THB(T)

Tel No.: 2189 2188

Fax No.: 2136 8016

2 June 2008

Clerk to Public Works Subcommittee
Legislative Council Building
8 Jackson Road, Central
Hong Kong
(Attack Man Appeal SHEK)

(Attn: Ms Angel SHEK)

Dear Angel,

Public Works Subcommittee <u>Hong Kong-Zhuhai-Macao Bridge</u>

During the discussion of the captioned on 21 May 2008, Members requested the Administration to provide the following supplementary information on the Hong Kong-Zhuhai-Macao Bridge (HZMB):

- (a) Figures obtained and used under the four-stage modelling approach adopted for the forecast of traffic volume for the HZMB project;
- (b) Explanation on how the results of the traffic volume forecast had been used to evaluate the direct and indirect economic benefits of the project for the three territories;
- (c) Explanation on how the split of contribution from the three governments to the funding gap of the project was calculated from the findings of the economic benefits assessment; and
- (d) Consolidation of the relevant information on the project provided to the Panel on Transport earlier on.
- 2. Members also requested the Administration to provide a plan to

illustrate the role of the HZMB as a strategic road link, in a broader regional context, in connecting Hong Kong with other places of the Mainland.

3. I set out the information required in the paper attached. Grateful if you would circulate this letter to Members for their information.

Yours sincerely,

(Ava CHIU) for Secretary for Transport and Housing

c.c.

FSTB (Attn.: Ms Sandra LAM) HyD (Attn.: Mr Albert CHENG)

The Four-Stage Modelling Approach and Figures Used for Traffic Projection for the Hong Kong-Zhuhai-Macao Bridge

The traffic volume forecast for the Hong Kong-Zhuhai-Macao Bridge (HZMB) is a key determinant in estimating the magnitude and distribution of the economic benefits arising from the project among the three governments, and for the purpose of examining the economic viability of the project. The traffic volume is also used for assessing the financial viability of the project. The methodology for the forecast of the traffic volume adopted for the project is a four-stage modelling approach for deriving passenger and vehicle flows, which is in line with international practice. It uses a systematic method to analyze the complex characteristics of population, travel characteristics, economic growth, foreign trade and transportation network development based upon various statistics and survey data. The forecasting process starts with defining the study area¹ and dividing them into a number of zones and considering all strategic transport networks in the study area. Based on the future planning data such as population and economic growth of major cities in the study area and changes to the transportation networks, the predicted passenger and vehicle flows on the HZMB are worked out.

- 2. The four stages involved in the approach are, namely,
 - i. Demand Projection, i.e. estimating the total cross-boundary passenger trips and cargo volume between Hong Kong and the Mainland, and between Hong Kong and Macao;
 - ii. Distribution Pattern Analysis, i.e. the projection of traffic flows between zones;

¹ Study area includes Hong Kong, Macao, Pearl River Delta (PRD) West (Zhuhai, Jiangmen, Zhongshan, West Guangdong), PRD East (Shenzhen, Dongguang, Huizhou), PRD Central (Guangzhou, Foshan, Zhaoqing), other areas in the Guangdong Province and the rest of the areas in the Mainland.

-

- iii. Mode Choice Analysis, i.e. deciding on the share of travel demand that will choose road transportation as compared to other modes; and
- iv. Route Choice Assignment, i.e. the prediction of travel demand to specific route, such as the HZMB.

Key findings of the various stages are set out in the tables below:

Table 2.1 Major findings of Stage 1 - Overall Demand Projection (Across all boundary

crossing points, including air, road, rail and water modes) (Passengers per Day)

crossing points, including air, road, rail and water modes) (Passengers per Day)									
Types of	Year	201	6	2020	0	2030	0	203:	5
Travellers	Area	No. of passengers	Ratio						
Hong	Hong Kong & Mainland	553,878	94.7%	639,138	94.9%	809,407	95.2%	879,883	95.2%
Kong Residents	Hong Kong & Macao	30,901	5.3%	34,005	5.1%	41,118	4.8%	44,347	4.8%
	Total	584,779	100.0%	673,143	100.0%	850,526	100.0%	924,230	100.0%
Hong	Hong Kong & Mainland	158,966	85.4%	199,534	84.9%	284,422	84.4%	330,201	85.0%
Kong Visitors	Hong Kong & Macao	27,129	14.6%	35,561	15.1%	52,639	15.6%	58,117	15.0%
	Total	186,096	100.0%	235,095	100.0%	337,061	100.0%	388,319	100.0%
T 1	Hong Kong & Mainland	712,844	92.5%	838,672	92.3%	1,093,829	92.1%	1,210,085	92.2%
Total Travellers	Hong Kong & Macao	58,030	7.5%	69,566	7.7%	93,757	7.9%	102,464	7.8%
	Total	770,874	100.0%	908,238	100.0%	1,187,586	100.0%	1,312,549	100.0%

Remarks for Table 2.1: Summation of items may not equal to 100% due to rounding-up of figures.

Table 2.2 Major findings of Stage 2 - Distribution Pattern Analysis for Passengers between Different Zones in the Mainland and Hong Kong (Across all boundary crossing points,

including air, road, rail and water modes) (Passengers per Day)

Year	201		202		203	0	203:	5
Area	No. of	Ratio						
	passengers		passengers		passengers		passengers	
Western PRD	42,139	5.9%	61,971	7.4%	124,504	11.4%	167,670	13.9%
Zhuhai	12,111	1.7%	17,801	2.1%	35,738	3.3%	48,161	4.0%
Zhongshan	19,169	2.7%	28,095	3.3%	55,926	5.1%	75,214	6.2%
Jiangmen	8,848	1.2%	13,051	1.6%	26,487	2.4%	35,673	2.9%
West	2,011	0.3%	3,024	0.4%	6,353	0.6%	8,622	0.7%
Guangdong								
Eastern PRD	542,438	76.1%	622,246	74.2%	760,932	69.6%	806,198	66.6%
Shenzhen	450,966	63.3%	516,980	61.6%	631,928	57.8%	669,190	55.3%
Dongguan	81,131	11.4%	93,319	11.1%	114,306	10.5%	121,385	10.0%
Huizhou	10,342	1.5%	11,947	1.4%	14,697	1.3%	15,623	1.3%
Central PRD	77,491	10.9%	92,419	11.0%	123,139	11.3%	137,675	11.4%
Guangzhou	63,642	8.9%	75,796	9.0%	100,818	9.2%	112,646	9.3%
Foshan	12,631	1.8%	15,165	1.8%	20,389	1.9%	22,878	1.9%
Zhaoqing	1,219	0.2%	1,458	0.2%	1,933	0.2%	2,150	0.2%
Other Parts of	7,629	1.1%	9,098	1.1%	12,056	1.1%	13,438	1.1%
Guangdong								
Province								
Southwest	3,343	0.5%	4,555	0.5%	7,840	0.7%	10,327	0.9%
Area of the								
Mainland								
Other Areas of	39,804	5.6%	48,384	5.8%	65,359	6.0%	74,778	6.2%
the Mainland								
Total	712,844	100.0%	838,672	100.0%	1,093,829	100.0%	1,210,085	$100.0\frac{1}{\%}$

Remarks for Table 2.2: (1) Summation of items may not equal to 100% due to rounding-up of figures.

⁽²⁾ Southwest area of the Mainland includes Hainan, Guangxi, Yunnan, Sichuan, Guizhou and Chongqing.

Table 2.3 Major findings of Stage 1 Demand Projection and Stage 2 Distribution Pattern Analysis for Cargo between Different Zones in the Mainland and Hong Kong (Across all

boundary crossing points, air and rail cargo excluded) (10,000 Tonnes per Year)

Year	20	16	20	2020		30	20	35
Area	Cargo	Ratio	Cargo	Ratio	Cargo	Ratio	Cargo	Ratio
Western PRD	3,252	17.7%	4,226	19.0%	7,329	22.1%	9,255	23.5%
Zhuhai	1,183	6.4%	1,519	6.8%	2,554	7.7%	3,170	8.0%
Zhongshan	1,404	7.7%	1,908	8.6%	3,525	10.6%	4,543	11.5%
Jiangmen	495	2.7%	593	2.7%	901	2.7%	1,094	2.8%
West	170	0.9%	207	0.9%	350	1.1%	448	1.1%
Guangdong								
Eastern PRD	9,602	52.4%	11,594	52.1%	17,056	51.4%	20,142	51.1%
Shenzhen	5,876	32.0%	6,950	31.2%	9,942	30.0%	11,665	29.6%
Dongguan	3,292	17.9%	4,130	18.6%	6,376	19.2%	7,617	19.3%
Huizhou	434	2.4%	514	2.3%	737	2.2%	860	2.2%
Central PRD	5,242	28.6%	6,140	27.6%	8,382	25.3%	9,565	24.3%
Guangzhou	3,223	17.6%	3,839	17.3%	5,380	16.2%	6,213	15.8%
Foshan	1,749	9.5%	1,993	9.0%	2,597	7.8%	2,894	7.3%
Zhaoqing	269	1.5%	307	1.4%	405	1.2%	458	1.2%
Other Parts of	127	0.7%	149	0.7%	205	0.6%	234	0.6%
Guangdong								
Province								
Southwest	107	0.6%	124	0.6%	168	0.5%	192	0.5%
Area of the								
Mainland								
Other Areas of	11	0.1%	13	0.1%	19	0.1%	22	0.1%
the Mainland								
Total	18,341	100.0%	22,246	100.0%	33,159	100.0%	39,410	100.0%

Remarks for Table 2.3: Summation of items may not equal to 100% due to rounding-up of figures.

Table 2.4 Major findings of Stage 1 Demand Projection and Stage 2 Distribution Pattern Analysis for Cargo between Macao and Hong Kong (On all modes except air cargo) (10,000 Tonnes per Year)

Year	2015	2020	2030	2035
Cargo	231.6	255.7	311.7	344.2

Table 2.5 Major Findings of Stage 3 Mode Choice Analysis - Mode Split for

Passengers on Road and Water (Air and Rail excluded)

Year	Mode	Zhuhai	Zhongshan	Jiangmen	Macao	West Guangdong	Southwest
2016	Road	82.0%	78.5%	74.1%	70.5%	93.0%	90.0%
2010	Water	18.0%	21.5%	25.9%	29.5%	7.0%	10.0%
2020	Road	82.0%	79.0%	74.7%	70.5%	93.0%	90.0%
2020	Water	18.0%	21.0%	25.3%	29.5%	7.0%	10.0%
2030	Road	82.0%	79.4%	75.2%	70.5%	93.0%	90.0%
2030	Water	18.0%	20.6%	24.8%	29.5%	7.0%	10.0%
2035	Road	82.0%	79.6%	75.5%	70.5%	93.0%	90.0%
2033	Water	18.0%	20.4%	24.5%	29.5%	7.0%	10.0%

Table 2.6 Major Findings of Stage 3 Mode Choice Analysis - Mode Split for

Containerized Cargo on Road and Water (Air and Rail excluded)

Mode	Zhuhai	Zhongshan	Jiangmen	Macao	Foshan	Zhaoqing	West	Southwest
		J	C			1 0	Guangdong	
Road	37.7%	19.3%	25.6%	57.2%	8.0%	8.0%	37.7%	10.0%
Water	62.3%	80.7%	74.4%	42.8%	92.0%	92.0%	62.3%	90.0%

Table 2.7 Major Findings of Stage 3 Mode Choice Analysis - Mode Split for Bulk Cargo on Road and Water (Air and Rail excluded)

Mode	Zhuhai	Zhongshan	Jiangmen	Macao	Foshan	Zhaoqing	West	Southwest
		C	Ü			1 0	Guangdong	
Road	43.8%	28.2%	25.9%	52.7%	8.0%	8.0%	43.8%	10.0%
Water	56.2%	71.8%	74.1%	47.3%	92.0%	92.0%	56.2%	90.0%

Table 2.8 Major Findings of Stage 4 Route Choice Assignment - Traffic Projection of

the HZMB (Vehicles per Day)

1	ehicle Type		Tot	al Traffic	Volume			Hong	Kong and	d Mainland			Hon	g Kong a	nd Macao	
Year		Total	Private Cars	Coaches	Container Trucks	Goods Vehicles	Total	Private Cars	Coaches	Container Trucks	Goods Vehicles	Total	Private Cars	Coaches	Container Trucks	Goods Vehicles
Traffic Volume	17016	9,200	4,300	1,350	1,500	2,050	5,550	1,850	550	1,350	1,800	3,650	2,450	800	150	250
	2020	15,350	8,000	2,150	2,450	2,750	9,550	3,850	1,000	2,250	2,450	5,800	4,150	1,150	200	300
	2030	27,400	15,700	3,500	4,250	3,950	18,650	9,100	2,000	3,950	3,600	8,750	6,600	1,500	300	350
	2035	35,700	21,250	4,250	5,400	4,800	25,500	13,300	2,650	5,100	4,450	10,200	7,950	1,600	300	350
% of Total	2016	100	46.7	14.7	16.3	22.3	100	33.3	9.9	24.3	32.4	100	67.1	21.9	4.1	6.8
	2020	100	52.1	14.0	16.0	17.9	100	40.3	10.5	23.6	25.7	100	71.6	19.8	3.4	5.2
	2030	100	57.3	12.8	15.5	14.4	100	48.8	10.7	21.2	19.3	100	75.4	17.1	3.4	4.0
	2035	100	59.5	11.9	15.1	13.4	100	52.2	10.4	20.0	17.5	100	77.9	15.7	2.9	3.4

Remark for Table 2.8: (1) The above figures correspond to the lower end of the ranges of the two-way traffic projections. All these projections assume that the existing quota system for the cross-boundary private cars remains as it is.

(2) Summation of items may not equal to 100% due to rounding-up of figures.

3. The above findings form the basis for the traffic projection of the HZMB, which would vary according to the assumptions adopted such as the quota system for cross-boundary vehicles, toll levels and the transport networks in the Mainland. We wish to emphasize again that parallel work is on-going to investigate the feasibility of relaxing the current quota system. Purely for the purpose of calculating the economic benefits of the HZMB as part of the feasibility study on the project, the China Highway Planning and Design Institute (HPDI) has adopted a conservative assumption that the quota system will remain as it is, and hence arrived at conservative ranges of the two-way traffic projections as set out below. The lower end of the ranges has been adopted as input assumptions into the calculation of economic benefits.

Table 3.1 Range of Traffic Projection of the HZMB (Vehicles per Day)

Year	HK - Mainland	HK - Macao	<u>Total</u>
2016	5,550 – 10,100	3,650 – 3,900	9,200 – 14,000
2020	9,550 – 16,200	5,800 – 6,100	15,350 – 22,300
2030	18,650 – 27,200	8,750 – 11,600	27,400 – 38,800
2035	25,500 – 38,650	10,200 – 10,550	35,700 – 49,200

- 4. No traffic between Macao and Zhuhai is assumed on the bridge. All the bridge traffic will have Hong Kong either as the origin or destination, and the split between Mainland and Macao is about 60% and 40% respectively in the initial years of its operation.
- 5. Similarly, the lower end of the following ranges of two-way passenger projections has been assumed in the calculations of economic benefits for the project.

Table 5.1 Range of Passenger Projection of the HZMB (Passengers per Day)

	0 9	3	0 1 37
Year	HK - Mainland	HK – Macao	<u>Total</u>
2016	22,950 – 32,150	32,900 – 37,050	55,850 – 69,200
2020	42,700 – 57,100	48,550 – 55,850	91,250 – 112,950
2030	88,200 – 115,250	65,700 – 74,500	153,900 – 189,750
2035	119,350 – 153,250	71,900 – 80,600	191,250 – 233,850

6. The HZMB will result in a significant reduction in relevant travelling time between Hong Kong and the western PRD². As illustrated by the table below, the travelling time between Zhuhai on the one hand, and the Kwai Chung Container Port and the Hong Kong International Airport on the other, will be reduced by more than 60% and 80% respectively.

Table 6.1 Travelling Time Comparison - With and Without the HZMB

Origin — Destinations	Current Distance and Travelling Time	Distance and Travelling Time with HZMB	Reduction in Distance and Travelling Time
Zhuhai — Kwai Chung Container Port	approx. 200km approx. 3.5hrs	approx. 65km approx. 75mins	> 60%
Zhuhai — Hong Kong International Airport	over 200km approx. 4hrs	approx. 40km approx. 45mins	> 80%

² For the purpose of the various quantification/projections in this paper, we have defined the western PRD as broadly covering Zhuhai, Jiangmen and Zhongshan.

-

Evaluation of the Benefits of the HZMB Project

Direct Benefits

7. Based on the results of the traffic volume forecast with the four-stage methodology, the benefits from savings in transport costs, value of time saved for travellers, induced traffic volume generated between the three territories, and value of time saved for goods on road, etc. were evaluated under two scenarios, i.e. with and without the HZMB. The economic benefits are then apportioned among the three territories, taking into account of the places of origin of the passengers, places of origin and destination of the freight vehicles with estimated economic benefits allocation as follows-

Table 7.1 Estimated Economic Benefits of the HZMB

Economic Benefits	Hong Kong	Mainland	Macao	Total
Discounted Total Benefits	42.8	24.1	7.1	74.0
(RMB¥ Billion)				
Discounted Total Benefits Ratio	57.8%	32.6%	9.6%	100%

- 8. It is estimated that the net economic benefits to Hong Kong at discounted present value (i.e. the discounted present value of economic benefits minus the discounted present value of costs contributed by Hong Kong to the project) will be around RMB\formu23 billion over a 20-year period, as compared to RMB\formu13 billion for the Mainland and RMB\formu44 billion for Macao.
- 9. The economic analysis also computes the Economic Internal Rate of Return (EIRR) of the project. EIRR is one of the key indicators on the economic viability of a project. Generally speaking the higher a project's EIRR, the more desirable it is to undertake the project. The HZMB is estimated to have an EIRR of 8.8% for Hong Kong over a 20–year period, or 12% over 40 years. It compares favorably with a number of other infrastructure projects we are undertaking:

Table 9.1 EIRR of Other Infrastructure Projects (Over a 40-year Period)

<u>Projects</u>	EIRR
South Island Line (East)	9%
West Island Line	8%
Shatin to Central Link	10%
Hong Kong Section of the Guangzhou-Shenzhen-Hong Kong	9%
Express Rail Link	

Indirect Benefits

- 10. The direct economic benefits of the HZMB have been quantified in paragraphs 7 to 9 above. There are substantial strategic value and indirect benefits of the HZMB to the local economies, but they have not been included in the calculation of benefits for the allocation of costs for the project as these do not normally form part of EIRR calculations.
- 11. There are at present four road crossings between Hong Kong and PRD, all of which provide connection with the eastern part of the PRD³. As a result, most of the business activities, in particular cargo and passenger flows, between Hong Kong and the PRD concentrate on the eastern part. As the eastern PRD can be covered within a 3-hour trip from Hong Kong, such geographical advantage has resulted in this part of the PRD attracting the bulk of foreign direct investment.
- 12. However most cities in the eastern region are now facing challenges in terms of exhaustion of developable land reserves, rapid escalation of labour costs, shortage of water, electricity, energy and environmental degradation. Average monthly wage of staff and workers in 2006 is reportedly at around US\$325-367 in the eastern PRD, considerably higher than that of US\$174-261 on the western side.

-

³ For the purpose of the various quantification/projections covered in this paper, we have defined the eastern PRD as broadly covering Shenzhen and Dongguan.

Apart from the ample and cheaper labour resources, the western region also has relatively more abundant land yet to be fully exploited, hence significant development potentials. The total land area of the eastern PRD is around 4,418 km², whereas the western part is almost three times bigger. The HZMB will provide the much needed infrastructure to connect Hong Kong to this land of great development potential.

- 13. The absence of a direct road link from Hong Kong to Zhuhai has been perceived as one of the reasons why Hong Kong investment in the western PRD has been relatively low compared to that on the east bank. Investing in this less developed region, upon commissioning of the HZMB, would benefit Hong Kong investors, as costs of labour and land resources are cheaper. Hong Kong will also gain from an increase in tourism, due to the improved convenience of travelling between Hong Kong and Pearl River West, and the increasing spending power of its residents over the coming years as the economy takes off. These would be similar to how the rapid economic development of the eastern PRD due to the efficient transport links with Hong Kong in the past years has brought about substantial economic benefits to Hong Kong. Hong Kong has become a preferred destination for visitors from the eastern PRD. With better income and purchasing power, these visitors contribute much to tourist spending in Hong Kong. There is also positive spill-over on other industries such as restaurants, hotels and transports in Hong Kong. Furthermore, according to trade figures, Shenzhen alone accounts for 45% and 44% of Guangdong's total exports to and trade with Hong Kong respectively. This close business relationship is beneficial to our external trade and logistics industries, not to mention the ancillary/supporting industries like finance, transport and warehouse, insurance etc. We can expect similarly vigorous economic interactions with the western PRD after the HZMB has been built.
- 14. Hong Kong will also benefit from an increase of travellers flying in or out of Hong Kong as the HZMB will encourage more visitors to fly to the Hong Kong International Airport and travel to the Mainland via Hong Kong, or vice

versa. The proposed Hong Kong Boundary Crossing Facilities off the waters at the northeast of the Hong Kong International Airport will further provide a convenient interface between the land and air modes of traffic for the travellers. The HZMB also connects the domestic flight network of Zhuhai airport to the well-established international network of the Hong Kong International Airport, thereby creating synergy for the two airports.

15. The timely implementation of the HZMB is consistent with the strategic proposals put forward in 2007 by the Focus Group on Maritime, Logistics and Infrastructure set up under the Economic Summit on "China's 11th Five-Year Plan and the Development of Hong Kong", which include, among other things, the development of cross-boundary transportation network by adopting a forward-looking perspective on regular development, and the optimization of cross-boundary transportation networks so as to establish efficient and convenient direct links with neighboring comprehensive transportation hubs, shorten the spatial distance with the Mainland and extend the hinterlands of Hong Kong's airport and ports.

Split of Cost Contribution for the Construction of the HZMB

According to the HPDI, the ratio of expected benefits (referring only to direct benefits) to costs for the Project is likely to exceed 2 (i.e. over the assessment period, total benefits will be more than double the total costs). After considering how the benefits are likely to be apportioned among the territories, it was concluded that the costs should be shared among Hong Kong, the Mainland and Macao in the same ratio (i.e. 57.8:32.6:9.6), as the ratio of direct benefits shown in Table 9.1. In other words, the costs are split based on the principle of equalization of benefit to cost ratio, i.e. an approach to equalize the ratio for the estimated benefit obtained to the estimated cost incurred for a joint investment from different territories.

Taking into account the fact that each territory has already agreed to fund the costs of connecting roads directly, contributions to the costs of the HZMB Main Bridge is accordingly adjusted to a ratio of 50.2:35.1:14.7 with cost allocation as follows-

Table 17.1 Cost Allocation of the HZMB Main Bridge (RMB \rightarrow Billion)

	% of	Cost	Cost for	Cost	% of Cost
	Benefit	Allocation for	Respective	Allocation for	Allocation for
	Allocated	Main Bridge ⁴	Connecting	Main Bridge	Main Bridge
		and	Roads		
		Connecting			
		Roads			
Hong Kong	57.8%	47.5 x 57.8%	11.88	27.455-11.88	15.575÷31.03
		= 27.455		=15.575	=50.2%
Mainland	32.6%	47.5 x 32.6%	4.59	15.485-4.59	10.895÷31.03
		= 15.485		=10.895	=35.1%
Macao	9.6%	47.5 x 9.6%	0	4.56	4.56÷31.03
		= 4.56			=14.7%
Total				31.03	

Note: The total cost of the HZMB Main Bridge and its connecting roads is estimated to be RMB ± 47.5 billion in the HPDI's report.

Major Road Infrastructure and Developments in Western Pearl River Delta and Major Road Infrastructure in Pan Pearl River Delta

18. We attach two plans showing the major developments and road infrastructure in the western PRD region (Annexure A), and major road infrastructure in the Pan Pearl River Delta (PPRD) region (Annexure B) for Members' information. The HZMB will provide convenient access to the various industrial areas, high technology development areas and free trade zone in the western PRD. It will also connect to the existing and proposed highways in the PPRD region, including the Guangdong West Coastal Expressway to the west, and the Jiangzhu Expressway, the Jingzhu Expressway and the Guangzhou – Zhuhai

⁴ The HZMB Main Bridge shall start from the artificial islands off Gongbei and Macao to the eastern artificial island west of the HKSAR boundary. It will be a 29.6km dual 3-lane carriageway in the form of a bridge-cum-tunnel structure running across major navigation channels in the Pearl River Estuary with an immersed tunnel of about 6.7km and the construction cost (excluding financing cost) is estimated to be

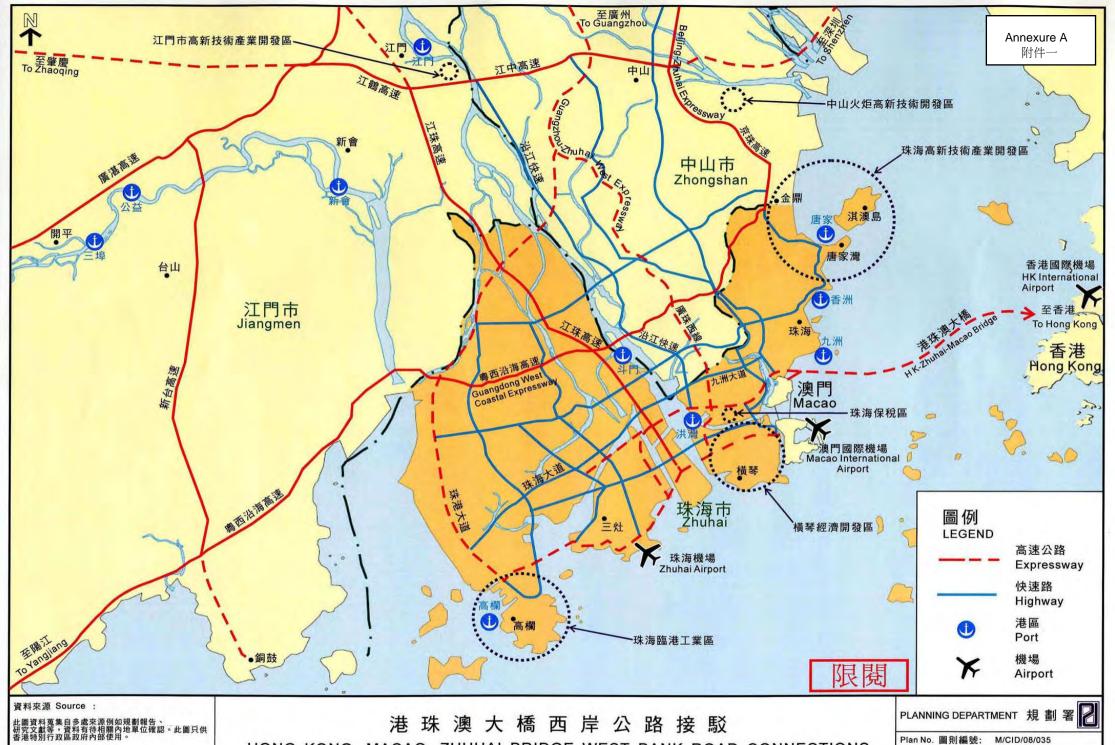
RMB¥31 billion at early 2007 prices.

- 13 -

West Expressway to the north. Through the Mainland's highways in the west PPRD region, the HZMB can further become part of the wider road networks connecting other Asian countries such as Vietnam and Myanmar.

Transport and Housing Bureau

2 June 2008



HONG KONG-MACAO-ZHUHAI BRIDGE WEST BANK ROAD CONNECTIONS

Date 日期: 20-05-2008

