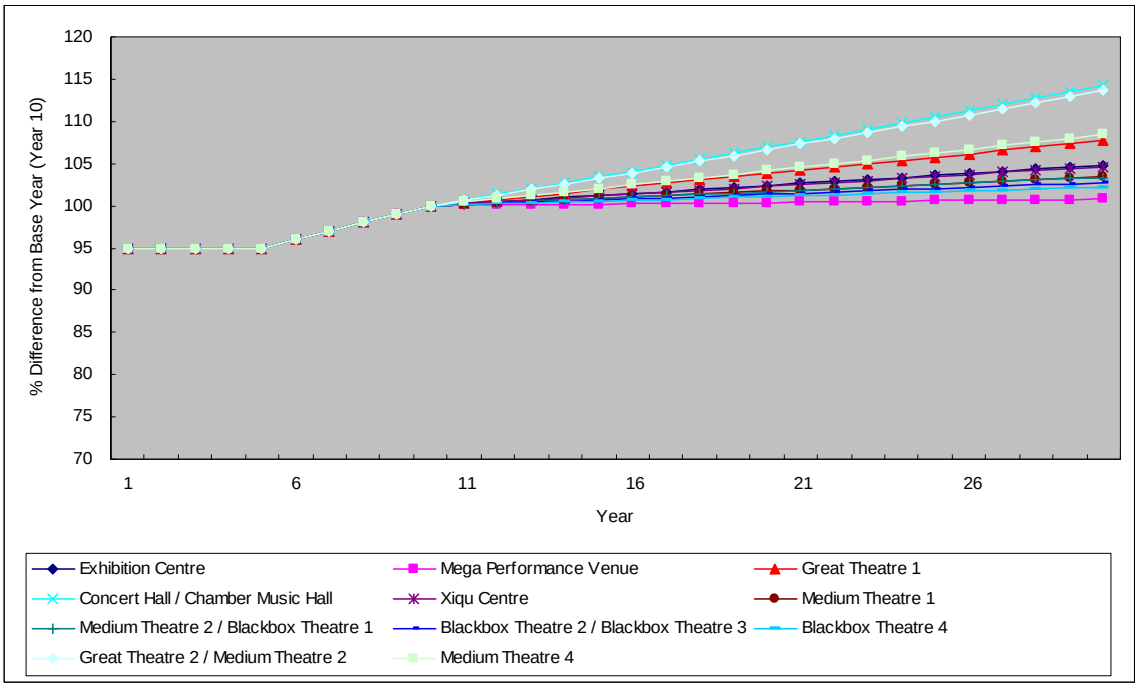
Figure I.4: Phasing of Major Overhaul Costs as a % of Total Construction Costs

		Total	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
PHASE 1																																
1	**Management and Masterplanning**																															
1.1	Masterplanning	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1.2	Area and Project Management	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2	**Museum and Exhibition Space**																															
2.1	M+	96%	0%	0%	0%	0%	0%	48%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	48%	0%	0%	0%	0%
2.2	Exhibition Centre	94%	0%	0%	0%	47%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	47%	0%	0%	0%	0%	0%	0%
3	**Performing Arts Facilities**																															
3.1	Mega Performance Venue	102%	0%	0%	0%	51%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	51%	0%	0%	0%	0%	0%	0%
3.2	Great Theatre 1	104%	0%	0%	0%	52%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	52%	0%	0%	0%	0%	0%	0%
3.3	Concert Hall and Chamber Music Hall	104%	0%	0%	0%	52%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	52%	0%	0%	0%	0%	0%	0%
3.4	Xiqu Centre	104%	0%	0%	0%	52%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	52%	0%	0%	0%	0%	0%	0%
3.5	Medium Theatre 1	104%	0%	0%	0%	52%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	52%	0%	0%	0%	0%	0%	0%
3.6	Medium Theatre 2 and Black Box Theatre 1	102%	0%	0%	0%	51%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	51%	0%	0%	0%	0%	0%	0%
3.7	Black Box Theatres 2 and 3	98%	0%	0%	0%	49%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	49%	0%	0%	0%	0%	0%	0%
3.8	Black Box Theatre 4	98%	0%	0%	0%	49%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	49%	0%	0%	0%	0%	0%	0%
3.9	Piazzas*	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
4	**Other Arts and Cultural Uses**	28%	0%	0%	0%	14%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	0%	0%	0%	0%	0%	0%
5	**Transport Facilities**																															
5.1	Automated People Mover	60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5.2	Road Works and Pedestrian Connections	150%	0%	0%	0%	75%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	75%	0%	0%	0%	0%	0%	0%
5.3	Public Pier	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5.4	Car parks	42%	0%	0%	0%	21%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	21%	0%	0%	0%	0%	0%	0%
6	**Communal Facilities**																															
6.1	Public Open Space	46%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	46%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
6.2	Fire Station, Police Post and RCP	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
6.3	Public Toilets	48%	0%	0%	0%	24%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	24%	0%	0%	0%	0%	0%	0%
7	**Engineering Works**																															
7.1	Deck Over WHC Tunnel Portal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
7.2	Build Over Ventilation Buildings	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
7.3	Other Site Engineering Works	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SubTotal																																
PHASE 2																																
8	**Performing Arts Facilities (Phase 2)**																															
8.1	Great Theatre 2 and Medium Theatre 3	52%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	52%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
8.2	Medium Theatre 4	52%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	52%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
9	**M+ (Phase 2)**	48%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	48%	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal																																
TOTAL CAPITAL EXPENDITURE																																
10	**Residential and Commercial Land Sales**																															
10.1	Villa Houses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10.2	Apartments	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10.3	Hotels	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10.4	Retail/Dining/Entertainment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10.5	Office	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
TOTAL CAPITAL REVENUE																																

* include a small canopy

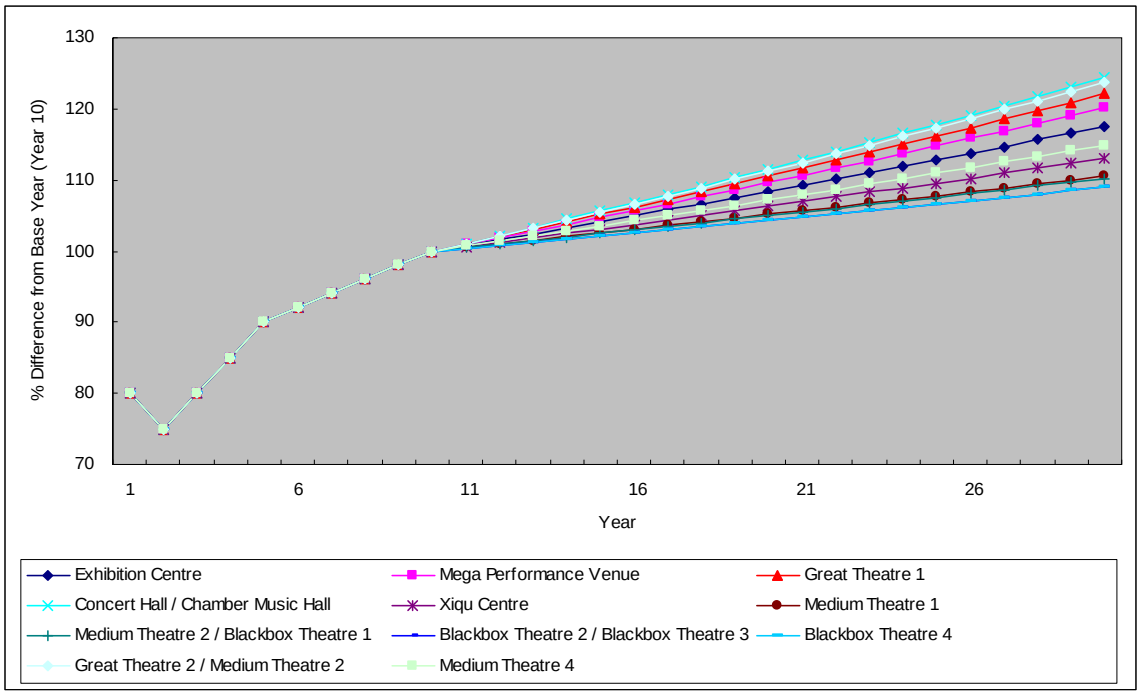
- The phasing of operation, maintenance and management (OMM) costs for CACF facilities, expressed as a percentage of total estimated OMM expenditures once the facility is fully up and running, is assumed to be 50% in the year prior to opening, 75% in the years in which the facility undergoes a major overhaul, and 100% in all other years for M+ and 95% to 100% in initial years of operation (100% in year 10) for Performing Arts (PA) venues and the Exhibition Centre. The OMM costs for PA venues and the Exhibition Centre are expected to grow steadily from year 10 to year 30 and become stable beyond year 30 (see operating assumptions for year 30 in Annexes C and D)

Figure I.5 Phasing Assumptions for PA Venues and Exhibition Centre – Operating Expenditure



- The phasing assumptions expressed as a percentage of total estimated operating revenues once the facility is fully up and running varies by facility as follows:
    - PA Venues and the Exhibition Centre: 80% in the year of opening, then 75% in year two, 80% to 100% in initial years of operation (100% in year 10) and 50% in the years in which a major overhaul takes place. The operating revenues are expected to grow steadily from year 10 to year 30 and become stable beyond year 30 (see operating assumptions for year 30 in Annexes C and D)

Figure I.6 Phasing Assumptions for PA Venues and Exhibition Centre – Operating Revenue



- o M+ (both phases): 100% in the year of opening, then 85% in year two, 90% in year three, 95% in year four, 100% in years five and onwards, and 50% in the years in which a major overhaul takes place
- o Piazza: assumed to be fully operational from the year of opening and 50% in the years in which a major overhaul takes place

5. Residual Value, Project Life, Depreciation and Major Repair and Replacement

5.1 The project design life is 50 years. This means that the design of the building is built to withstand expected 50 year incidents. The amounts incurred for major repair and replacement reflect estimates of the cost of bringing the building into serviceable life until the major repair is required again. As such the building in theory lasts in perpetuity. It is assumed that the facilities will last and continue to be used past the 2060 assessment period and a residual value has not been included. Details of the major overhaul percentages of construction cost are provided in Annexes A, C to F and summarised in Figure I.4.

6. Additional Financial Assumptions

Assumption	Reason
Discounted cash flow analysed over 50 years from assumed year of land sale	Land grants are typically for 50 year terms
Tax as per the current Inland Revenue Ordinance	Current applicable situation in Hong Kong

7. Development Programme

Phase 1: ▪ Planning / design starts – 2008 ▪ Detailed design / construction starts – 2010 ▪ Land sales of residential uses – around 2010, depending on development packaging ▪ Full operation of Phase 1 facilities starts – 2014 to 2016, PA venues and EC that require less subsidies will be completed earlier, depending on their packaging with residential and commercial uses	Assumed the planning / design of Phase 1 will start as soon as possible, all facilities will be completed at the same time, and Phase 2 facilities will be completed 10 years after completion of Phase 1 facilities.
Phase 2: ▪ Planning / design starts – 2022 ▪ Detailed design / construction starts – 2023 ▪ Full operation of all Phase 2 facilities starts – 2026	As advised by PATAG, master planning would include Phase 2 facilities, while the seating capacity and other technical requirements would be reviewed at the planning / design stage.