



The Central-Wanchai Bypass

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1. Introduction

1.1 Purpose of this report

This Report examines two scenarios, these being the situation where no new bypass is constructed and where a new bypass is constructed for the relief of traffic congestion in Central and Wanchai. The bypass in question is the proposed Central-Wanchai Bypass (CWB) as part of the Central Reclamation Phase III project.

In examining the situation where the CWB is not constructed then consideration is given to alternative means of dealing with traffic. Where the CWB is constructed, the general pros and cons of the bypass are considered.

This Report deals with the traffic and transportation aspects on a qualitative basis only and does not seek in any way to address highway design issues such as alignment nor does it seek to comment on the general engineering issues such as the amount of reclamation required to accommodate the CWB.

1.2 Background

There are already many existing traffic-related problems on the north shore of Hong Kong Island, and in particular for the areas of Central and Wanchai. These problems cause congestion and pollution, and conflicts between traffic and pedestrians on the local streets. The root cause is the high density of development, the associated high level of traffic and a comparatively limited road network which has evolved historically rather than being planned for modern traffic demands. This is compounded by the concentration of cross harbour traffic at the Central Harbour Tunnel (CHT) while the Eastern Harbour Tunnel (EHT) and Western Harbour Tunnels (WHT) are considerably less busy.

The current problems will worsen because traffic demand will grow as the economy recovers and as development continues. The HKSAR Government and the community need to agree on providing a solution otherwise “by default” there will be “management by congestion”, with even longer queues of slow moving or stationary traffic and even worse traffic related pollution. This state of affairs is labelled “management by congestion” because some traffic (and possibly some development) will be discouraged, and a balance will be found between traffic and congestion, but most probably at a higher level of congestion than currently experienced. A better solution to the current and future problems will need to include construction of new infrastructure, policy initiatives, and traffic management schemes with an appropriate balance struck between them.

Although the HKSAR Government is studying ongoing schemes to pedestrianise parts of Central and Wanchai and continually reviews the traffic situation, the focus of this Report is the CWB and the associated surface roads, especially Road P2 (a 3 lane highway) which are aimed at bringing about the improvement in traffic conditions. This Report describes the operation of the CWB as currently planned in order to illustrate how it will help to relieve congestion. But it is clear that there needs to be accompanying demand management and new policy measures in order to make the most effective use of the CWB. The need for policy and management measures is made even more necessary as the anticipated opening date for CWB is 2012, some 8 years hence, and a plan is needed for the intervening years to improve traffic conditions and accommodate traffic growth.

1.3 Criteria Justifying the CWB

The justification for a new highway depends on the technical criteria and the policy context in which these are applied. The major technical criteria conventionally adopted include:

- Economic cost/benefits for the project;
- Improved operational conditions of the network;
- Improved accessibility to key developments;
- Relief to congestion on specific key corridors
- Improved journey times and speeds; and
- Improved environmental conditions.

Previous justifications for the need for the CWB were carried out through the 1980's and 1990's, which also addressed the environmental impact. The traffic justifications would have used criteria such as the above, but were unlikely to have included an explicit allowance for any "loss of amenity" resulting from the reclamation necessary to build the CWB. This is because much of the technical analysis would have taken place before the enactment of the Protection of the Harbour Ordinance (PHO) in 1997. Also it is likely that public access to the waterfront would have been taken as a proxy for "public amenity" and there would have been the implicit assumption that the detailed planning would ensure that public access to the waterfront and the provision of public facilities at the waterfront would be no worse, and possibly better, than the current provision.

However, it is always the policy context that sets the framework for the acceptability of a project, and determines the need for innovation or other measures. In particular, there are the two related issues of "restraint on vehicle usage", such as Electronic Road Pricing (ERP), and "managing the demand" between the three cross harbour tunnels, which in effect is another form of restraint that would require an increase in tolls at the CHT. Debate on both issues is increasing. In the publication, *All about Central Reclamation Phase III* (December 2003), the Housing, Planning and Lands Bureau stated that there was no consensus as yet on these subjects. The fact is the authorities have yet to put these options to the public for a serious debate.

In general, provision for demand is still the basis for highway planning in Hong Kong, as it is in many other cities. This is likely to remain so until policy-makers, legislators and the general public are prepared to accept a change. There is some growing criticism in Europe of this "predict and provide" approach because it may ignore alternative possible policies, such as either changing the landuse plan, or consider "restraint" and "demand management" measures. However, such criticisms are generally made in countries or cities where there is a very extensive highway network, and ample supply of roads. In contrast, Hong Kong has the highest number of registered cars per kilometre of roads than any other country in the world because of its very high density of development. Hong Kong's growth trajectory and transport requirement are different from other cities, and the "predict and provide" approach is not as relevant for Hong Kong as elsewhere.

The underlying policies on transport provision are critical to the justification of a project such as the CWB. There is the question of whether the PHO, as interpreted by the Court of Final Appeal's Judgment (CFA Judgment) handed down on 9 January 2004, would undercut the case for the CWB because the requirement to "protect and preserve" Victoria Harbour represents a new policy. One argument "for" the CWB is that, so far, there are no alternative

strategic traffic management concepts proposed in its place although this sort of argument is being tested in court by the Central Reclamation Judicial Review (case starting 9 February 2004). The authorities are arguing that the choices faced by the authorities and the public are either to construct the CWB or face congestion in the foreseeable future. It may be unfortunate that the choices are so limited, but the provision of the CWB and associated roads, such as Road P2, are a part of the development plans in Central and much of the development, especially the International Finance Centre Phase I and Phase III (IFC), are already built.

1.4 Review of Justification of CWB and Road P2

Much of the traffic justification for the CWB was undertaken in the 1990's when the assumptions upon which the traffic forecasts were based were different from those used nowadays. Four main examples illustrate this:

- Several of the strategic highways which would have fed into the CWB have been cancelled or are in doubt, namely Route 7 and the Green Island Link;
- The planning context of population levels in Hong Kong has been reduced;
- The development on Central Reclamation Phase III and in the immediate catchment of the CWB have been reduced; and
- The pattern of cross harbour tunnel tolls currently charged places greater emphasis on the CHT than assumed and this will alter the traffic flow on the roads feeding the tunnels, including the CWB.

As for the surface roads, including Road P2 which provides east-west access along the Wanchai and Central Reclamations, their sizing may need review because of the reduced level of development. However, the developments which have already taken place in Central, in particular the IFC, do require transport support.

There is a case for reviewing the traffic justification for the CWB and the associated road systems. Although it may be argued that each individual change in the previously made traffic assumptions is likely to be small and therefore the overall conclusion for the need of the CWB will be unaltered, it would be prudent and responsible to cross-check that there remains a real need and the extent of that need, which has to be done in any case to satisfy the "overriding need" test set by the CFA Judgment for the presumption against reclamation to be rebutted. The review should include the design of interchanges and ensure that they are consistent with the latest forecast of traffic patterns.

One particular aspect that should be reviewed is the connectivity between the CWB and the two main north-south primary distributors, Canal Road and the Cotton Tree Drive/Garden Road pair; currently the linkage is circuitous and indirect. This may not have been of importance when the CWB was initially proposed and designed, and the development on the reclamation provided the major source of traffic; however, now that the reclamation development is much reduced, the connectivity to other traffic sources is more important, in order that the capacity of the CWB can be fully used.

It is for the HKSAR Government as the project proponent to make the case for the CWB project. The recent *Review of CR III Reclamation and the Essential Works* published by the Housing, Planning and Lands Bureau in November 2003 provided a useful discussion of the

engineering arguments for the reclamation. However, the traffic arguments were limited to selected statistics from two recent runs of the CTS3 model, one of which included the CWB and Road P2, the other excluded both roads. It would have been preferable to see the findings of a more comprehensive Traffic Impact Analysis, so that the whole picture could be obtained, and good documentation prepared to show how different areas would use the CWB.

For example, it would be helpful if the assessment considered how the implementation could be supported by appropriate policies and management to encourage the use of the CWB; improve the balance of traffic between the cross harbour tunnels; and spread the benefit of the additional capacity through the currently congested areas, which would in turn make the project more sustainable in the long term. This approach should also include grasping the opportunities to introduce measures such as pedestrianisation of key roads where there are large pedestrian flows.

1.5 The Structure of this Report

This Report presents a short perspective on the past and current approaches to construction of roads and bypasses, here and overseas. This is followed in Section 3 by a discussion of the traffic issues in Central and Wanchai. This is followed in Section 4 with a discussion of the available options for improving traffic in the Central-Wanchai area. Section 5 discusses the operation of the CWB, and examines the cases of “with and without” the Bypass. Section 6 summarises the conclusions and presents ideas for maximising its use, if it were constructed.

2. Perspective on the Development of Bypasses

2.1 A Historical Perspective

Historically, governments throughout the world have built highways to cater for the anticipated increase in demand for movement of people and goods by road. The extent and rate at which they have done this depended by and large on two factors: (i) the space available; and (ii) the estimated rate of growth in the economy. The latter generates both demand for road use and the revenues to pay for infrastructure.

In cities, the rate of growth of demand for private passenger travel by road is ameliorated by the presence of good public transport; and in general, the greater the population and employment density of the city, the greater the share of passenger travel by public transport. Hong Kong is no exception to this general rule and has a very high level of passenger travel by public transport. The provision of high quality public transport does not affect the demand for goods vehicle movements nor does it impact on the use of private vehicles by senior executives and for non-commuting work related travel.

2.2 Locking-in of Benefits

As a general rule, the approach of most governments is to slowly build new infrastructure in response to demand, which fluctuates over time depending on the state of the economy. New highways are built and justified in terms of its economic benefits to road traffic (both goods and passengers) but may also have environmental benefits, especially road by-passes, when through traffic is removed from city streets.

Many road by-pass schemes of towns in the United Kingdom now come as a complete package of by-pass plus town centre improvements designed to “lock in” the benefits of the

traffic reductions created by the by-pass. These improvement schemes typically include pedestrianisation measures, street design to encourage traffic calming, as well as other environmental improvements.

2.3 Restraint of Traffic to Replace Construction

Some cities are now at the stage where lack of space and concern for the environment is causing them to eschew new road projects in favour of pricing some of the traffic off the roads at peak times and from certain areas. London and Singapore are examples where this has been undertaken.

General car ownership in Hong Kong is constrained by the costs of owning and maintaining the vehicle as it is in all other countries. Car ownership increases when disposable incomes move ahead faster than the ownership costs. There is therefore an inherent restraint on car ownership but less restraint on car usage. Pricing schemes such as those used in London and Singapore would produce a more focussed restraint on car usage in terms of time of day and location without affecting car ownership.

3. Traffic Related Issues in Central and Wanchai

3.1 Traffic Problems

The traffic problems are discussed from four separate aspects:

- The traffic aspects associated with the main east-west route;
- Queuing of cross harbour traffic at CHT;
- The issues of access to the new developments already built on previous reclamations in Central; and
- The general traffic issues in the whole area.

3.2 Main East-West Route

Connaught Road Central, Harcourt Road and Gloucester Road currently form the main east-west route. These roads are very heavily used. They are classified as urban trunk roads but are sub-standard for this purpose. Trunk roads are intended to carry longer distance traffic, and junction spacings should ideally be 1km or more. However, the route has frequent side road junctions in the form of off and on slips and a number of underpasses and overpasses which have been constructed to maintain through traffic movements at junctions such as at Pedder Street and at Cotton Tree Drive. It also has many bus stops along its length.

The proliferation of side road accesses creates problems of weaving and merging traffic which have been controlled to a limited extent by a large array of double white lines although it is exacerbated by the stopping and starting of buses. There is congestion throughout much of the day, with long queues on the approach to Central giving tailbacks, both on the western and eastern approach to Central. The CWB and the Road P2 would help to relieve this corridor.

3.3 Cross Harbour Traffic

Gloucester Road is badly affected by traffic queuing to enter the CHT. All other traffic movements are impeded by the queuing traffic. The provision of the CWB is unlikely to have a significant impact on reducing queues at CHT unless there were accompanying policies

such as “toll-balancing” to encourage use of the Eastern and Western Crossings, making use of the CWB to distribute traffic between them, and also using the CWB to enhance the catchment areas of the WHT and EHT.

The reduction in this queuing, would give a significant improvement to traffic operation of the Connaught-Harcourt-Gloucester Road corridor. The most obvious way to achieve this would be a sizable increase of the CHT tolls, and this would be required irrespective of the construction of the CWB.

3.4 Access to Existing Developments

The planning of the IFC and adjacent development was based on the use of roads yet to be constructed on the previous reclamation in Central. New traffic support was seen to be required in order to avoid the congestion in Connaught Place, as it exits on to Harcourt Road. There are already serious delays in the evening peak hours, and these are likely to worsen as the existing buildings become fully occupied. The momentum of this committed development requires improved access. The currently planned solution, namely some additional reclamation and surface roads adjacent to this area, appears to be a reasonable approach, and there is an argument for carrying this forward with some urgency. It is Road P2 which provides this linkage. However, the sizing of this road (3 lanes or two lanes) needs to be reviewed to ensure it is appropriate.

3.5 General Problems in the Area

Traffic related problems that persist throughout much of the working day in Central and Wanchai are a result of heavily used roads and slow moving vehicles. Problems are cumulative. These include:

- Pollution
- High degree of conflict between pedestrians and traffic
- Low traffic speeds
- Extensive one way routings to cater for peak hour traffic and banned turns
- High degree of conflict between servicing traffic and through traffic
- Inadequate footway widths
- Inadequate kerb lengths for loading and unloading due to waiting restrictions
- Poor road hierarchy definition

The high volumes of traffic also cause traffic spilling over from the trunk roads, which is partly also because there is no adequate hierarchy of roads.

3.6 Pedestrianisation and Other Improvements

There have been proposals to ameliorate the general problems. To discourage use of buses and cars, there are the construction of additional rail lines including the KCRC’s Shatin to Central Link, and the possibility of the MTR’s South Island Line. There are proposals to reduce the amount of bus traffic through combining services and introducing “bus-to-bus interchange” to increase bus occupancy. There are also plans for pedestrianising sections of Queens Road in Central and sections of Des Voeux Road. However, the plans for further pedestrianisation are seen as dependent on reducing traffic flows and have therefore been associated with the construction of the CWB, although there has as yet been no formal linkage of these issues, and no formal commitment to the pedestrianisation schemes.

3.7 Issues Identified by Government

The HKSAR Government has noted the existing and future problems arguing if the CWB and the related surface roads are not built:

Table 1: Existing And Future Traffic Issues Listed By Government

Item	Issue
Connaught/Harcourt/Gloucester Corridor	2003 operating over capacity; weekday congestion between 8am to 7pm; tailbacks to Central at East and West
	2011 peak hour flows in excess of capacity by 30%; speeds decline to 5kph; congestion spilling over into other areas;
Other east/west corridors	2011 Hennessey/Queensway fully loaded by local vehicular traffic and pedestrian crossing traffic
CR1 Area, IFC and Airport Railway Station and Ferry Piers	2003 routing of this traffic through the junctions with Connaught Road causes heavy congestion. P2 will relieve this at around 2007
	2006/7 traffic volume will double at around 2006, with completion of various development; Planned opening of P2 at 2007 is necessary to pre-empt extreme congestion.
Travel Between Central and Causeway Bay	2011 to take 45min at 5kph; taxi cost will be \$80 at today's prices

Source: *All About Central Reclamation Phase III*, Housing, Planning and Lands Bureau, December 2003.

3.8 Issues Omitted by Government

Several possible measures have been omitted from the above table, such as traffic management, pedestrianisation, and the management of buses, because “as yet there is no consensus on this subject”, according to the Housing, Planning and Lands Bureau (see also paragraph 1.3). However, it can also be strongly argued that these issues are directly related to the implementation of the CWB and affect its utilisation and the scale of relief it offers other roads. In short, because the CWB is most probably the last opportunity for major road construction in Central, its provision should be part of a comprehensive rearrangement of provision and pattern of movements. Furthermore, this opportunity to generating and stimulating improvements in the general transport network could help to make the CWB an acceptable project to the public. It would therefore appear appropriate for the Bureau to investigate these matters.

4. Options for Improving Traffic Conditions

4.1 Current Position

The existing problems in Central and Wanchai have been studied for many years. It would be fair to say that the existing situation is the culmination of years of fine tuning with traffic engineering solutions and small scale infrastructure improvements. No further significant improvements are likely to be achieved with this type of solution. In order to effect any significant improvements traffic flows in the affected areas must be reduced below their current levels and then held there.

This would be achieved with a combination of new strategic infrastructure, such as the CWB, and management of demand to address the two issues of:

- Reducing traffic on Gloucester Road by changing the balance of traffic between the harbour crossings; and
- Reduction in overall travel demand in Central and Wanchai.

It is likely that the improvement of traffic conditions in Central and Wanchai will require some form of demand management irrespective of construction of the CWB, but it would be less onerous if provision of new infrastructure also played a role.

4.2 Methods for Managing Demand

The mechanisms for managing traffic demand in this area are:

1. The use of tunnel tolls to reduce congestion by changing the balance between tunnels, and ultimately raising all tunnel tolls to such an extent that traffic flows to and from Hong Kong Island are reduced sufficiently to achieve the desired flow reductions in Central and Wanchai. However, any such scheme would only be successful if a substantial proportion of the harbour crossing traffic had an origin or destination either in or passing through Central and Wanchai.
2. A second option would be to introduce ERP such that the cost of travelling on the roads in Central and Wanchai was set at sufficiently high a level to effect the necessary traffic flow reductions. This latter option has the benefit of being much more selective in the choice of target area.

Either option would require a major change in government policy from one of catering for demand by gradually increasing network capacity to one of restraining demand to suit network capacity. For both options there would be a continuing need to increase charges over time so that the deterrent effect is not eroded by inflation and general growth in disposable incomes.

The critical issue is the public acceptability of higher charges for trip-making but enjoying less congested roads for those who elect to pay. It should be noted that higher charges may need to be imposed irrespective of whether or not the CWB is constructed, but they would be much higher in the case of no CWB. Further, charging is accepted in many cities, including London and Singapore. Acceptability of small scale charges would appear likely, but there would need to be a question-mark over the higher charges required for the no-CWB scenario.

Both these options could have a role and could be used together in the long term. The toll balancing option would directly address one of the major causes of congestion on Gloucester Road. But the necessary flow reduction on the local roads of Central and Wanchai can only be achieved practically by demand restraint using some form of road pricing as in London and Singapore but using technologies appropriate to Hong Kong. Either option would require a major change in government policy.

4.3 Provision of the CWB

If the CWB is to be constructed then the proposed scheme (ignoring reclamation proposals) provides for a junction at each end and one in the middle at the Hong Kong Convention and Exhibition Centre (HKCEC). It also provides the missing link in the trunk road network on the north shoreline of Hong Kong Island. However, whether it should be a three lane or two lane highway needs to be recalculated in light of the CFA Judgment.

If a review is undertaken of the CWB and its junctions, there should be a reconsideration of the connections between the by-pass and the hinterland particularly with regard to providing for all directions of traffic movement at the HKCEC and Causeway Bay junctions so as to maximise usage of the CWB especially for west bound traffic from Wanchai and Causeway Bay areas. Improved connectivity with the two main north-south primary distributors, Canal Road and Cotton Tree Drive/Garden Road, would also be helpful as discussed in 1.4. If these could be achieved then this would go a long way to making access to WHT from these areas more straightforward and would remove additional traffic from Central.

4.3 Provision of Surface Roads

There are other surface roads associated with the Central Reclamation Phase III, which may be reduced in scale depending on the amount of new development associated with the reclamation. Known problems that these surface roads should resolve are the access to the IFC area.

Surface roads on the reclamation should facilitate internal local connections between any new building developments (if any) on the reclamation and to improve the access to the IFC and Airport Railway Station and Ferry area; this has already been singled out in Table 1 as a problem area where additional access provision is required. However, the creation of yet another east-west route should be avoided by minimising the capacity of the roads and creating frequent signal controlled junctions.

5. Is The CWB Required?

5.1 Two Alternative Scenarios

The Consultants have been asked to broadly comment on the traffic related issues of two alternative scenarios, namely a transport network without the CWB, and a network including the CWB. To ensure that there is a “fair” and “like-for-like” comparison in terms of the level of service provided by each network, the following assumptions are made:

- The “no CWB scenario” contains sufficient reclamation to support the new access to IFC described in 4.4;
- Policies of demand management will be developed for each scenario such that the pedestrianisation plans and other improvements to the local streets in Central and Wanchai can be implemented; and measures will be implemented to achieve a better balance of cross harbour traffic.

5.2 The CWB Scheme

If the CWB is to be constructed then the current proposed alignment is probably the best one providing that its size is determined using the CFA Judgment test.

5.3 Minimal Requirements without CWB

As noted above some minimal reclamation and road provision is necessary to support the access roads planned to serve the IFC and adjacent development.

5.4 Traffic conditions with and without the CWB

The Government’s Third Comprehensive Transport Study forecast a traffic growth on the north shore of about 3% per annum between 1997 and 2016. Traffic conditions on parts of the north shore are already poor, and action is required to either provide additional capacity or to

manage demand through policy initiatives. The “do-nothing” approach of allowing congestion to manage demand by deterring traffic as a result of extensive queuing is a poor solution because pollution and fuel consumption increase very sharply at the “stop-go” speeds as a result of heavy congestion. And it would be unlikely that, in such conditions, the ideas for improvements such as pedestrianisation would be implemented.

We have therefore assumed that there would be a need for demand management with each of the two scenarios stated in paragraph 5.1 in order to reduce congestion on the major trunk roads, and to implement the positive ideas such as pedestrianisation on some of the local streets. In using the Bureau’s assessment, Table 1 indicates that the Queensway/Hennessey Road corridor will be heavily congested with local traffic and pedestrians, which are unlikely to be affected by the CWB. In other words, there will need to be traffic restraint irrespective of the provision of the CWB. The implication of this is to lock-in the public benefits of constructing the CWB by making it part of a package of other environmentally positive traffic arrangements (see paragraph 2.2). And there needs to be management of demand to achieve the traffic levels which permit the implementation of these ideas.

The difference between the two scenarios is therefore the amount of “management and restraint” which would be required in order to manage demand to acceptable levels in each case. The scale of restraint required would depend on many factors. The authorities have studied them over the years including ERP (although the full report on ERP has never been publicly released). “Management and restraint” measures would need to address two separate issues:

- Cross harbour traffic - the use of Gloucester Road for queuing for access to the CHT would not be resolved simply through construction of the CWB but will need intervention such as toll-balancing. Action is required irrespective of the provision of CWB; and
- Reduction of general traffic levels in the local roads of Central and Wanchai - this problem is best resolved by the ERP approach, but the scale of reduction would depend on the relief generated by the CWB, and also the impact of changing the balance of cross harbour movements.

The extent of “management and restraint” required for each scenario cannot be precisely specified here but it would need to apply to all vehicle types i.e. cars, taxis, buses, and goods vehicles.

Clearly, the extent of “management and restraint” would need to be much higher in the “no CWB scenario”. As an example, if it assumed that an initial 15% reduction is required to make the existing traffic flows function properly in Central and Wanchai, then any charging system which implemented the restraint would need the charges to be steadily increased in the future to maintain the deterrent effect as incomes grow and as the pressure for traffic growth increased with development.

For the “with CWB” scenario, there would be some prospect that the extent of the “management and restraint” measures could be applied without imposing ERP by using the road space created by reclamation on top of the sunken CWB to implement pedestrianisation and other similar packages of environmental improvements. This approach is commonly adopted overseas with a package of measures which are part of the bypass proposals. Some changes in toll levels of the harbour crossings would also be required to balance the tunnel usages.

6. Conclusions

It is for the project proponent to justify an “overriding need” to build the CWB as reclamation is required. A full review of the size of the CWB and its associated roads, especially Road P2, needs to be reconsidered in light of the CFA Judgment as every piece of reclamation has to be individually justified.

A revised project Traffic Impact Assessment should be prepared, which should include an explanation of how the CWB and its connections will relieve existing congestion.

There needs to be a crosscheck that the current plan is able to provide the expected relief to the existing road system, provides the expected benefits, and is a necessary and robust scheme under a range of policy assumptions. The arguments for the project should take account of the potential relief from an aggressive policy of toll balancing and traffic restraint. However we do not wish to see this crosscheck generating delays to the project.

6.1 Suggested Package of Measures to be Associated with any Bypass Scheme for Central and Wanchai

The CWB should carry with it a package of measures designed to lock in the benefits of the bypass arising from the reductions of traffic flow in these areas. These measures could include for example:

- Downgrading of Gloucester Road, Harcourt Road and Connaught Road to distributor status.
- A review of the road hierarchy and local access routes to simplify and improve hinterland access particularly from Gloucester Road, Harcourt Road and Connaught Road.
- Traffic calming and pedestrianisation schemes to create pedestrian priority areas and force out inappropriate traffic.
- Transfer of bus routes and stops onto Gloucester Road, Harcourt Road and Connaught Road from less suitable routes where possible.
- Greater emphasis on the needs of local servicing traffic.
- Balancing of the Central and Western Harbour Crossing Tolls so that more traffic uses the Western Harbour Crossing once the bypass is in place.

6.2 Need for a Comprehensive Plan Making Use of CWB

The list of issues included above is extensive. Other points made earlier in this Report in section 4.3 have highlighted the possible benefit of reviewing the interchange arrangements at HKCEC and Causeway Bay intersections to extend the catchment area of the CWB. If the construction of CWB is accepted as necessary, it represents the final item of major road construction in Central and the North Shore; it therefore merits being the focus of a comprehensive plan to ensure that the potential benefits of the scheme are extracted, and it will be compatible with a long term and sustainable traffic and transport plan for the North Shore of Hong Kong Island.