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1. Introduction and Scope

1.1 Background

1.1.1 This working paper has been prepared as part of the reporting on the economic and financial assessments of the current Territorial Development Strategy (TDS) Review – Hong Kong 2030: Planning Vision and Strategy (HK2030 Study). The findings of this assignment will be used as input to the options evaluation and preparation of the Planning Strategy and Response Plan in the HK2030 Study. It is the first of three working papers covering each of the three tasks as set out below:

**Task I : Methodology Formulation**

1.1.2 Task I comprised one main task:

- Task 1.1 : Methodology for Economic Assessment

1.1.3 The objective of the task is to prepare a practical, efficient and transparent assessment methodology to evaluate the economic and financial performance of the initial and preferred development options to be developed for the HK2030 Study. The methodology will comprise both quantitative assessment and qualitative assessment. This Working Paper 1 covers this Stage.

**Task II : Initial Options Assessment**

1.1.4 Task II will comprise two main tasks:

- Task 2.1 : Broad Brush Financial and Economic Assessment of Initial Options
- Task 2.2 : Options Refinement

**Task III : Further Assessment**

1.1.5 Task III will comprise two main tasks:

- Task 3.1 : Financial and Economic Assessment of the Preferred Option
- Task 3.2 : Advice on Overall Planning Strategy and Response Plan.

1.2 Task II and Task III

1.2.1 The essential differences between Task II and Task III are as follows. Task II assessments will be comparisons between development options. The comparisons will be made for development options under the reference scenario based on some planning parameters, such as population, housing, employment and port location. The options will share a number of similarities in terms of ultimate land use. However, the timing of implementation for different projects is a key difference. Task II will identify the comparative costs and benefits of the options. Based on the results of the analysis, the preferred option, or a hybrid of the several options, will be selected/formulated.
1.2.2 Task III assessment will help Planning Department to explain to the public the financial and economic robustness of the preferred option. A detailed quantitative financial assessment and qualitative economic assessment on the preferred option will be carried out. The assessment will also highlight the ability of the preferred option to accommodate changes in the planning parameters of the reference scenario, i.e. ‘what if’ scenarios. Task III will answer ‘what if?’ questions which test the sensitivity of the variations in the planning parameters of the reference scenario. For example, Task III will consider the implications of, ‘What if the total population levels are higher/lower than those used in the planning parameters of the reference scenario?’, or ‘What if there is reduced levels of economic activity at the port?’

1.2.3 Tasks II and III assessments will have a different focus and purpose, but they need to be internally consistent. That is, they need to use the same underlying approach to the identification and measurement of costs and benefits.

1.2.4 Task II will be broad-brush in nature, identifying the essential differences between the options. Task III assessments will be more detailed in the sense that the assumptions used will be under scrutiny, and will be tested. Task III will also include testing of the sensitivity of the variations in the planning parameters and the responses under the ‘what if’ scenarios.

1.2.5 For Tasks II and III, Planning Department will provide several development options under the reference scenario and what-if scenarios. Each of the options is concerned with a spatial allocation of a common number of activities at any given future year. What distinguishes these options is the different locations and implementation timing of a common number of core activities in the territory. Because implementation timing and locations differ, there will be different consequential investments in the options in terms of development of land and provision of infrastructure. Assessments are concerned with identifying and measuring the different costs and benefits of different options.

1.3 The Assessment of Development Options under the Reference Scenario and the ‘What If’ Scenario

1.3.1 An assessment of development options needs to be undertaken in terms of the achievement of planning policy objectives. Planning at the strategic level seeks to provide for society’s land development and associated infrastructure requirements in a way which maximises the overall net economic, social and environmental benefits. There will be several subsidiary objectives to take into account.

1.3.2 The main elements of the development options are therefore releases of land or, more specifically the development rights in land, for activities and the provision of associated infrastructure. Land will be provided for housing, economic activities, and associated purposes such as retail, recreational, etc. The main variables in the assessments of the options are, therefore, the nature, scale, implementation timing and location of land releases for different activities in different locations.

1.3.3 The economic and financial assessment therefore addresses the differences among the options, that is, different spatial distributions of land release for development, in terms of maximising their net benefits. The economic context within which the options are presented is defined as the reference scenario and provides estimates of requirements for land and property as a result of assumptions made which primarily concern economic changes (e.g. where further port expansion and cross boundary land based connections locate) and population growth.
1.3.4 What are the implications of each of the options? In essence, the options are concerned with:

- where and how people live – i.e. their net residential location benefits
- where and how they work and their production activities – i.e. net economic benefits
- strategic economic development issues such as where further port development and cross boundary land based connections locate
- how the location patterns of residences, workplaces and other activities affect their quality of environment, congestion, and recreation and other life opportunities, and
- the land resumption, land development and infrastructure costs which will be incurred to provide these benefits of development.

1.3.5 The assessment of the options is concerned with these implications: net residential location benefits; economic benefits; environmental and related benefits and the costs of development and infrastructure.

1.3.6 It is useful from the point of view of the assessment to classify land use activities (residential, economic etc.) in two supplementary ways. First, there are activities which are ‘new’ in the sense of occupying development in locations which are variable between the options. Second, there are those which are ‘existing’, in the sense of being common to the options. Consideration of the options will illustrate the differences.

1.3.7 For example, residents of new development areas will be affected by site, location and quality of the existing environment. Greenfield areas in the New Territories tend to have greater design opportunities, and be less polluted and congested than new developments in the Metro area. But greenfield residents generally have less choice than brownfield in terms of quality of public facilities and access to existing as well as new employment opportunities. The land development costs in the New Territories will generally be lower for each development, but greater strategic transport and other infrastructure is required.

1.3.8 Likewise, residents of ‘existing’ development areas will be affected by the locations selected for the ‘new’ developments. A development in a new area will bring with it improved employment opportunities for the existing residents as well as the new ones, and possibly new opportunities for retail activities. It may reduce the quality of the environment for the incumbents. Metro developments tend to be of higher density and lead to environmental problems for existing land uses. There will be more pressure on existing transport networks and requirements for cultural, recreational and other services. Residents have more choice of employment and recreational activity but the Metro area is busier and more polluted.
HK2030 Study: Assessment of Development Options

In Hong Kong pressure to release land to accommodate increasing population and changes in socio-economic conditions require a number of planning choices including the speed and timing of land supply, provision of associated infrastructure and its location. Such choices have important implications for the success of the economy as a whole and ultimately the quality of life of residents. Planning choices can impact on competition, tourism, population and employment, through its direct effect on the living environment, amenity, access and community.

1.4 Scope

1.4.1 Obviously the decision in favour of the preferred option will have wide-ranging implications on most of Hong Kong society and its economy in the future. There are limits to the assessment since it is evident that not all the impacts can be identified and traced. Moreover, the options will have implications stretching many years into the future and there are many uncertainties involved in the assessments.

1.4.2 Accordingly, the assessments at Task II will concentrate on the essential differences among options in terms of their costs and benefits. They will focus on the ‘big issues’ of residential and economic locations which are associated with accessibility, the quality of the environment and lifestyle. These benefit issues will be compared with the costs of providing and servicing the developments. There will be special issues of public sector involvement to take into account, and in particular the Budgetary implications. But it will not be possible to go beyond the main items of difference because of the constraints arising from uncertainty.

1.4.3 The consultants will use costs and values for the assessments which are largely based on to-day’s sources of evidence, for want of anything better. Where the direction of changes in values is known, or may be surmised (as, for example, with increasing environmental valuations over time) some assumptions may be deployed to reflect them.

1.5 Structure of Working Paper 1

1.5.1 This first Working Paper is set out in five further chapters following this introduction. The coverage and purpose of each chapter is set out below:

- Chapter 2 provides an overview of financial and economic assessment;
- Chapter 3 reviews current practice and recent experience in financial and economic assessment;
- Chapters 4 and 5 highlight issues for consideration in methodology formulation;
- Chapters 6 and 7 propose methodology for Tasks II and III assessments.
2. Financial and Economic Assessment: An Overview

2.1 Definition

2.1.1 The financial and economic assessments have similar objectives: they both determine the net worth of an investment but from different perspectives and using different inputs:

- Financial assessment determines the net monetary worth of an investment (or policy) to a given entity. Financial assessment uses expenditures and revenues as inputs.

- Economic assessment determines the net economic worth of an investment (or policy) to society or the economy as a whole. Economic assessment uses economic costs and economic benefits as inputs. The assessment aims to incorporate all perspectives of an investment including financial, environmental and socio-economic considerations. It does this either through adjusting financial prices to reflect the real or economic situation and/or by identifying, quantifying and assigning monetary values to qualitative factors in order to include them in the assessment.

2.1.2 Economic assessment therefore differs from financial assessment because it aims to include qualitative factors which are not considered in the financial assessment. However, since financial inputs and outputs usually provide the basis of the economic assessment the two perspectives are closely linked and are normally undertaken concurrently.

2.2 Financial Assessment

2.2.1 The first step in financial assessment is to determine the entity that is being considered. Many investments involve costs and revenues to a number of different entities, such as the government or private sector companies. The assessment could include all entities but more usually, and more meaningfully, separate financial assessments are undertaken for different entities, particularly if investment includes both the public and private sector. The assessment of planning policy principally concerns the impact on the government and the public spending, in determining whether expenditure on planning policies delivers value for money.

2.2.2 The second step is to determine which costs and revenues are relevant to the assessment. Financial costs include capital costs and recurrent costs, which include operations (for utilities) and maintenance. Financial revenues include any taxes, fees, charges or other income resulting from the investment. Revenues can be positive or negative. For example in considering the financial assessment of a new taxation policy both the positive and negative revenue effects must be taken into account. For the assessment of planning policy, costs to the government are primarily the cost of land and infrastructure. Land and lease premium are the main elements of cost recovery.

2.2.3 The cost and revenue streams provide the basis for the analysis and are usually determined annually, or another appropriate time period, depending on the timeframe of the investment, the known investment schedule and the required accuracy of the results.
2.3 Economic Assessment

2.3.1 The first step in economic assessment is to determine economic costs. As noted in para 2.1.1, economic costs include the impact on society as a whole including social, environmental and other costs excluded from the financial assessment. Traded goods, that are included as financial expenditures in the financial assessment, are converted into economic costs by eliminating market distortions such as taxes and subsidies. For example, if a good is sold at $100, but $10 represents tax paid to the government then the financial price is $100 but the real (economic) cost of producing that good is only $90. Similarly, if a good is sold at $90 but the government subsidises the production of that good by $10, then the financial price is $90 but the economic price is $100. The economic price of land is its opportunity cost, or the price in its next best alternative use. For an assessment of planning policy, the economic price of land is likely to be one of the most important considerations in terms of comparing financial and economic costs. For the decentralization land use pattern, the economic price of agricultural land is likely to be far lower than the economic price of land in the Metro Area. Social, environmental and other costs, which are excluded from the financial assessment, are also included in the economic assessment, since economic assessment incorporates the costs to the economy as a whole. This includes expenditures that are excluded from the financial assessment because they are not paid by the entity under assessment, as well as a valuation of the environmental and social impacts. Specifically, for policy evaluation, economic costs would include all development costs, whether incurred by the Government or not.

2.3.2 The second step is to identify, quantify and value the economic benefits wherever possible. However, this task is highly subjective and is generally very difficult to achieve. Problems can exist in identifying and quantifying benefits which are intangible. This is particularly true for environmental policies, where it is difficult to attribute benefits to a specific investment. For example, development focus in the New Territories may relieve improvements in river water quality. This may be partially the result of a new wastewater treatment plant and partially the result of tightening of industrial effluent monitoring. The exact impact of each in terms of physical pollution reduction is difficult to determine, even before a value is placed on the reduction. Valuation of benefits is also problematic. Investments which are complex and cover social and environmental aspects usually rely on techniques such as “contingent valuation” or “revealed preference” to assist in assigning values to intangible benefits. Contingent valuation involves using questionnaires to test the potential behaviour of consumers. Revealed preference techniques use a proxy value for improvements based on observation of changes in market values or consumer behaviour. For planning policy assessment, for example, the value of property development incorporates relatively intangible factors such as access, environment, quality and location.

2.3.3 As with financial assessment, the economic costs and benefits should be identified according to the point in time when they are incurred. Discounting techniques are then used to express the costs and benefits at different points in time according to a common numeraire.
2.4 Assessment Criteria

2.4.1 Financial and economic assessments both use the same type of techniques to determine net worth. Once the data has been finalized, all these ratios are reasonably easy to generate and thus a discussion of the relative merits of each is largely academic. However, a brief description and commentary on the main advantages and disadvantages of criteria are listed below.

Payback period

2.4.2 Restricted to financial assessment, this technique determines the number of years before the initial investment cost is recouped. The main disadvantage of this technique does not take into account the time value of money.

Average Incremental Analysis

2.4.3 For financial assessment this technique compares the average incremental cost to the average incremental revenue or for economic assessment the average incremental cost to the average incremental benefit. This technique is more appropriate for single operational investments than multi policy or programme assessments.

Present Values and Benefit/Cost Ratios

2.4.4 The present value (PV) technique uses discounted cash flow technique to determine the present value of a given stream of values over time, given a discount rate. This technique can be applied to both financial and economic inputs and outputs and has the advantage of incorporating the time value of money. The benefit/cost ratio (BC ratio) is the ratio of the PV of costs and revenues for financial assessment and of economic costs and benefits for economic assessment.

Net Present Values

2.4.5 The net present value (NPV) uses the same discounted cash flow technique but to net inputs less outputs. For financial assessment the NPV is the present value of net income (expenditure less revenue) and for economic assessment, the NPV is the present value of the net benefits (economic costs minus economic benefits). Where the NPV at a given discount rate is greater than zero, the policy is considered to be worthwhile. NPV curves are often used to show the NPV of a given investment at a range of discount rates to allow the reader to see the implication of changes in the discount rate. NPVs also offer the advantage of being able to distinguish between large and small investments which other ratios cannot.

Internal Rates of Return

2.4.6 The internal rate of return (IRR) of a set of values is the discount rate at which the NPV is zero. The financial IRR (FIRR) or economic IRR (EIRR) criteria have an advantage in considering the time value of money and enabling a number of alternative investments to be compared both to each other and to a required standard or hurdle rate, above which the investment is considered worthwhile.
Financial Projections

2.4.7 For financial assessment, the implications of the investment on the accounts of the entity involved are also an important consideration, particularly if other activity is undertaken concurrently. For private sector entities, this will include projections of the investment impact on the balance sheet, income statement and cash flow and consideration of key ratios for debt, liquidity, cash balance, profit and other financial requirements. For public sector investments, in a similar way, the impact on the public sector finances is examined.

3. Current Practice and Recent Experience

3.1 TDSR

3.1.1 The Territorial Development Strategy Review (TDSR) was undertaken in the early 1990s to determine a strategic planning framework for Hong Kong. Strategy option formulation and evaluation played a key role was an important part of the review. The process was undertaken in stages, starting with the generation and testing of Initial Options and Hybrid Options to the formulation and final evaluation of Preferred Options. Financial and economic assessments were undertaken at the Hybrid Option evaluation and the Preferred Option evaluation stages to evaluate the economic and financial implications of alternative development options.

3.1.2 The TDSR evaluation process focused solely on comparing the incremental differences between the alternative development options and a base growth pattern – a common base for all options. As with the Task II assessment, the quantity of land-use under different options were constant, such that different options had the same amount of housing land and industrial land but the spatial distribution was different. In practice, the option formulation process was a selection of strategic packages which contained individual or groups of development sites plus the necessary off-site infrastructure to sustain them. By focusing on the difference between alternative options and a baseline, the approach allowed users to compare the options easily. However, this approach did not address the financial and economic viability of the TDS strategy as a whole.

3.1.3 In addition to providing specific financial and economic assessments, TDSR used the results in an option evaluation matrix which evaluated the performance of alternative development options against a wide range of performance criteria covering financial, economic, land use, environment, transport and implementation aspects. For this reason, a range of different financial and economic criteria were drawn up, some of which overlapped one another, rather than focusing on a summary or overarching criteria. For this reason, the evaluation is somewhat confusing, since it is not clear how the criteria relate to one another, or which are the most important.

3.1.4 TDSR used changes in land and property values as a measure of economic benefits. This is an efficient method integrating and summarising a wide range of economic benefits to the community, including shorter journey to work, better environment and improved access to community facilities. All these benefits are represented by the willingness of the community to pay for the use of investments, which is reflected in the value of the property.

3.1.5 The evaluation process undertaken for TDSR did not include a qualitative examination of the economic costs or benefits. The evaluation would have been more complete and better understood if the wide range of economic methods were presented and compared qualitatively. A more detailed review of TDSR is included as Appendix A.
3.2 Sub-Regional Planning Studies

3.2.1 A financial assessment was undertaken as part of the two sub-regional planning studies (Planning and Development Studies on North West New Territories and North East New Territories) to evaluate the financial implications of new development areas (NDA) proposals. The assessment method was essentially an engineering project appraisal method focusing on comparing the costs and revenues to the Government under different input, output assumptions depending on the treatment of public housing and GIC. The assessment also presented a cash flow analysis with costs and revenues assessed based on specific development proposals and included sensitivity analyses for private land/property sale values.

3.2.2 This method is appropriate for a simplified financial assessment. It provides a range of results for the decision maker but fails to incorporate the complexities of public sector expenditures and revenues which must be considered in a Territory-wide strategic review.

3.3 Transport Studies

3.3.1 Financial and economic evaluation was conducted in two major transport studies: the Third Comprehensive Transport Study (CTS3) and the Second Railway Development Study (RDS2).

3.3.2 The financial evaluation considered the construction costs of infrastructure and equipment, operating costs of facilities and services, as well as the revenues from road tolls and passenger fares. The main output of the financial evaluation was a Financial Internal Rate of Return (FiRR) in both CTS3 and RDS2, and a Net Present Value (NPV) in RDS2. Sensitivity assessments were undertaken in RDS2 for different network options.

3.3.3 The economic evaluation considered a number of quantifiable benefits to the travelling public, to the operators and the community such as time savings to passengers and other road users, reduction in rail and vehicle operating costs, reduction in infrastructure costs, reduction in accident costs and environmental savings. The main output of the economic evaluation was a Benefit to Cost Ratio in CTS3 and an Economic Internal Rate of Return (EIRR) in both CTS3 and RDS2. The EIRR was compared with an opportunity cost of capital measuring the value of alternative (generally non-transport) uses in CTS3.

3.3.4 This approach is entirely appropriate for the consideration of alternatives transport infrastructure. Inputs and approach are clear and the assessment of benefits draws on a range of transport generated benefits to the economy as a whole.

3.4 International Development Bank Methods

3.4.1 The World Bank and Asian Development Bank undertake investment in developing countries, including infrastructure such as roads, rail, water, wastewater, telecommunications and energy supply. Over the last 20 years these institutions have developed and expanded long-established cost-benefit analysis methodologies for appraising a wide variety of projects. Their guidelines are now the best available for Cost-Benefit Analysis (CBA) assessments.
3.4.2 In assessing the relevance and usefulness of the methodologies for Hong Kong, three specific factors should be considered.

- all of the countries concerned have far lower GDP per capita than Hong Kong and although this does not significantly affect the CBA methodologies used, it does influence the emphasis which given to some of the issues, especially poverty.

- many of the analyses will have specific development concerns which are not found in Hong Kong and hence are not strictly comparable to those found here, such as debt repayment, vulnerability to market shocks, and economic dependency.

- although investment at a national and regional level does take place, much of the methodology developed refers to analysis of individual projects or group of related projects within a sector, rather than strategic policies as is the case here.

3.4.3 However, all these factors considered, the basic analytical tools and approach of the World Bank and Asian Development Bank remain valid.

3.4.4 The financial analysis relevant to this study focuses on the affordability of the planned investment to Government and not to individual executing entities which cannot be identified. This contrasts with the approach of the WB and ADB which has to be alert to issues of cost recovery for the specific executing agencies in the public sector which invariably are in dire financial straights, so private sector participation and maximum leverage is sought. FIRR analysis shows project returns to the entity rather than the government.

3.4.5 The WB/ADB methodologies do require the assessment of the magnitude of the impacts of the projects on the public exchequer, which parallels the current study requirements and is a very helpful addition to assessment methodologies. Financial statement projections for government are required to show the sustainability of what is proposed.

3.4.6 The EIRR analysis proposed by the WB/ADB type approaches aims to assess the returns to the national economy to determine whether the project is worthwhile. Particularly important is a qualitative assessment of whether there are any risks that would render the investment unsustainable. The approaches suggested may be useful to Task III.

3.5 Summary

3.5.1 Experience elsewhere demonstrates that there are well established criteria and methodologies for assessing financial and economic viability which can be utilised in this study. However, there are no directly comparable experiences to call on for use, and to some extent the approaches required for this study need to have some unique characteristics. The main comfort from these other assessment experiences is that there is sufficient theoretical and practical underpinning to the CBA approach for it to be used without there being concern that there will be major criticism.

3.5.2 Lessons from other assessments include:

- quantitative analysis should be utilised as far as possible
- options should be clearly defined
- the assessments should be transparent and easy to understand
- assumptions should be clearly stated
• the impact of the options on Government Budgets (the financial analysis) should be seen to be part of the CBA
• sensitivity analysis must be performed extensively when there are uncertainties of valuation

3.5.3 In the following sections, the proposed methodology sets out the overall approach and choice of baseline; an assessment of inputs and the proposed approach for Tasks II and III.

4. Methodological Approach

4.1 Introduction

4.1.1 As noted in the introduction, the objective of Task II is to provide an estimate of the financial and economic returns of the development options (for easy illustration purpose, Options A and B are employed in the following paragraphs and figures) under the Reference Scenario. The objective of Task III is to provide a financial and economic assessment of a preferred option and response plans under a number of ‘what if scenarios’. For the purpose of this Chapter, which addresses the overall approach to the methodology, ‘internal rates of return” are used as the example measure of return on investment.

4.1.2 Assessment of internal rate of return (IRR) to an investment is, by definition, a relative/comparative analytical tool. The IRR compares the return to an option compared to the returns under another, which can either be an alternative option or a baseline. The advantage of assessing options relative to a baseline is that many different options can easily be compared to one another and the comparison is more readily understandable. In addition, it is possible to set a standard requirement or hurdle rate for returns when compared to the baseline. This enables governments and other decision makers to compare across different types of projects and timeframes as well as between options. It is clear that for the purposes of the assessment of financial and economic viability of the planning strategy, there is a need for a baseline with which to compare, say, two options A and B under the reference scenario.

4.2 Types of Baseline

“Do Nothing”

4.2.1 In the context of the HK2030 study, this would be an assessment of Option A versus Option B compared to the existing situation\(^\text{2}\), including all committed projects from now into the future. The most appropriate baseline data would be to use TPEDM data for 2001, as a proxy for the existing situation. The advantage of this approach is that results show IRRs that test the viability of total government planning investment from today (approximated by 2001) to 2030. (See Figure 1).
4.2.2 The disadvantages of the “do nothing” approach are that the results would reflect all investment commitments and those proposed under both under Option A and Option B. This would involve a large amount of work to assess all the developments which would go ahead anyway since government decisions on that development have already been taken. In addition, since the differences in options lie at the margin and are likely to be at the end of the planning period, under this approach the results are likely to be very close because the assessment is ‘swamped’ by commitments. It may be that the difference between option A and B will be indiscernible.

“What Would Have Happened Anyway”

4.2.3 In the context of the HK2030 study, this would be an assessment of Option A vs Option B compared to the situation without either policy but under the same reference scenario. The consultants understand that the baseline data for a “Without Policy” options does not exist under the same reference scenario or time frame as the Options A and B. Nor would this information be easy to generate. For the purposes of the analysis, it would be necessary to establish a proxy for this option.
4.3 Generating Baseline Data

4.3.1 There are three possible proxies for the “without policy” option:

- Generate a new full data set for an alternative for 2010, 2020 and 2030. In this case the IRRs would reflect the differences in return under each of the Options and what would have occurred without the policy. (See Figure 2)

**Figure 2: “What Would Have Happened Anyway”: Generate New Data Set**

- Establish a date (such as 2010) prior to which both Options A and B are the same and thus the date becomes the cut off for “Do Nothing”. In this case the IRRs would reflect the returns to Options A and B excluding all commitments prior to the cut off date. (See Figure 3)
Combine the above two approaches such that a cut off date is established (such as 2010) and generate a new data set for 2020 and 2030. In this case the IRRs would reflect the returns to Options A and B compared to what would have occurred without the policy and exclude all committed projects prior to the cut off date. (See Figure 4)

Figure 3: “What Would Have Happened Anyway”: Establish a Cut-Off Date (2010)

Figure 4: “What Would Have Happened Anyway”: Establish a Cut-Off Date (2010) and Generate a New Data Set
4.4 Sources of Baseline Data

Territorial Population and Employment Data Matrix (TPEDM)

4.4.1 TPEDM will provide the base data for 2000, provided it can be adjusted to fit the format of the reference scenario options A and B.

4.4.2 TPEDM is also available for 2006, 2011 and 2016. The data for 2006 onwards could provide an approximation of the development that would have taken place anyway. The data would have to be adjusted in order to match the data point years under the reference scenarios. However, the main disadvantage is that TPEDM is undertaken under a different scenario to the reference scenarios and is thus not strictly comparable and may be confusing for people to understand.

4.4.3 TPEDM is being updated currently. The revised results are expected to be available by end 2002. The revised TPEDM is expected to be very similar to the reference scenario and thus some of the problems discussed above concerning the use of TPEDM may be lessened.

Options A and B under the Reference Scenario

4.4.4 Options A and B under the reference scenario will provide the data for comparison. Data for 2010 (or 2020) could provide the baseline data if the two data sets are the same. In particular, if it could be assumed that 2010 (or 2020) were a cut off date, after which all development would only occur under Option A or B, then the reference scenario data could be used as an approximation of the development that would have happened anyway.

Additional Options under the Reference Scenario

4.4.5 An additional option generated under the reference scenario could provide the baseline data set to reflect the development that would have taken place anyway. However, this would require additional work and data from Planning Department and the consultants understand that this is not feasible under the proposed study timetable.

4.5 Summary of Alternatives and Recommendations

4.5.1 Table 1 shows a summary of the alternative approaches and their results.

4.5.2 For Tasks II and III, the consultants believe it is appropriate that alternative 5 be undertaken to compare the cost implications of the differences between the two development options.

4.5.3 The consultants also recognise the need for an assessment of Options compared to a more realistic “What would have happened anyway” Option, in order to demonstrate the overall viability of the planning strategy and also to test the sensitivity of the results under a number of “what if” scenarios. The generation of an appropriate baseline has been discussed with Planning Department and it is agreed that for the consultants will use the updated TPEDM (based on C&SD 2001 data) to be available in end 2002 to generate a baseline. Thus for Tasks II and III, alternatives 5 and 2 will be undertaken.
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<td>Reference scenario Options A and B; Mutually inclusive data set (i.e. same in both options)</td>
<td>Common Development that takes place under both Options A and B will be excluded, i.e. to compare the cost implications of the differences between two options</td>
<td>Figure 2</td>
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<td>6. “What would have happened anyway”</td>
<td>New option generated by Planning Department</td>
<td>Development that would have happened anyway as defined by Planning Department will be excluded</td>
<td>Figure 2</td>
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<td>7. “What would have happened anyway”</td>
<td>New option generated by Planning Department where 2010 is the same for Options A and B</td>
<td>Development that would have happened anyway as defined by Planning Department will be excluded</td>
<td>Figure 4</td>
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5. **Institutional Issues**

5.1 **Introduction**

5.1.1 Chapters 1 and 2 set the objectives of the assessment and explain the relationship between the financial and economic assessments. The financial assessment uses expenditures and revenues as inputs and considers only the financial impact to Government. The economic assessment uses economic costs and benefits as inputs and considers the impact to society as a whole.

5.1.2 Consideration of appropriate inputs is complicated by the lack of clear distinction firstly between what is government activity as opposed to private sector activity and secondly what aspects of government activity are affected by property development? Government provides a large number of services both directly and indirectly through line departments and other entities. Similarly, the government collects revenue based on a wide variety of factors, only some of which are related to property development.

5.1.3 This section addresses how institutional status and type of activity affects the choice of inputs in the assessment, in terms of expenditures and revenues for the financial assessment and the calculation of economic costs. It considers the treatment of government services provided through line departments, government agencies and non-government organisations (NGOs). It also considers the impact of property and infrastructure development in determining appropriate revenues to be included in the assessment.

5.1.4 Where possible, the consultants have adopted simplifying assumptions. In particular, for the financial assessment, where expenditures and revenues are seen to cancel each other out, they are excluded. This simplification does not apply to the calculation of economic costs, which incorporates all expenditure in the economy, whether matched by government revenue or not.

5.2 **Direct Government Revenue and Expenditure**

*Rates and Local Services*

5.2.1 Rates are collected from property owners based on 5% of the annual rateable value. In the past, rates primarily covered expenditure of the former Provisional Urban and Regional Councils which provided a range of services including cultural and recreational facilities, markets and municipal services including waste collection. Since the former Provisional Urban and Regional Councils were dissolved, rates are no longer an identified revenue source for specific services but a part of general government revenue whilst the same services are covered by a range of different central government departments. For the purpose of this assessment, annual revenue from rates is assumed to be approximately equal to the amount spent on local services.

5.2.2 For the financial assessment, annual rates and recurrent government expenditure on local services are excluded. For the calculation of economic costs, recurrent government expenditure on local services will be included.
Land Premium and Lease Modification Premium

5.2.3 Land and lease modification premium are the main sources of government revenue from land transactions. Land premium for new land sale/land grant and lease modification premium for change of use will be included as revenues in the financial assessment.

Government Rent

5.2.4 Government rent is in general charged at 3% of rateable value for all properties. Government revenue from government rent for 2002/03 is estimated at $4.3 billion. This is essentially a ground rent and is part of overall government revenue. Government rent will be included as revenue in the financial assessment.

Taxation on Profit

5.2.5 Property developers, transport operators, electricity and gas companies are subject to profit tax at 16%. Although these taxes are government revenues and property related the implications of policy options on taxation revenues from property developers is considered to be beyond the scope of this study and therefore it is excluded from the assessment.

Property Tax

5.2.6 Property owners are subject to a tax on income from property levied at 15%. Government revenues for 2002/03 are estimated at $1 billion. Although this tax is property related, it is largely related to the proportion of property rented, as well as the overall stock. The incremental impact of policy options on the rate of rentals and property income is considered to be marginal. Property tax is excluded from the assessment.

Taxation on Transactions

5.2.7 Stamp duty and estate duty are levied on transactions and change of title. These apply both to the direct property and to other assets, mainly stock exchange assets. Government revenues for 2002/03 are estimated at $11 billion and $1.6 billion respectively. Although part of government revenue, these taxes are based on the level of transactions, which tends to follow economic and property cycles, rather than the spatial distribution of stock. Taxation on transactions is excluded from the assessment.

Highways

5.2.8 Highway projects, excluding Build, Operate and Transfer (BOT) projects, are funded by the Capital Works Reserve Fund (CWRF). Estimated expenditure for highway projects for 2002/03 is $3 billion.

5.2.9 For the financial assessment, capital expenditure on highways is included. Recurrent costs of maintenance are excluded as it is assumed that vehicle-related taxes cover this cost. For the economic assessment, road maintenance costs will be included.
**Water Supply**

5.2.10 Water supply is the responsibility of the Water Supplies Department. Budget expenditure for 2002/03 was approximately $5.4 billion\(^3\). Revenues from water charges for 2002/03 are estimated at $1.5 billion. The consultants will discuss the existing and any proposed changes to cost recovery policy with the Water Supply Department.

5.2.11 If water charges are set on the principle of full cost recovery, then water supply costs and revenues will be excluded from the assessments. If charges are set on the principle of cost recovery of recurrent costs, then only the capital cost of any major new infrastructure will be included in the assessments.

**Sewerage and Drainage**

5.2.12 Sewerage and drainage are the responsibility of the Drainage Services Department. Budget expenditure for 2002/03, including stormwater drainage and sewerage was approximately $1.6 billion\(^4\). Revenues from sewerage charges for 2002/03 are estimated at about $0.4 billion. As with water supply, the consultants will discuss with the Drainage Services Department, the general principles of cost recovery and determine appropriate inputs and outputs to be included in the assessment, based on those discussions.

5.3 **Revenue and Expenditure of Non-Government Corporations**

**Mass Transit Railway Corporation Limited (MTRC)**

5.3.1 MTRC is a public corporation about 76% owned by Government. Government capital expenditure to March 2001 was $32 billion\(^5\). MTRC undertakes two very different function, that of rail services and property development for station sites.

5.3.2 For the purpose of this financial assessment, capital expenditures on rail infrastructure will be included but property development will be excluded. Recurrent costs on rail services are assumed to be covered by user charges and are also excluded. For the calculation of economic costs, property development will also be included.

**Kowloon-Canton Railway Corporation (KCRC)**

5.3.3 KCRC is a public corporation, 100% owned by Government. Government capital expenditure to March 2001 was $37 million. KCRC, like MTRC, has dual functions, acting as a rail service provider and property developer.

5.3.4 For the purpose of this financial assessment, capital expenditures on rail infrastructure will be included but property development will be excluded. Recurrent costs on rail services are assumed to be covered by user charges and are also excluded. For the calculation of economic costs, property development will also be included.
Urban Renewal Authority (URA)

5.3.5 URA is a government agency. According to the Urban Renewal Strategy (URS), the URA should be self-financing in the long run. The LegCo Finance Committee has approved a capital injection of HK$10 billion for the URA. URA will be treated as a quasi government entity. Resettlement housing expenditure for tenants is assumed to be included under public housing provision. However, URA is also considering the need to construct some dedicated rehousing blocks to rehouse the clearances affected by the URA projects. If URA undertakes development of its own to rehouse relocations, then this will be included in URA financial expenditure and economic cost. Similarly, if the HA programme does not include provision for relocations from URA sites, then the cost of relocation will be included in the URA expenditure estimates. [N.B. This aspect will be updated when the latest information on whether the proposed public housing includes URA relocations or not is available] Other property development expenditures are assumed to be approximately equal to revenues (in line with the overall cost recovery objective).

5.3.6 For the financial assessment, land assembly including land resumption and compensation payments to occupiers/property/business owners and environmental mitigation measures will be treated as expenditures but property development costs and sales of property will be excluded. For the economic costs, compensation, which is a money transfer, will be excluded and property development costs will be included. According to the URS, the Government would waive the land premium for the URA projects. This policy to waive the land premium for URA sites will incur some financial loss to the Government in lost revenues. However, the justification for such a policy is that there are economic benefits from undertaking development on these redevelopment sites. The consultants will ensure that land premium is excluded from the financial assessment for URA sites. Valuation of land in economic prices (or its next best alternative use) overrides this consideration for the economic assessment.

Housing Authority

5.3.7 Public housing sector entities will be reorganised under the recent government policy changes. For the purposes of the methodology, the approach for each type of housing is set out for the current entity responsible.

5.3.8 Housing Authority/Department will be treated as a public entity. Estimated revenue from recovery from Housing Authority (sale of flats) will be included as a revenue item for assessment purpose.

5.3.9 For financial and economic assessments, expenditure on public housing developments, maintenance and management will be included. Revenues for the financial assessment will include public housing rental payments where appropriate.

Housing Society

5.3.10 Housing Society is a non-profit making organization. It will be treated as a private sector entity.

5.3.11 For the financial assessment, expenditures and revenues will be excluded from the assessment. For the calculation of economic costs, development by the housing society will be included.
5.4 Private Sector Revenue and Expenditure

Electricity

5.4.1 Electricity is provided by the private sector, largely by coal, natural gas and some nuclear from Guangdong. Current data suggest there is spare capacity in electricity production and no new power stations will be required as a result of government planning policy. It is also assumed that the requirement for electricity will be about the same under the two options and therefore the natural resource depletion impacts from electricity production will also be the same.

5.4.2 For both the financial and economic assessments, recurrent electricity expenditures and revenues will be excluded.

Gas

5.4.3 Gas is provided by the private sector. It is assumed that no major new infrastructure will be required as a result of government planning policy. As with electricity, recurrent expenditure and revenue will be excluded from the assessments.

Property Developers

5.4.4 Property developers are private sector entities.

5.4.5 For the financial assessment, all expenditure and revenue is excluded. For the calculation of economic costs, expenditure on property development is included.

6. Proposed Methodology for Task II

6.1 Overall Approach

6.1.1 Based on the alternative approaches set out in Chapter 2, consideration of past and current experience and discussions with Planning Department, Task 2 will focus on a broad assessment of the Options provided under the Reference Scenario. This will incorporate:

- Assessment of Option A and Option B using the development that is mutual between the two options as a baseline (set out as Alternative 5 in Chapter 4)

6.1.2 The assessment therefore will determine the incremental impact of Option A and Option B relative to the baseline. This means that data will refer only to expenditure and revenue over and above that which would take place under both options.

6.2 Assessment Criteria

6.2.1 For Task II, financial assessment will focus on two main criteria: NPVs and IRRs – these are the two most commonly used methods in economic and financial assessment. NPV curves will be provided, which will cover a wide range of discount rates. This approach draws on best practice in financial evaluation since at this stage in the assessment, a financial projection assessment is too detailed and cash flow specific for the level of analysis to be undertaken. Essentially the reason for their use is that they capture the costs and benefits as they occur at different points in time and they express the results according to a common numeraire which is essential for decisions having long-term impacts. The NPV is the value today of the
future net benefits of the Planning alternatives. The IRR determines whether the alternative over its lifetime achieves some desirable target level of net benefits.

6.2.2 For the economic assessment, public consultation revealed a set of criteria on which the economic performance of the chosen strategy could be judged. These were:

- Enhance GDP
- Strengthen economic base
- Maximise efficient use of resources (land and water)
- Enhance employment opportunities
- Maximise benefit to cost

6.2.3 The first four criteria are economic benefits. The impact of all four relative to the respective costs are collapsed into the fifth criteria, maximise benefits to costs. Consideration of the first four as criteria is an acceptable way of focusing on particular economic benefits but they disregard the cost element and therefore may be misleading. For simplicity and clarity, Task II will only use one set of criteria, EIRR and economic NPV, the same set as financial but reflecting economic costs and benefits. The first four criteria help to determine the level of benefits and will be reflected in the chosen criteria.

6.2.4 The economic benefits mentioned will be further addressed in the qualitative economic assessment.

6.3 Reference Scenario, Development Options

Reference Scenario

6.3.1 For planning purposes, Planning Department has developed a reference scenario which combines trend-based information with vision targets. The reference scenario contains both qualitative (such as environmental guiding principles) and quantitative planning parameters (such as population, economic land requirements and number of trips generated). The planning parameters will serve as the basis for developing, respectively, options statements (e.g. whether loft development should be allowed/encouraged in vacated industrial premises) and spatial development options (e.g. further development in the New Territories or further development using brownfield sites). Options developed under the Reference Scenario are spatial, that is they provide geographical alternatives for the distribution of population, employment and floorspace but the total population, employment and floorspace for the Territory remain the same.

6.3.2 For Task II, Planning Department will provide a set of planning parameters for the reference scenario and an explanation of how the planning parameters were derived.

Development Options

6.3.3 A development option illustrates a possible future development pattern of principal land uses and key infrastructure, responding to the land requirements defined by the planning parameters. The basic variables for constructing development options include (i) major land requirements (type, amount, general location and broad timing for the development of major land uses for housing, employment, port facilities, logistics facilities and tourism infrastructure); (ii) major transport networks (routes, location, capacity and broad timing for the development of major transport projects including rail system, road system, water transport facilities, major transport
interchanges and additional cross-boundary crossing points); and (iii) areas for protection - the areas that should be protected against major strategic development due to its ecological, heritage, landscape values or due to the presence of geotechnical or other constraints.

6.3.4 Development options under the reference scenario would share a number of comment elements, such as the population and employment projection, port facilities, economic land needs, conservation, Victoria Harbourfront, integrated community, urban renewal and improvement, tourism development, etc. However, the timing of implementation for different projects is a key difference.

Matrix Data

6.3.5 Under each of the development options under the Reference Scenario data for population and employment, by type will be provided by Planning Department for the years 2010, 2020 and 2030. Data will be split into 160 Planning Vision and Strategy Zones (PVS zones). The data provided by Planning Department will also contain estimates of:

- Residential: number of living quarters by housing type
- Commercial (retail and office): GFA
- Industrial/Office: GFA
- Industrial: GFA
- Hotel: number of rooms

6.3.6 Planning Department will also provide a list of committed developments under both options and verbal explanation of the matrix including a description of planning developments and the differences between options.

Other Data

6.3.7 Under each of the development options under the Reference Scenario a strategic infrastructure map and implementation program will be provided by Planning Department. The implementation program will demonstrate which of the infrastructure components will be completed by the years 2010, 2020 and 2030. Planning Department will also make available the latest versions of strategic planning and sub-regional studies and transport studies on which the development options are based, or which provide additional descriptive explanation of the alternative options. A list of required documents is included in Appendix B.

6.4 Financial Assessment

Basic Assumptions

6.4.1 The financial assessment will be undertaken from the perspective of the Government of the HKSAR. This means that the returns refer to returns to government from public sector expenditure, under the development options.

6.4.2 The assessment will use January 2002 prices. All assessment and calculation will be done in constant prices that exclude inflation. Discount rates will be based on existing government practice, as advised by Planning Department. Recent projects have used discount rates of 4%.
6.4.3 The assessment will calculate FIRRs over the period 2002 to 2030 and NPVs in constant 2002 prices. Residual values for property development and infrastructure will be included at the end of the period.

**Expenditure**

6.4.4 Taking into consideration the government and institutional assumptions described in the previous chapter, financial expenditure only includes capital costs, except for the recurrent expenditure on maintenance and management of public housing. Other maintenance and operational costs are excluded from the calculations since they are either covered by matching revenues (rates) or by user fees and charges (water, sewerage and drainage and highways).

6.4.5 Expenditure estimates will be provided by: the surveyors (Insignia Brooke), for land/property based expenditure [see Appendix C for assessment methodology], public housing and Government/Institutional and Community (G/IC) facilities; the engineers (Mott Connell) for engineering and infrastructure works; and the environmental specialists (Mott Connell/Hyder) for environmental mitigation measures. Estimates will be based where possible using existing studies and research and/or information provided through Planning Department, including information from other Government Departments.

6.4.6 Financial expenditure items will include:

**Land Assembly**

6.4.7 Land assembly includes resumption and compensation costs for major infrastructure and urban renewal schemes but excludes resettlement housing. Estimates will be based on recent comparables, the proposed size of the scheme, transport alignment and PVS zone. Transport alignment, type and land area will be provided through existing studies and/or by Planning Department.

**Site Formation**

6.4.8 Major site formation costs in relation to, for example, new town development will be development specific and will be based on recent comparable schemes, proposed size and location. Site area will be provided by Planning Department.

**Public Housing and G/IC (including maintenance and management)**

6.4.9 Public housing and G/IC construction costs will be based on unit costs for recent comparable schemes and proposed GFA. Estimates will include on-site and immediate off-site services including power, communications, water, sewerage and drainage. Estimates for maintenance and management will be based on existing comparable housing estates and G/IC facilities. A unit rate per flat or proportion of capital value will be established.

**Transport Infrastructure and Port Development**

6.4.10 The capital cost of strategic transport and port infrastructure will be project specific, based on the identified requirement. Infrastructure will include rail, port development and highways.
Utilities

6.4.11 If included in the assessment, the capital cost of additional major infrastructure will be project specific, based on the identified need for facilities.

Environmental Mitigation

6.4.12 If possible the environmental mitigation will be project specific. However, at Task II, it is unlikely that there will be enough information from the Strategic Environmental Assessment (SEA) to provide any estimates of environmental measures. A broadbrush estimation of the cost will be adopted for the purpose of this assessment exercise.

Revenue

6.4.13 Revenues to Government will mainly be estimated based on analysis by the surveyors (Insignia Brooke) in conjunction with GHK. Revenues to Government will include:

Land Premium

6.4.14 Land premium will include premium received from land sale/land grant for development of residential, commercial, office, I/O, industrial, hotels and also port, utility installations and other special facilities. Land premium will also include property related developments by MTRC, KCRC but exclude property development by the URA.

Lease Modification Premium

6.4.15 Premium from land exchanges or modification of Government leases will be included as for land premium. Premium reflect enhancement (if any) in the value of the lot derived from the modification, that is, the difference between the land value before and after modification which are assessed to Full Market Value.

Government Rent

6.4.16 Estimates of incremental revenues from government rent will be based on rateable value of new property and increased rateable value of existing property.

Rentals on Government Housing

6.4.17 Rentals on government housing will be based on comparable rental prices for existing schemes.

Results

6.4.18 Financial assessment will include clear summary presentation of calculated annual revenues and expenditures and PVs of each. Detailed tables of the calculation of revenue and expenditure items will be provided as necessary.

6.4.19 Calculation of NPV curves and FIRR will be clearly set out and a summary of the key parameters, sensitive inputs and outputs and the implications of the results will be provided.
6.5 Economic Assessment

Basic Assumptions

6.5.1 As with the financial assessment, the economic assessment for Task II will determine the incremental impact of each of the development options, when compared to the baseline. This means that all data will refer to economic costs and benefits over and above that which will take place under each of the development options.

6.5.2 The assessment will use January 2002 prices. All assessment and calculation will be done in constant prices that exclude inflation. Discount rates will be based on existing international and/or government practice, as advised by Planning Department.

6.5.3 The assessment will calculate EIRRs over the period 2002 to 2030 and economic NPVs in constant 2002 prices. Residual values for property development and infrastructure will be included at the end of the period.

Economic Costs

6.5.4 Economic cost estimates will be based on the financial expenditure estimates. For the majority of costs, the financial price and the economic value is the same and thus no adjustment is necessary. In addition, as noted in Chapter 4, the economic costs include some items excluded from the financial expenditure estimates since they are not borne by the Government. These expenditure items are included in the economic assessment.

Land Assembly

6.5.5 The economic cost of land is determined by its ‘opportunity cost’ or its value in its next best alternative use. In Hong Kong, resumption costs are likely to be higher than the land value for its alternative use, and thus the consultants expect the economic cost of land assembly to be lower than the financial cost. Compensation costs are monetary transfers and thus compensation payments are excluded from the economic assessment.

Site Formation

6.5.6 Site formation costs are largely engineering costs and the economic cost will be the same as the financial cost.

Public Housing and G/IC (including maintenance and management)

6.5.7 Public housing and G/IC construction costs are largely engineering costs and the economic cost will be the same as the financial cost.

Transport Infrastructure and Port Development

6.5.8 Transport infrastructure and port development costs are largely engineering costs and the economic cost will be the same as the financial cost. The economic cost will also include the recurrent cost of highway maintenance.
Utilities

6.5.9 Utility facility construction costs, again are largely engineering costs and the economic cost will be the same as the financial cost.

Environmental Mitigation

6.5.10 If possible the economic costs of environmental mitigation will be adjusted from the financial cost to reflect the true cost to society, depending on the extent of the proposed measures. This can be estimated by assessing the cost of mitigation measures that result in no impact. At Task II, the ability to accurately assess the economic cost will be limited, depending on the level of detail provided under the SEA.

Property Development

6.5.11 The costs of property development will be included in the economic assessment, based on unit costs of construction for types of use. Costs will include all private sector property development and development undertaken by public corporations and authorities.

Economic Benefits

6.5.12 Despite the concerns raised in Chapter 4, property values remain the single most appropriate assessment of economic benefits. The consultants will be actively involved in assisting the surveyors to adopt appropriate assumptions and considerations in their valuation of property.

6.5.13 The valuation of economic benefits for Task II is proposed to be limited to two factors:

- The rateable value of new property development. The rateable value of new development will be assessed by the surveyors (Insignia Brooke) and will take into account use type, location, access to transport links, environment amongst other factors.

- The increase in rateable value of existing property, either through redevelopment or as a result of other changes such as improved transport or a cleaner environment. The increase in rateable value will be judged by surveyors, based on knowledge of proposed property and infrastructure development under each proposal.

6.5.14 The use of this technique enables many economic benefits to be captured in a simplified calculation that truly reflects the value that society places on economic, social and environmental factors.

6.6 Qualitative Assessment

6.6.1 The Planning Strategy will impact on many social and economic aspects of life in Hong Kong and while the financial and economic assessment will identify and measure the main differences between the alternatives, not all the impacts can be measured and incorporated. In order to ensure nothing important is overlooked, the Consultants will discuss the likely impacts of the alternatives on non-quantified social and economic criteria.
6.6.2 Factors to be incorporated in the qualitative assessment include those identified by the public consultation (the first four) and a variety of other factors covering environment, social, community and transport related benefits such as:

- GDP
- Strength of economic base
- Use of land (water) resources
- Employment opportunities
- Conservation of natural resources and heritage
- Congestion
- Pollution
- Resettlement
- Amenity
- Journey to work
- Urban vibrancy
- Urban design
- Community building and social cohesion
- Linkages with the mainland

6.6.3 The approach is outlined in the following paragraphs.

6.6.4 This non-quantified part of the analysis will be presented as a discussion of each criterion. The conclusion will be the identification of which (if any) alternative is preferred for each scenario and whether it is likely that the differences among the alternatives are significant. The conclusions reached by this analysis will be based on reasoned justification and informed judgement in consultation with the Planning Department and concerned parties.

6.6.5 It is likely that different alternatives will be preferred for the different criteria; i.e. there will be no clear-cut preference for an alternative for any scenario across all the criteria. Conflicts between the options for the different criteria should be revealed to Government as clearly as possible. By definition, of course, the conflicts cannot be resolved by analysis since quantification of the differences will not have been possible.

6.6.6 The Consultants will prepare a summary table following the discussion of the criteria and how the alternatives impact on them. The summary table will list the criteria, identify which alternative is preferred and whether the differences are likely to be significant. Some sensitivity tests based on different criteria weights may be applied to these results. However, any weighting and sensitivity tests which are undertaken will only be performed under the guidance of the Planning Department.

**Input from Transport and Environmental Assessments**

6.6.7 An independent transport assessment of the Reference Scenario options is being undertaken. The consultants understand that the assessment will involve utilization of the transport model to determine if the options cause bottlenecks or serious capacity problems. The model will generate number and length of trip, average time and speed. The transport assessment will provide useful inputs to the quantitative assessment and the opportunity to liaise and share information should not be missed.
6.6.8 There is also an independent assessment of the Reference Scenario options being undertaken for the environment. The Strategic Environmental Assessment (SEA) will address possible environmental issues including noise, water, air quality and ecological impacts. As with the transport assessment, environmental considerations are incorporated into the financial and economic assessments and information from the SEA will provide key inputs.

7. Proposed Methodology for Task III

7.1.1 Task III assessment will include quantitative financial and economic assessments as well as a qualitative economic assessment of:

- Preferred Option
- Preferred Option against a baseline of committed developments
- Sensitivity analyses of the various options under different What If Scenarios
- Broad assessment of the response plans in terms of their economic and financial implications

7.1.2 The consultants will review the methodology used in Task II in the light of the assessment and its results. If necessary, the consultants will provide an additional Methodology Working Paper 3A to recommend minor modifications to the overall approach or the valuation exercise.

Footnotes

1 Many ‘existing’ occupiers will, of course, be newly arrived in the period from now until 2030. ‘Existing’ really means ‘common’ to the options.

2 Existing refers to investments that are common to all options, including commitments and projects under planning.

3 Source : Budget 2002/03, Government of the HKSAR, Expenditure Estimates, Head 194, Water Supplies Department

4 Source : Budget 2002/03, Government of the HKSAR, Expenditure Estimates, Head 39, Drainage Services Department

5 Source : Budget 2002/03, Government of the HKSAR, Capital Investment Fund

6 Resumption costs refer to the costs associated with land resumption under the provision of the Lands Resumption Ordinance, Roads (Works, Use and Compensation) Ordinance, Railways Ordinance and the Urban Renewal Authority Ordinance.
The Territorial Development Strategy Review (TDSR) was undertaken in early 1990s with a view to formulating a strategic planning strategy for Hong Kong. The strategy option formulation and evaluation process was an important part of work in the review. The process moved through a number of stages from the generation and testing of Initial Options and Hybrid Options to the formulation and evaluation of Preferred Options. Economic assessment and financial assessment were undertaken at the Hybrid Option evaluation and the Preferred Option evaluation stages to evaluate the economic and financial implications of alternative development options.

The TDSR evaluation process focused solely on comparing the differences between the alternative development options. The evaluation was concerned about the distribution of strategic increments of growth beyond the base growth pattern – a common base for all options. It is noted that the strategic "quantities" under different options were constant, e.g. different options have the same amount of housing land and industrial land. In practice, the option formulation process could be viewed as a selection of Strategic Packages which contained individual or groups of potential development nuclei plus the necessary off-site infrastructure to sustain them. The components of the six TDSR Hybrid Options are presented in Table 1.

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</tr>
<tr>
<td>Sai Sha</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Whitehead</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Sai Kung</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Tseung Kwan O</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Tung Chung</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Tai Ho</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Discovery Bay</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
At the Hybrid and Preferred Option evaluation stages, economic assessment was first carried out to demonstrate that the options would allow Hong Kong to get the best value for money; financial assessment was carried out at a later stage in the process to check for affordability. The results of the two assessments were subsequently fed into an option evaluation matrix which evaluated the performance of alternative development options against a wide range of performance criteria covering economic, land use, environment, transport and implementation aspects. The performance criteria linked to economic and financial assessments are presented in Table 2.

Table 2: Performance Criteria Linked to Economic and Financial Assessments

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Performance Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximise the impact of TDS on GDP</td>
<td>Contribution to GDP directly estimated from strategic property and the value of transport benefits to Base Growth activities.</td>
</tr>
<tr>
<td>Minimise development costs of land and servicing</td>
<td>Opportunity cost of land and economic costs of land formation and servicing.</td>
</tr>
<tr>
<td>Minimise road freight transport costs</td>
<td>Goods vehicles’ transport costs.</td>
</tr>
<tr>
<td>Maximise the Benefit/Cost ratio of TDS investment</td>
<td>Ratio of undiscounted economic benefits to costs for differences between options.</td>
</tr>
<tr>
<td>Maximise the economic rate of return to TDS investment</td>
<td>Economic rate of return (ERR) and Net present value (NPV) for complete options.</td>
</tr>
<tr>
<td>Maximise strategy flexibility to performance relationships of TDS programme</td>
<td>Professional judgement (through examining the sensitivity of the options to the availability and cost of capital etc.).</td>
</tr>
<tr>
<td>Minimise freight time/costs to major economic centres in neighbouring Territories</td>
<td>Goods vehicles and passenger trip costs to and from border crossing points.</td>
</tr>
<tr>
<td>Maximise the private sector proportion of costs for infrastructure projects</td>
<td>Cost of private sector projects and private sector contribution to joint projects. Proportion of capital investment of total TDS.</td>
</tr>
<tr>
<td>Maximise the financial return of private sector projects</td>
<td>Financial rate of return of private sector projects and private sector contribution to joint projects.</td>
</tr>
<tr>
<td>Minimise capital expenditure of public sector</td>
<td>Cost of public sector projects and contribution of public sector to joint projects.</td>
</tr>
<tr>
<td>Minimise recurrent expenditure of the public sector</td>
<td>Discounted average annual recurrent costs of maintaining proposed public projects.</td>
</tr>
<tr>
<td>Maximise revenue to public sector from land sales for private sector housing, office/commercial development, industrial and storage development, and from rates revenue</td>
<td>Discounted value of land sales in each sector, and discounted stream of rates revenue.</td>
</tr>
<tr>
<td>Maximise the financial rate of return of public sector projects</td>
<td>FRR of capital and recurrent public expenditure on projects and public sector contribution to joint projects.</td>
</tr>
<tr>
<td>Ensure that total TDS Capital public expenditure does not exceed Finance Branch budgetary guidelines on proportions of Government expenditure</td>
<td>Finance Branch budgetary estimates and guidance.</td>
</tr>
<tr>
<td>Minimise the demand on construction sector capacity</td>
<td>Professional judgement in line with Finance Branch estimates and guidance (through assessing funds available for public capital expenditure etc.).</td>
</tr>
</tbody>
</table>
A different method was adopted at the Hybrid and Preferred Option evaluation stages. The evaluation method for Hybrid evaluation was more broad brush and concentrated on the marginal differences between options with discounting over time being ignored, assuming the programming of investments would not differ significantly amongst the various Hybrid Options. It is noted that the costs and benefits of Strategic Packages in a development option were first assessed and added up to give the costs and benefits of the development option.

The approach to estimating economic and financial benefits and costs is presented in Table 3. It is noted that:

- the benefits and costs as a result of base growth were deducted
- the concept of land and property values, which represented the willingness of the community to pay for the use of investments, was employed as a measure of economic benefits
- recurrent costs were recapitalised for initial Hybrid Option evaluation
- the financial benefits and costs to both the Government and the private sector were assessed in the financial evaluation
- no transfer of money was considered, e.g. the costs involved in Government use of Government land was ignored
- benefits and costs were expressed at constant price to eliminate the effect of inflation
- a discounted rate of 4% was used in the economic evaluation and the discounting period was from 2041 to 1994.

Table 3: Approach to Estimating Economic and Financial Benefits and Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>Assessment Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic benefits</td>
<td>The changes in annual rental values of property (residential, office, industrial, hotel and some special uses).</td>
</tr>
<tr>
<td>Economic costs</td>
<td>Land opportunity costs – the difference in land value if used for alternative use in the absence of TDS proposals.</td>
</tr>
<tr>
<td></td>
<td>Site formation costs – covered land reclamation / formation / servicing costs.</td>
</tr>
<tr>
<td></td>
<td>Off-site infrastructure costs – included trunk sewage collection and treatment facilities.</td>
</tr>
<tr>
<td></td>
<td>On-site infrastructure costs – included water distribution / drainage / sewage collection networks, landscaping and roads.</td>
</tr>
<tr>
<td></td>
<td>Costs of strategic transport links – strategic transport links included railways and highways</td>
</tr>
<tr>
<td></td>
<td>Building / construction costs – varied across the territory with the geotechnical conditions of the locations and the requirements for gas, electricity and telecommunication services. Demolition and replacement costs were ignored.</td>
</tr>
<tr>
<td>Financial benefits to the private sector</td>
<td>Proceeds of sale of property</td>
</tr>
<tr>
<td>Financial costs to the private sector</td>
<td>Land purchasing costs, lease modification premium, building costs</td>
</tr>
<tr>
<td>Item</td>
<td>Assessment Method</td>
</tr>
<tr>
<td>------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Financial benefits to Government</td>
<td>Lease modification premium, land sales to the private sector, proceeds of sale of public housing, rent from rental housing and property rates</td>
</tr>
<tr>
<td>Financial costs to Government</td>
<td>Land acquisition, platform formation, infrastructure servicing, development of transport links, construction of community facilities and open spaces, construction of public housing</td>
</tr>
</tbody>
</table>

The relationship between performance criteria and economic and financial assessments is presented in Table 4.

### Table 4: Relationship between Performance Criteria and Economic and Financial Assessments

<table>
<thead>
<tr>
<th>Item</th>
<th>Outputs of Economic and Financial Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Land resumption costs</td>
</tr>
<tr>
<td>2</td>
<td>Land economic costs, clearance costs, formation costs</td>
</tr>
<tr>
<td></td>
<td>Civil engineering costs (roads, railways, sewerage, site servicing)</td>
</tr>
<tr>
<td>3</td>
<td>Building costs (community facilities, residential, commercial, industrial)</td>
</tr>
<tr>
<td>4</td>
<td>Base growth benefits</td>
</tr>
<tr>
<td></td>
<td>Optional increments of benefits</td>
</tr>
<tr>
<td>5</td>
<td>Other project benefits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Performance Criteria</th>
<th>Hybrid Option Evaluation</th>
<th>Preferred Option Evaluation</th>
<th>Source Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Maximise private investment</td>
<td>✓ √</td>
<td>✓ √</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>B</td>
<td>Minimise public capital expenditure</td>
<td>✓ √</td>
<td>✓ √</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>C</td>
<td>Minimise land and servicing costs</td>
<td>✓ √</td>
<td>✓ √</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>D</td>
<td>Restrain capital expenditure</td>
<td>✓ √</td>
<td>✓ √</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>E</td>
<td>Minimise construction impact</td>
<td>✓ √</td>
<td>✓ √</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>F</td>
<td>Maximise Government Revenue</td>
<td>✓ √</td>
<td>✓ √</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>G</td>
<td>Minimise contribution to GDP</td>
<td>✓ √</td>
<td>✓ √</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>H</td>
<td>Maximise private FRR</td>
<td>✓ √</td>
<td>✓ √</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>I</td>
<td>Maximise public FRR</td>
<td>✓ √</td>
<td>✓ √</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>J</td>
<td>Maximise benefit to cost ratio</td>
<td>✓ √</td>
<td>✓ √</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>K</td>
<td>Maximise EFF &amp; NPV</td>
<td>✓ √</td>
<td>✓ √</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>L</td>
<td>Maximise flexibility</td>
<td>✓ √</td>
<td>✓ √</td>
<td>1, 2, 3</td>
</tr>
</tbody>
</table>

✓ assessed capital costs only
☑ assessed capital costs and recurrent costs
APPENDIX B : LIST OF REQUIRED DOCUMENTS

- Hong Kong 2030 Study: Working Papers
- The Third Comprehensive Transport Study
- The Second Railway Development Study
- Cross-Boundary Travel Survey 2001
- Feasibility Study for Additional Cross-border Links
- Port Development Strategy Review 2001

- Urban Renewal Strategy Study
- Land Use Restructuring Studies
- "Business" zone concept and guidelines for rezoning of industrial land
- Second Survey to Ascertain the Parameters for Forecasting Employment Distribution

- Planning and Development Study on North East New Territories
- Planning and Development Study on North West New Territories
- Study on South East New Territories Development Strategy Review
- South West New Territories Development Strategy Review
- Stage II Study on Review of Metroplan and the Related Kowloon Density Study Review
- Planning and Development Study on Hong Kong Island South and Lamma Island

- Planning Study on the Harbour and its Waterfront Areas
- The Focus Study on Aberdeen Harbour
- Wan Chai Development Phase II
- Western District Development Strategy
- Study on Revitalisation of Tai O
- Study on Village Improvement and Upgrading of Lei Yue Mun Area
- Preliminary Feasibility study on Logistics Park Development at Tung Chung East
- Feasibility Study on Development for Additional Population Growth in North West New Territories
- Feasibility Study on Development for Additional Population Growth in North East New Territories
APPENDIX C : METHODOLOGY FOR ASSESSING LAND / PROPERTY RELATED EXPENDITURES AND REVENUES

Methodology for Assessment of Revenue to be generated in relation to Property Developments

1. Land Premium

Land revenue is secured by the Government via the payment of premium by private parties as consideration in relation to land grants, land exchanges or the modification of existing Government Leases, particularly for the purposes of property development. The revenue to be secured via the payment of land premium relates to two main categories of property development. The first category comprises residential, commercial, industrial, industrial/office ("I/O") and hotel development, whilst the second category of development includes ports, utility installations and other special facilities. For the purposes of this study, the land premium in respect of each category of property development will be assessed by multiplying the gross floor area ("GFA") of each type of property by the analysed Accommodation Value ("AV") associated with the respective type of property.

First Category: Land premium associated with residential, commercial, industrial, I/O and hotel developments

The first step of the assessment of premium will be to identify the annual supply of GFA of each type of property within this category, within each of the Planning Vision and Strategy ("PVS") zones as defined by the Planning Department. Given that the projection of the aggregate stock of GFA associated with office, industrial-office and industrial properties in the years 2006, 2011 and 2016 will be provided by the Planning Department, an interpolation method will be applied to establish the average annual supply of GFA in respect of these types of property within each PVS zone. With regard to the hotel, public and private residential properties, given that only projection of the aggregate stock of number of room or flat associated with these types of property will be provided by the Planning Department, an average room size or flat size associated these properties within each PVS zone will be assumed, in order to establish the average annual supply of GFA in respect of these properties within each PVS zone.

The annual supply of GFA within each PVS zone, as derived from the information provided by the Planning Department, will be divided into two sources. The first source will represent supply from the release of new sites by the Government, whilst the second source will relate to supply associated with the redevelopment of privately held lots via land exchanges or the modification of Government Leases. The two sources of GFA supply will be derived by assigning a percentage to each of the two sources. The percentage in respect of each source of GFA supply within different districts will vary and will be determined with reference to existing land use patterns, development intensities, plot ratio controls and general lease restrictions applicable to particular districts.

a) Land Premium from New Grants

Having identified the average level of annual supply of GFA from new grants in respect of each type of property within each PVS zone, the next step will be to assess the AV associated with each type of property development within each PVS zone. Reference will be made to the market AV’s achieved via Government land auctions and private land transactions. These market AV’s will be adjusted to reflect factors such as location, proximity to transport nodes, the provision of government facilities, as well as the scale, period and type of development, in order to arrive at an assessed AV for each type of
property development within each PVS zone. Finally, having multiplied the assessed AV of each type of property development within each PVS zone by the average annual supply of GFA in respect of the same type of property development within the same PVS zone, the amount of land premium associated with each type of property development within each PVS zone will be derived. Land premium of all types of property development within all PVS zones will be summated to derive the total land premium to be generated via the new grants.

b) Land Premium from Land Exchanges or Modification of Government Leases

The approach to the assessment of land premium associated with land exchanges or lease modifications is similar to that adopted in relation to the assessment of land premium to be generated via new grants. However, whilst the land premium associated with new grants is assessed upon the basis of the full market land value of the site, land premium associated with a land exchange or a lease modification is calculated upon the basis of the difference between the full market value of the land under previous lease conditions (before modification) and its value under the modified lease conditions (after modification).

Similar to the assessment of land premium generated via the new grants, the first step will be to identify the annual supply of GFA in each type of property development within each PVS zone, resulting from land exchanges and lease modifications. This information will be derived from the information to be provided by the Planning Department.

Having obtained the average annual supply of GFA from land exchanges and lease modifications in respect of each type of property development within each PVS zone, the next step will be to assess the “After” value of the site associated with this supply of GFA. The same methodology will be adopted to the assessment of the AV as in the case of new grants. Having multiplied the assessed AV by the average annual GFA, the “After” value of the sites associated with the annual supply of GFA via land exchanges and lease modifications can be derived.

The “Before” values of the sites associated with land exchanges and lease modifications will be derived by multiplying the “After” values by a certain percentage, which will be determined with reference to existing land use patterns, development intensities, plot ratio controls and general lease restrictions in connection with a particular district. For example, the percentage of “Before” value to “After” value associated with land exchanges or lease modifications in the New Territories will be lower than the percentage in urban districts, given the fact that the existing development potential utilised to generate the “Before” values in the New Territories (mostly agricultural lots) is lower than that within urban districts (most lots are governed by virtually unrestricted leases).

Finally, the land premium associated with the land exchanges and lease modifications in respect of each type of property development within each PVS zone will be derived. This will represent the difference between the assessed “After” land value and the assessed “Before” land value. Land premium of all types of property development within all PVS zones will be summated to derive the total land premium associated with the land exchanges and lease modifications.
Second Category: Land premium associated with port, utility installations and other special facilities

The methodology to be adopted in relation to the assessment of land premium associated with port, utility installations and other special facilities needs to reflect the fact that the GFA of each individual facility will not be available. The approach to the assessment of land premium is similar to that adopted for residential, commercial, industrial, I/O and hotel developments, except that in this case, the GFA is derived by multiplying the site area of each facility, identified from the studies and reports provided by the Planning Department, by a plot ratio which reflects the nature and intensity of the facility. This is the common practice adopted in relation to special facilities of this type. The AV’s utilised to calculate the land premium revenue will be assessed by reference to transactions associated with industrial development sites in particular locations.

Mass Transit Railway Corporation and the Kowloon-Canton Railway Corporation

It has been assumed that full market land premium will be secured via the disposal of sites for the purposes of railway related property developments to be implemented by the Mass Transit Railway Corporation and the Kowloon-Canton Railway Corporation.

Housing Authority, Housing Society and Urban Renewal Authority

It has been assumed that no land premium will be secured via the allocation of sites for the purposes of the development of public housing by the Hong Kong Housing Authority (“HKHA”) and the Hong Kong Housing Society (“HKHS”).

Given the fact that information regarding the sites to be redeveloped by the Urban Renewal Authority is not readily available, it has been assumed that any premium to be derived via the granting of land associated with redevelopment projects to be initiated by the Urban Renewal Authority will be utilised to subsidise the compensation costs to be paid by the Urban Renewal Authority to affected residents. Therefore, no revenue from this source will be reflected in the analysis.

2. Government Rent

All land leases in the New Territories, and those in New Kowloon north of Boundary Street, expired on 27th June 1997. However, Annex III to the Sino-British Joint Declaration provided that non-renewable land leases which expired before 30th June 1997 would be automatically extended up to 30th June 2047 without payment of an additional premium, but with a new level of Government Rent becoming payable from the date of extension. It was stipulated that this Government Rent would represent 3% of the Rateable Value of the property. In addition, all land leases, whether on Hong Kong Island, Kowloon, or the New Territories which have been granted since 27th May 1985, the date from which the Joint Declaration took effect, are also subject to the payment of this new Government Rent with effect from 1st July 1997.

Prior to the assessment of Government Rents associated with real estate properties, the Rateable Values of these properties will need to be assessed. The Rateable Values of existing and future properties will be derived by decapitalising the current capital values of these properties, utilising appropriate property yields.

In the case of existing properties, which will enjoy an enhancement in Rateable Value as a result of infrastructural improvements in the locality, the enhancement in Rateable Values will be assessed by estimating the enhancement in the capital values of these properties
resulting from the infrastructural improvement, and then decapitalising the enhancement in capital values utilising the appropriate property yields.

Having obtained the Rateable Value of the properties and the enhancement in Rateable Value, the amount of revenue to be secured from Government Rent associated with real estate properties can be obtained by multiplying the Rateable Value by three percent.

3. Income from the Disposal and Leasing of Properties held by the HKHA and the HKHS (Not necessary to be the same income to Government)

Following the recent changes in housing policy of the Government, this category of income has been focused on the assessment of the net gain in rental income to be derived via the leasing of public rental housing (“PRH”) flats held by the HKHA, and has excluded the income generated via the leasing of shopping arcades and the car parking spaces held by the HKHA and the HKHS, as well as the income from disposal of the flats from various schemes, such as Home Purchase Schemes and the Private Sector Participation Schemes. The rental income to be derived via the leasing of public rental housing flats held by the HKHA will be analysed upon the basis of the annual reports and relevant information available from the HKHA, the HKHS and the Rating and Valuation Department.

Methodology for Assessment of Costs to be incurred to facilitate Property Developments

1. Provision of Infrastructure, Site Formation, Reclamation, Transportation, Drainage and Sewage

The construction costs which are directly related to infrastructure, site formation, reclamation, transportation, drainage and sewage facilities will be assessed by Mott Connell. Compensation costs associated with the land resumption which will need to be undertaken to facilitate implementation of these projects will be assessed by Insignia Brooke, based upon the adoption of unit compensation costs for different districts, similar to the existing standard ex-gratia rates adopted by the Government. These unit compensation costs will be assessed with reference to the average capital value of each type of property to be resumed for the purposes of the provision of infrastructure within each district.

2. Provision of Public Housing

The construction costs relating to the provision of public housing will be assessed by multiplying the relevant average unit construction costs by the gross floor area of public rental housing and Home Ownership Schemes / Private Sector Participation Schemes to be provided by the HKHA within the time period during which the quantity of production of public housing flats can be reasonably identified.

3. Construction Costs of Private Property Developments

Although these costs are not incurred by the Government and are reflected in the land premium assessment, the total construction cost and professional fees relating to each of the property development will be calculated using unit costs in respect of each type of property development.