



CONSTRUCTION  
INDUSTRY COUNCIL  
建造業議會



# Hong Kong Construction Industry Performance Report for 2011

## **Disclaimer**

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## **Enquiries**

Enquiries on this publication may be made to the CIC Secretariat at:

CIC Headquarters  
15/F, Allied Kajima Building  
138 Gloucester Road, Wanchai  
Hong Kong

Tel: (852) 2100 9000  
Fax: (852) 2100 9090  
Email: [enquiry@hkcic.org](mailto:enquiry@hkcic.org)  
Website: [www.hkcic.org](http://www.hkcic.org)

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## TABLE OF CONTENTS

Executive Summary.....	1
1. Background.....	3
2. Introduction of Key Performance Indicators (KPIs).....	4
3. Productivity KPIs.....	8
4. Health & Safety KPIs.....	22
5. Manpower KPIs.....	32
Annex A – Data Sources.....	A1
Annex B – Terms and Definitions.....	B1

## **EXECUTIVE SUMMARY**

This is the first construction industry performance report published by the Construction Industry Council (CIC). The information in this report, verified by Rider Levett Bucknall Limited, provides an overview of the performance of the Hong Kong Construction Industry in terms of productivity, health & safety and manpower over the last 11 years (2001 ~ 2011).

### **PRODUCTIVITY**

Tender price indices rose between 2004 and 2008. Following a fall in the fourth quarter of 2008, tender price indices went up again in the third quarter of 2009. Both the percentage of gross value of construction works to Gross Domestic Product and the percentage contribution of construction activities to Gross Domestic Product at basic prices have been increasing since 2008 after a continuous decreasing trend from 2002. The recent increase was mainly due to the increase in the number of new projects in the public sector. The gross value of construction works per capita has been increasing since 2009, largely due to the increase in gross value of the public sector construction works per capita. Correspondingly, the number of manual workers employed per HK\$1,000,000 gross value of construction works has been decreasing over the same period.

### **HEALTH AND SAFETY**

A generally decreasing trend of industrial accident rate / number was recorded in the last 11 years whilst there was an improving performance in all categories or sectors in this aspect, improvement in fatal accident rate was not obvious. There was a general trend of improvement in terms of summonses under the Factory and Industry Undertaking Ordinance and Occupational Safety & Health Ordinance. In general, the public sector demonstrated a better performance than the private sector in this area.

## **MANPOWER**

The salaries of craft and related workers/elementary occupations were lower than the Hong Kong median monthly earnings and also the industry median, while the managers and administrators / professionals / associate professionals had a higher median salary than the Hong Kong median monthly earnings as well as the industry median. The salary differences between different groups of employees remained largely unchanged in the last 4 years. The median salary in the construction industry was close to the Hong Kong median salary.

Just over 30% of the currently registered workers are under the age of 40. The number of registered workers in this age group has been decreasing steadily over the last 4 years although the number of registered workers with mandatory basic safety training course (green card) in the same age group has remained largely unchanged. There has been an improvement trend since 2007 in the retention rate of graduates for the basic craft courses and Construction Supervisor / Technician Programme provided by the Construction Industry Council Training Academy.

## 1. BACKGROUND

Section 5 of the Construction Industry Council Ordinance (Cap. 587) governs the functions of the Construction Industry Council. Sub-section 5(k) provides:

“(k) To assess improvements made by the construction industry through the compilation of performance indicators.”

Initiated and being steered by the Committee on Environment and Technology established under the Construction Industry Council, the CIC Secretariat has reviewed the local and overseas practices of the construction industry performance benchmarking and developed a set of Key Performance Indicators (KPIs) for the Hong Kong construction industry.

After several rounds of consultation with various Committees (including the Committee on Construction Site Safety, Committee on Sub-contracting, Committee on Manpower Training and Development and Committee on Procurement) and the Council, the KPIs for the Hong Kong construction industry have been established and approved based on the following criteria:

- (a) KPIs should be relevant and important to the construction industry;
- (b) KPIs should be able to improve external accountability and verification;
- (c) KPIs must be quantifiable;
- (d) Supply of data for deriving the KPIs should be recurrent instead of one-off;
- (e) KPIs should focus on those closely related to the industry performance;
- (f) KPIs should reflect the future development of the industry;
- (g) KPIs should be subdivided into new works, RMAA works, civil works, building works, private sector works and public sector works.

## 2. INTRODUCTION OF KEY PERFORMANCE INDICATORS (KPIs)

The KPIs for the Hong Kong Construction Industry are classified into 5 areas and presented in 4 categories and 2 sectors as listed in Table 1. Descriptions of the KPIs are provided in Table 2.

**Table 1 – Classification of KPIs**

5 Areas	4 Categories	2 Sectors
<ul style="list-style-type: none"><li>• Productivity (7 KPIs)</li><li>• Health &amp; Safety (3 KPIs)</li><li>• Environment (3 KPIs)</li><li>• Manpower (3 KPIs)</li><li>• Dispute Resolution (3 KPIs)</li></ul>	<ul style="list-style-type: none"><li>• Whole Industry</li><li>• Civil Engineering Works</li><li>• New Building Works</li><li>• RMAA Works</li></ul>	<ul style="list-style-type: none"><li>• Public</li><li>• Private</li></ul>

During the data collection exercise for the first stage KPIs, further division of the KPIs has been found necessary due to some deviation of the available data coverage from the original intention. Such further division of the KPIs and their descriptions are provided in Table 3.

The KPIs will be launched by stages based on availability of data and the programme for new data collection.

The performance of the Hong Kong Construction Industry in terms of the first stage KPIs (P3 ~ P7, HS1~HS3, M1~M3) over the last 11 years (2001 ~ 2011) is presented in this report. The data used for the computation of KPIs has been verified by Rider Levett Bucknall Limited.

**Table 2 – Construction Industry KPIs**

KPIs	Definition	Purpose	Whole Industry	Civil Works	New Building Works	RMAA Works	Public Sector	Private Sector
P1	(On site) Man-days per HK\$1,000,000 gross value of construction works	Indication of productivity	✓	✓	✓	✓	✓	✓
P2	(On site) Man-days per gross floor area	Indication of productivity	✗	✗	✗	✗	✗	✓
P3	Construction cost Indices	Indication of cost trend of construction works	✗	✗	P3.1, P3.2 & P3.3 ✓	✗	P3.2& 3.3 ✓	P3.1 ✓ (Building works only)
P4	Percentage of gross value of construction works to GDP	Measurement of the economic significance of the construction industry	P4.1 ✓	P4.2 ✓	P4.3 ✓	P4.4 ✓	P4.5 ✓	P4.6 ✓
P4a	Percentage contribution of construction activities to GDP at basic prices	Measurement of the economic significance of the construction industry	✓	✗	✗	✗	✗	✗
P5	Gross value of construction works per capita	Indication of productivity	P5.1 ✓	P5.2 ✓	P5.3 ✓	P5.4 ✓	P5.5 ✓	P5.6 ✓
P6	Number of manual workers engaged per HK\$1,000,000 gross value of construction works at construction sites	Indication of productivity	P6.1 ✓ (except RMAA Works)	P6.2 ✓	P6.3 ✓	✗	P6.4 ✓	P6.5 ✓
P7	Number of manual workers engaged per 1,000 sq. m. gross floor area	Indication of productivity	✗	✗	✗	✗	✗	✓
HS1	Industrial accident number / rate (reportable industrial accidents per 1,000 manual workers)	Measurement of safety performance	HS1.1 ✓ (Number)	HS1.2 ✓ (Rate)		HS1.3 ✓ (Number)	HS1.4 ✓ (Rate)	HS1.5 ✓ (Rate)
HS2	Fatal accident number / rate (fatal accidents per 100,000 manual workers)	Measurement of safety performance	HS2.1 ✓ (Number)	HS2.2 ✓ (Rate)		HS2.3 ✓ (Number)	HS2.4 ✓ (Rate)	HS2.5 ✓ (Rate)
HS3	Number of summonses convicted per HK\$100,000,000 gross value of construction works	Indication of degree and effectiveness of legal enforcement	HS3.1 ✓	HS3.2 ✓		HS3.3 ✓	HS3.4 ✓	HS3.5 ✓



KPIs	Definition	Purpose	Whole Industry	Civil Works	New Building Works	RMAA Works	Public Sector	Private Sector
E1	Energy use per HK\$1,000,000 gross value of construction works	Indication of energy consumption in construction works	✓	✓	✓	✓	✓	✓
E2	Energy use per gross floor area	Indication of energy consumption in building construction works	✗	✗	✗	✗	✗	✓
E3	Construction waste (tonnes) to landfill per HK\$1,000,000 gross value of construction works	Indication of D&C waste generated from construction works	✓	✓	✓	✓	✓	✓
M1	Workers' wage index	Indication of the trend of workers' wages	✓	✗	✗	✗	✗	✗
M2	Workers' aging index (% of registered workers under and above the age of 40)	Indication of the aging mix of the workers	✓	✗	✗	✗	✗	✗
M3	Retention rate of graduates (basic craft courses and construction supervisor / technician programme provided by the Construction Industry Council Training Academy) (% of graduates remaining in the industry after 12 months from works)	Indication of the retention rate of graduates	✓	✗	✗	✗	✗	✗
DR1	No. of court cases per HK\$1,000,000 gross value of construction works	Indication of the trend of contractual dispute resolution through litigation	✓	✗	✗	✗	✗	✗
DR2	No. of construction arbitration cases per HK\$1,000,000 gross value of construction works	Indication of the use of alternative dispute resolution in construction contracts	✓	✗	✗	✗	✗	✗
DR3	No. of labour disputes per HK\$1,000,000 gross value of construction works	Indication of the trend of labour disputes	✓	✗	✗	✗	✗	✗

**Legend:**

- ✓ - to be provided. ✗ – KPI not applicable, not necessary or data not available.
- Data of the proposed KPI would be launched and released by stages. The following shading indicated the timing of data release:  

Early 2013	Mid 2013	Early 2014
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- The need for further division of the future stage KPIs will be subject to review when data become available.

**Table 3 – Further Division of First Stage KPIs**

<b>Key Performance Indicators</b>	
<b>P3 Construction Cost Indices</b>	
P3.1	Builder's Works Tender Price Index (RLB) (4Q 1968=100)
P3.2	Building Works Tender Price Index (ArchSD) (1Q 1970 = 100)
P3.3	Building Services Tender Price Index (ArchSD) (new base schedule 2007)
<b>P4 Percentage of Gross Value of Construction Works to GDP</b>	
P4.1	Whole Industry
P4.2	Civil Works (Structures & Facilities)
P4.3	New Building Works (Buildings)
P4.4	RMAA Works
P4.5	Public Sector Construction Site
P4.6	Private Sector Construction Site
<b>P4a Percentage Contribution of Construction Activities to GDP at Basic Prices</b>	
<b>P5 Gross value of Construction Works per Capita</b>	
P5.1	Whole Industry
P5.2	Civil Works (Structures & Facilities)
P5.3	New Building Works (Buildings)
P5.4	RMAA Works
P5.5	Public Sector Construction Site
P5.6	Private Sector Construction Site
<b>P6 Number of Manual Workers Engaged per HK\$1,000,000 Gross Value of Construction Works (at Construction Sites)</b>	
P6.1	Whole Industry (except RMAA Works)
P6.2	Civil Works (at Civil Engineering Sites)
P6.3	New Building Works (at Building Sites)
P6.4	Public Sector Construction Site
P6.5	Private Sector Construction Site
<b>P7 Number of Manual Workers Engaged per 1,000 sq. m. Gross Floor Area</b>	
New Private Building Works (at Private sector)	
<b>HS1 Industrial Accident Number / Rate (Reportable Industrial Accidents per 1,000 Manual Workers)</b>	
HS1.1	Whole Industry ( <i>Number</i> )
HS1.2	New Works ( <i>Rate</i> )
HS1.3	RMAA Works ( <i>Number</i> )
HS1.4	Public Sector Sites ( <i>Rate</i> )
HS1.5	Private Sector Sites ( <i>Rate</i> )
<b>HS2 Fatal Accident Number / Rate (Fatal Accidents per 100,000 Manual Workers)</b>	
HS2.1	Whole Industry ( <i>Number</i> )
HS2.2	New Works ( <i>Rate</i> )
HS2.3	RMAA Works ( <i>Number</i> )
HS 2.4	Public Sector Sites ( <i>Rate</i> )
HS 2.5	Private Sector Sites ( <i>Rate</i> )
<b>HS3 Number of Summonses Convicted per HK\$100,000,000 Gross Value Of Construction Works</b>	
HS3.1	Whole Industry
HS3.2	New Works
HS3.3	RMAA Works
HS3.4	Public Sector
HS3.5	Private Sector
<b>M1 Workers' Wage Index</b>	
Hong Kong Construction Industry - Employed Persons' Median Wage	
<b>M2 Workers' Aging Index - % of Registered Workers Under and Above the Age of 40</b>	
M2.1	Whole Industry
M2.2	Registered workers with Mandatory Basic Safety Training Course (Green Card)
<b>M3 Retention Rate of Graduates</b> (Basic Craft Courses And Construction Supervisor / Technician Programme Provided By Construction Industry Council Training Academy)	
Retention Rate of Graduates (after 12 Months from Works)	

### **3. PRODUCTIVITY KPIs**

## PRODUCTIVITY KPIs

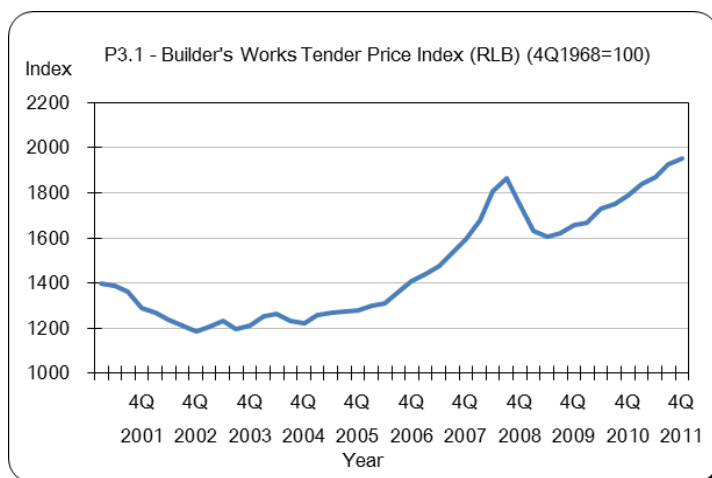
### P3 Construction Cost Indices

#### P3.1 – Builder's Works Tender Price Index (RLB) (4Q1968=100)

**Category:** Buildings

**Sector:** Private

The quarterly report as published by Rider Levett Bucknall (RLB) shows that the tender price index for builder's works in the private sector increased steadily between 2004 and 2008. Following a fall in the fourth quarter of 2008, the tender price index went up again in the third quarter of 2009. The index in the fourth quarter of 2011 was up by 9.5% over the fourth quarter of 2010.



P3.1 - Builder's Works Tender Price Index (RLB)											
Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Quarter											
1Q	1400	1270	1205	1255	1260	1300	1440	1680	1630	1670	1840
2Q	1390	1240	1230	1265	1270	1310	1475	1810	1605	1730	1870
3Q	1360	1210	1195	1230	1275	1360	1535	1865	1620	1750	1925
4Q	1290	1185	1210	1220	1280	1410	1595	1750	1655	1785	1955

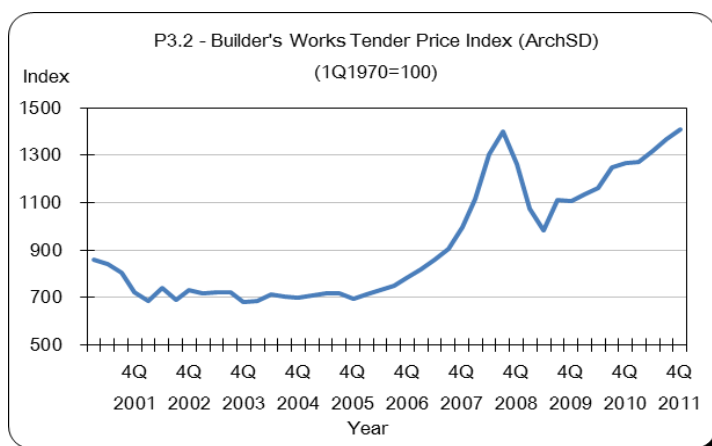
Source: Rider Levett Bucknall Limited

#### P3.2 – Builder's Works Tender Price Index (ArchSD) (1Q1970=100)

**Category:** Buildings (excluding building services)

**Sector:** Public (undertaken by Architectural Services Department)

The public builder's works tender price index increased between 2005 and 2008. Following a fall in the fourth quarter of 2008, the tender price index recovered in the third quarter of 2009. The index in the fourth quarter of 2011 was up by 11.2% over the year before.



P3.2 - Builder's Works Tender Price Index (ArchSD)											
Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Quarter											
1Q	862	687	720	685	711	714	821	1118	1074	1134	1273
2Q	842	742	723	712	716	730	859	1305	983	1161	1320
3Q	807	692	722	704	718	751	906	1401	1111	1249	1369
4Q	721	733	681	701	697	789	998	1262	1107	1266	1408

Source: Architectural Services Department

## PRODUCTIVITY KPIs

### P3 Construction Cost Indices

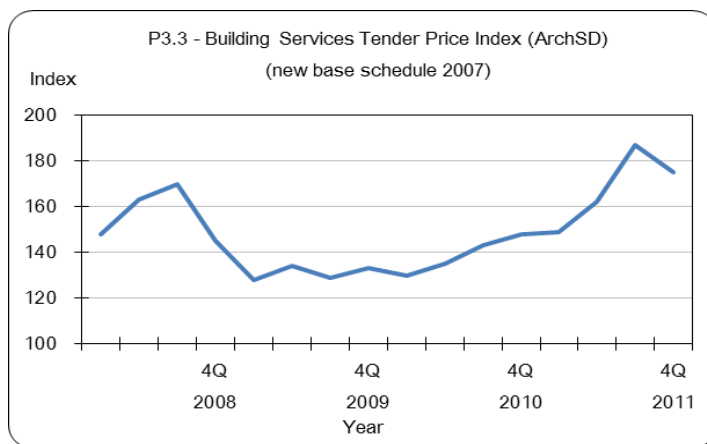
#### P3.3 – Building Services Tender Price Index (ArchSD) (new base schedule 2007)

**Category:** Buildings (Building Services)

**Sector:** Public (undertaken by Architectural Services Department)

The public building services tender price index showed a drop in the fourth quarter of 2008. It remained steady in 2009 and started to rise in 2010. The index in the fourth quarter of 2011 was up by 18.2% compared to the year before.

*Note: The index numbers before 2008 have not been included as the method for calculating the index numbers has changed since 2008.*



P3.3 - Building Services Tender Price Index (ArchSD)				
Year	2008	2009	2010	2011
Quarter				
1Q	148	128	130	149
2Q	163	134	135	162
3Q	170	129	143	187
4Q	145	133	148	175

Source: Architectural Services Department

## PRODUCTIVITY KPIs

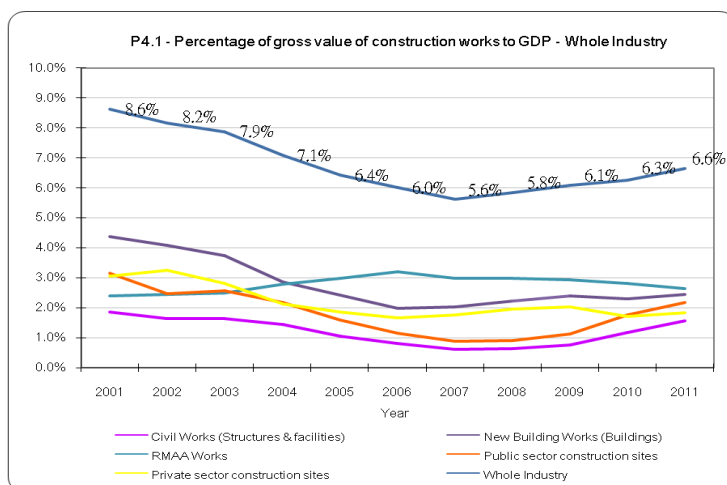
### P4 Percentage of Gross Value of Construction Works to GDP

#### P4.1 – Whole Industry

**Category:** Whole Industry

**Sector:** N/A

The percentage of gross value of construction works to GDP had been decreasing continuously since 2002 and started to increase in 2008. The percentage was 6.6 % in 2011. The percentage of gross value of construction works in the private sector has remained fairly steady since 2005. The increase in the percentage since 2008 has been mainly from the public sector.



Source: Census and Statistics Department

Note 1 – Percentage of Gross Value of Construction Works to GDP

=  $\frac{\text{Gross value of construction works (whole Industry / respective categories or sectors)}}{\text{GDP (overall; at current market prices)}}$  (in nominal terms)

GDP (overall; at current market prices)

Note 2 – Gross value of construction works (Whole Industry) = Gross value of construction works (at construction sites) + Gross value of construction works (at locations other than sites = RMAA Works).

Note 3 – Gross value of construction works (at construction sites) can be calculated by using the formulas below:

- Gross value of construction works (Civil Works (Structure & Facilities)) + Gross value of construction works (New Building Works (Buildings)) or;
- Gross value of construction works (Public sector construction sites) + Gross value of construction works (Private sector construction sites)

Note 4 – The GDP of recent years may be further revised in a later publication.

## PRODUCTIVITY KPIs

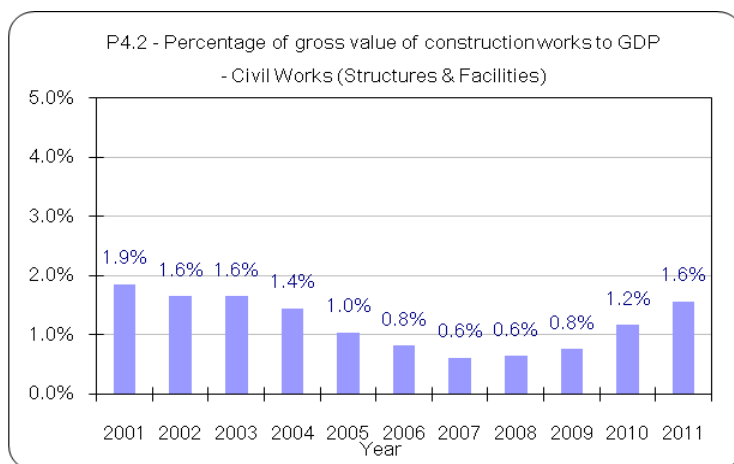
### P4 Percentage of Gross Value of Construction Works to GDP

#### P4.2 – Civil Works (Structures & Facilities)

**Category:** Civil Works (Structures & Facilities)

**Sector:** N/A

Output of Civil Works (Structures & Facilities) has shown an increasing trend since 2008. In 2011, the percentage increased by 34.4%, compared to the year before.



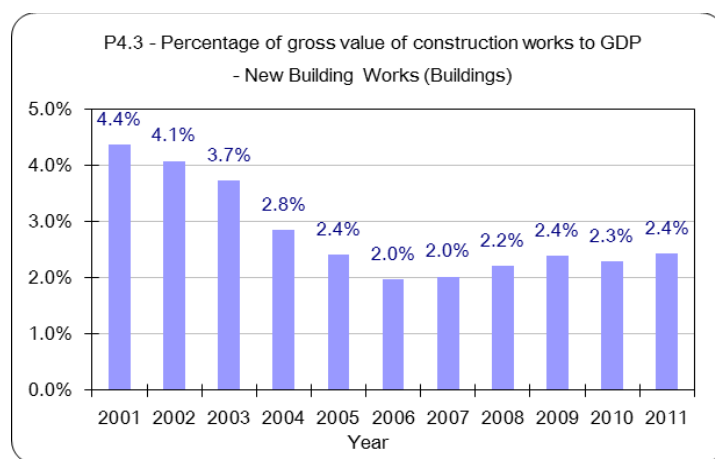
Source: Census and Statistics Department

#### P4.3 – New Building Works (Buildings)

**Category:** New Buildings Works (Buildings)

**Sector:** N/A

The decreasing trend for New Building Works stopped in 2006. The percentage remained at around 2% in recent years.



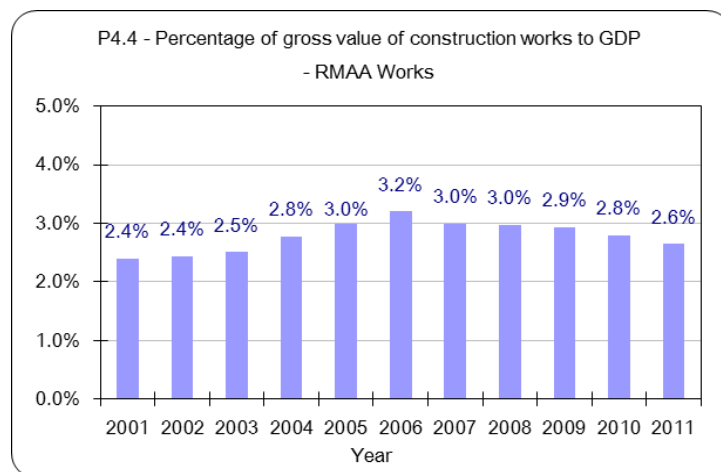
Source: Census and Statistics Department

#### P4.4 – RMAA Works

**Category:** RMAA Works (Construction works at locations other than sites)

**Sector:** N/A

Output of RMAA Works showed a gradual increasing trend between 2002 and 2006, which levelled off in recent years.



Source: Census and Statistics Department

## PRODUCTIVITY KPIs

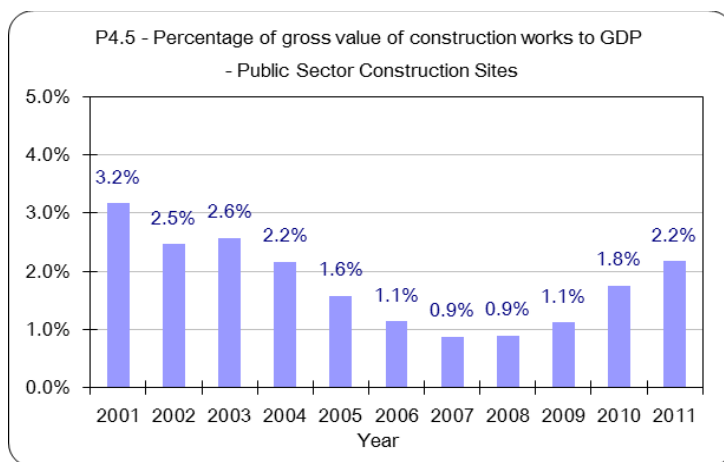
### P4 Percentage of Gross Value of Construction Works to GDP

#### P4.5 – Public Sector Construction Sites

**Category:** N/A

**Sector:** Public (construction sites)

Public works output has shown a rapid increasing trend since 2009. In 2011, the percentage increased by 23.8%, compared to 2010.



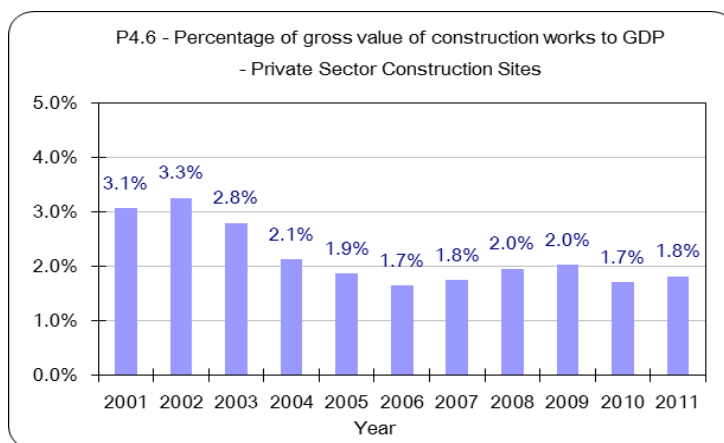
Source: Census and Statistics Department

#### P4.6 – Private Sector Construction Sites

**Category:** N/A

**Sector:** Private (construction sites)

The percentage of gross value of construction works in private sectors has remained steady at around 2% since 2005.



Source: Census and Statistics Department



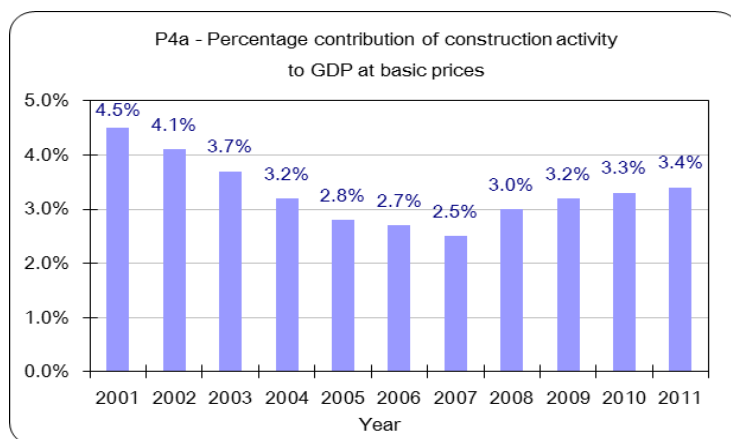
## PRODUCTIVITY KPIs

### P4a Percentage Contribution of Construction Activities to GDP at Basic Prices

**Category:** Whole Industry

**Sector:** N/A

The overall contribution of construction activities to GDP at basic prices had been decreasing since 2002 until 2007 and started to rise in 2008. The overall contribution of construction activities to GDP at basic prices was 3.4% in 2011.



Source: Census and Statistics Department

Note 1 – GDP of construction activities = Gross value of construction works (Whole Industry) – Intermediate consumption

Note 2 – The intermediate consumption of the construction industry comprises the expenses on consumption of building materials and supplies on sites and sundry supplies in business operation, rentals, expenses on repair and maintenance and other services such as transportation, technical consultancy, insurance, etc. Consumption of materials and supplies is obtained by adjusting the value of purchases by changes in inventories net of price appreciation. Payments to labour-only sub-contractors are included in compensation of employees.

Note 3 – GDP at basic prices excludes taxes products and statistical discrepancy.

Note 4 – Percentage contribution of construction activities to GDP at basic prices of recent years may be further revised in a later publication.

## PRODUCTIVITY KPIs

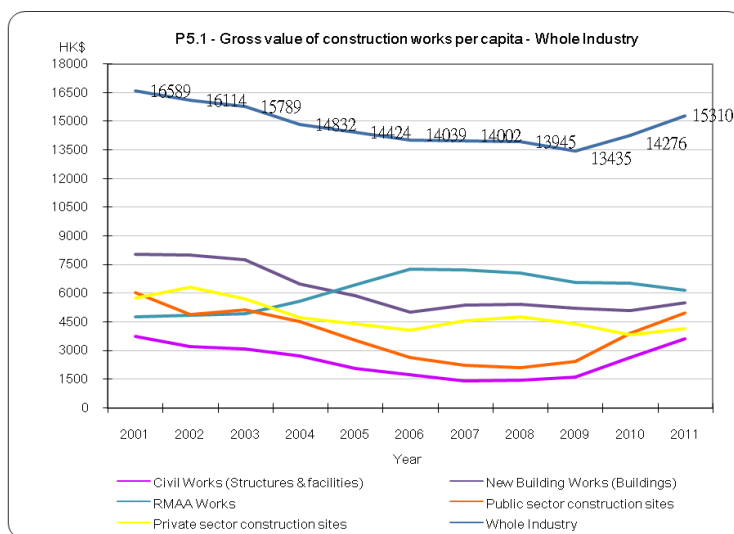
### P5 Gross Value of Construction Works per capita

#### P5.1 – Whole Industry

**Category:** Whole Industry

**Sector:** N/A

The gross value of construction works per capita demonstrated a decreasing trend between 2001 and 2006 except the RMAA Works (i.e. repair, maintenance, alteration and addition works) which showed a gradual increase. During 2009 to 2011, the output of Civil Works was the major driver to the increase of gross value of construction works per capita. The gross value of construction works per capita at Public Construction Sites also showed a rapid increase between 2008 and 2011, which rose from HK\$2,100 in 2008 to HK\$4,985 in 2011.



Source: Census and Statistics Department

Note 1 – Gross Value of Construction Works per capita

=  $\frac{\text{Gross value of construction works (Whole Industry / Respective categories or sectors) (at constant (2000) market prices)}}{\text{Capita (overall)}}$

Note 2 – Gross value of construction works (Whole Industry) = Gross value of construction works (at construction sites) + Gross value of construction works (at locations other than sites = RMAA Works).

Note 3 – Gross value of construction works (at construction sites) can be calculated by using the formulas below:

- Gross value of construction works (Civil Works (Structure & Facilities)) + Gross value of construction works (New Building Works (Buildings)) or;
- Gross value of construction works (Public sector construction sites) + Gross value of construction works (Private sector construction sites)

## PRODUCTIVITY KPIs

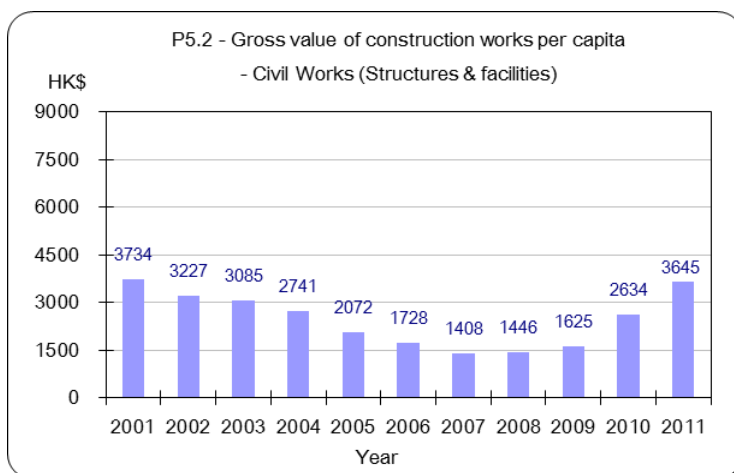
### P5 Gross Value of Construction Works per capita

#### P5.2 – Civil Works (Structures & Facilities)

**Category:** Civil Works (Structures & Facilities)

**Sector:** N/A

The decreasing trend in this category stopped in 2007 and the gross value of civil works per capita had rebounded since 2008 and increased rapidly in 2010. In 2011, the output increased by 38.4%, compared to that in 2010.



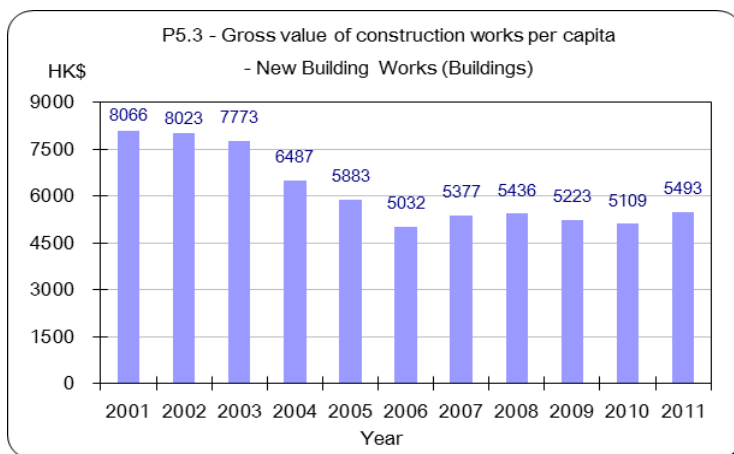
Source: Census and Statistics Department

#### P5.3 – New Building Works (Buildings)

**Category:** New Building Works (Buildings)

**Sector:** N/A

The decreasing trend in this category stopped in 2006 and the gross value of new building works per capita remained steady in recent years.



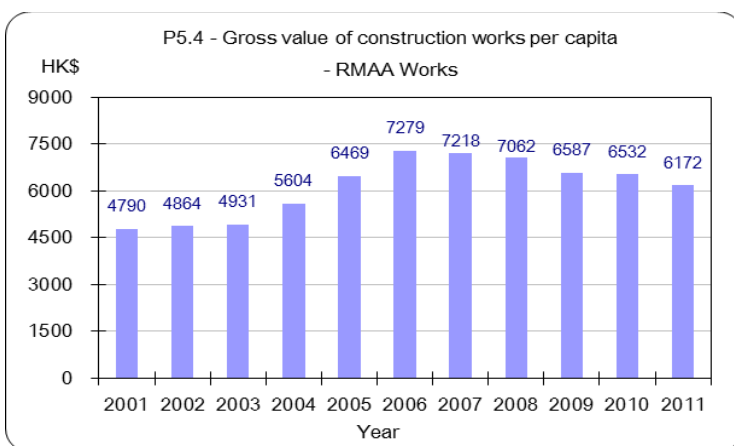
Source: Census and Statistics Department

#### P5.4 – RMAA Works

**Category:** RMAA Works

**Sector:** N/A

The gross value of RMAA works per capita showed an increasing trend between 2001 and 2006. There has been a gradual decrease since 2007.



Source: Census and Statistics Department

## PRODUCTIVITY KPIs

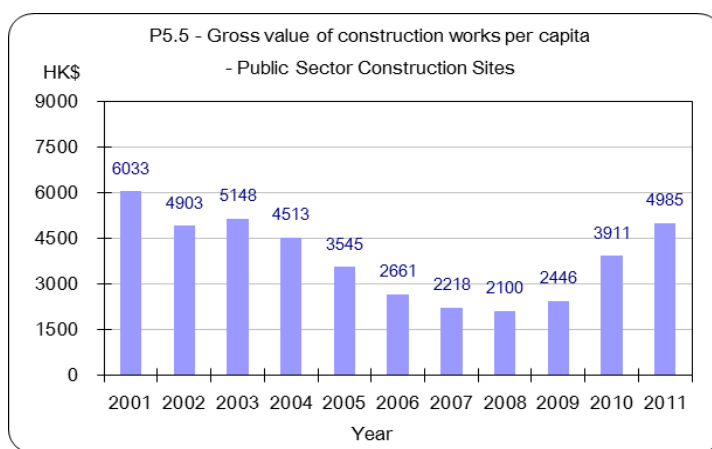
### P5 Gross Value of Construction Works per capita

#### P5.5 – Public Sector Construction Sites

**Category:** N/A

**Sector:** Public (Construction Sites)

Public works output has shown a rapid increasing trend since 2009. In 2011, the output per capita was up by 27.5%, compared to the year before.



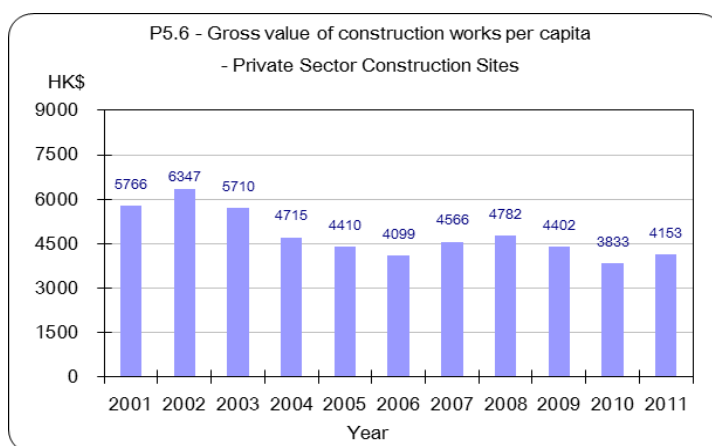
Source: Census and Statistics Department

#### P5.6 – Private Sector Construction Sites

**Category:** N/A

**Sector:** Private (Construction Sites)

Private works output has been fluctuating over the past 11 years. It remained at around HK\$4,000 in 2010 and 2011.



Source: Census and Statistics Department

## PRODUCTIVITY KPIs

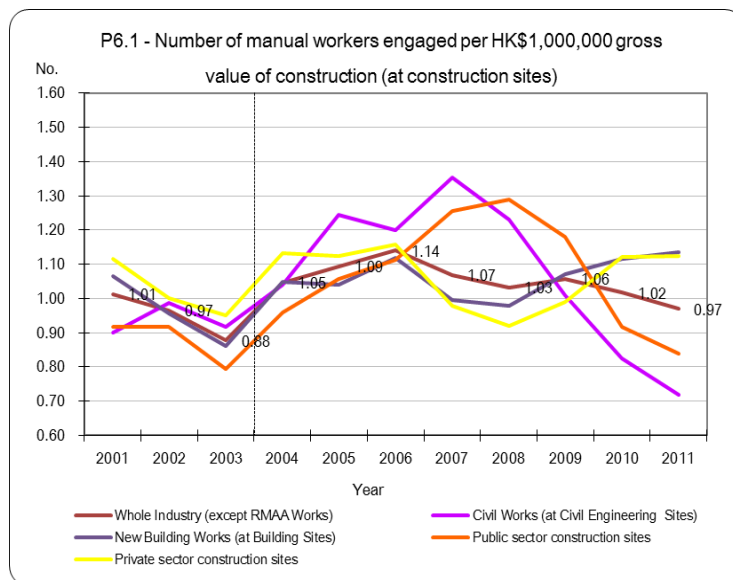
### P6 Number of Manual Workers Engaged per HK\$1,000,000 Gross Value of Construction Works (at Construction Sites)

#### P6.1 – Whole Industry (except RMAA Works)

**Category:** Whole Industry

**Sector:** N/A

The number of manual workers engaged per HK\$1,000,000 gross value of construction works (at construction sites) has shown a decreasing trend since 2006. The numbers of manual workers in civil engineering works sites and public sector construction sites decreased significantly in recent years. There was a decrease in number of manual workers per HK\$1,000,000 gross value of construction works in the private sector in 2011 compared to the year before.



Source: Census and Statistics Department

- Note 1 – Number of manual workers engaged per HK\$1,000,000 gross value of construction works (at construction sites)  
 = Average number of manual workers engaged for each year at construction sites (Whole Industry (except RMAA works) / Respective categories or sectors)  
 HK\$1,000,000 Gross value of construction works (at construction sites) (Whole Industry (except RMAA works) / Respective categories or sectors) at constant (2000) market prices)
- Note 2 – Number of manual workers before 2003 excludes E&M workers and those workers work at the sites under the charge of the Electrical and Mechanical Services Department and the Environmental Protection Department but the data includes those workers after 2003.
- Note 3 – Number of manual workers excludes the workers work for RMAA works. For sites under the charge of Government departments, manual workers in some 40 selected major occupations at the skilled and semi-skilled levels are covered in the administrative returns furnished by the respective Government departments.
- Note 4 – No of manual workers engaged at construction sites (Whole Industry) can be calculated by the formulas below:  
 a) No of manual workers engaged at construction sites (Civil Works (at Civil Engineering sites) + No of manual workers engaged at construction sites (New Building Works (at Building sites)) or;  
 b) No of manual workers engaged at construction sites (Public sector construction site) + No of manual workers engaged at construction sites (Private sector construction site).

## PRODUCTIVITY KPIs

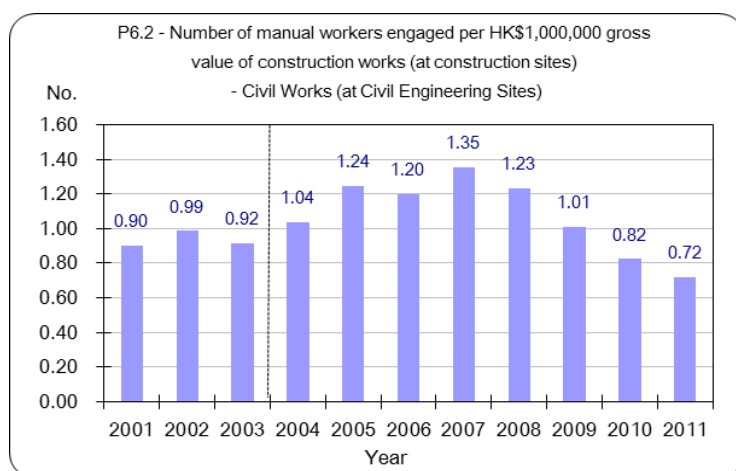
### P6 Number of Manual Workers Engaged per HK\$1,000,000 Gross Value of Construction Works (at Construction Sites)

#### P6.2 – Civil Works (at Civil Engineering Sites)

**Category:** Civil Engineering  
(Construction Sites)

**Sector:** N/A

The number of manual workers engaged for HK\$1,000,000 gross value of civil engineering construction works has shown a decreasing trend since 2008.



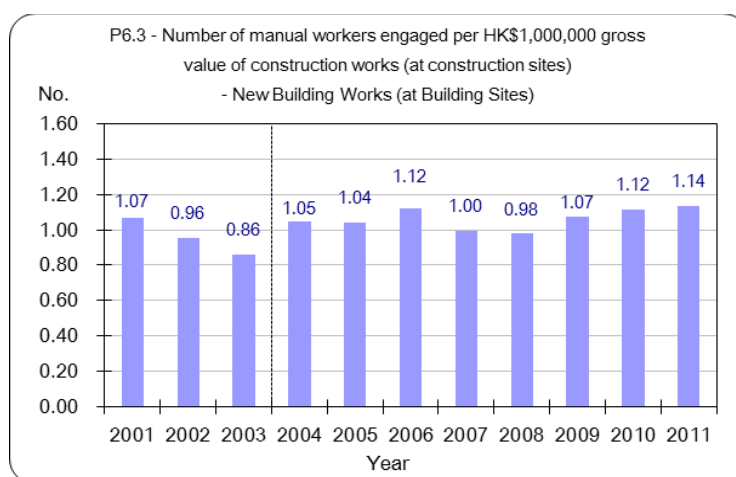
Source: Census and Statistics Department

#### P6.3 – New Building Works (at Building Sites)

**Category:** Building (Construction Sites)

**Sector:** N/A

The number of manual workers engaged for HK\$1,000,000 gross value of new building works has shown an increasing trend in recent years.



Source: Census and Statistics Department

## PRODUCTIVITY KPIs

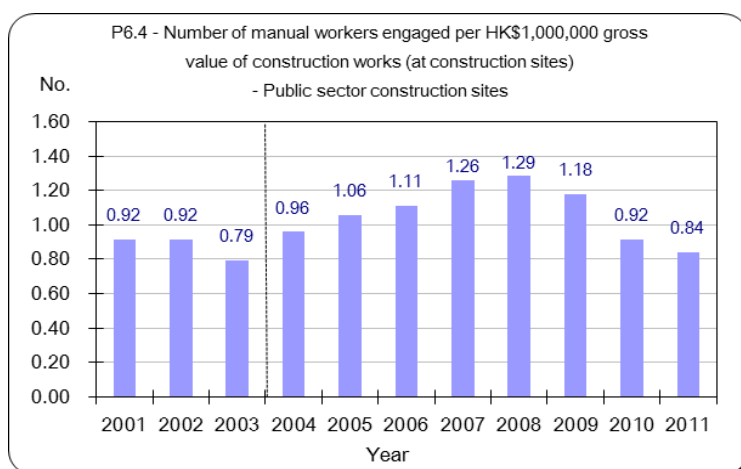
### P6 Number of Manual Workers Engaged Per HK\$1,000,000 Gross Value of Construction Works (at Construction Sites)

#### P6.4 – Public Sector Construction Sites

**Category:** N/A

**Sector:** Public (Construction Sites)

The number of manual workers per HK\$1,000,000 gross value of public works has shown a decreasing trend since 2009.



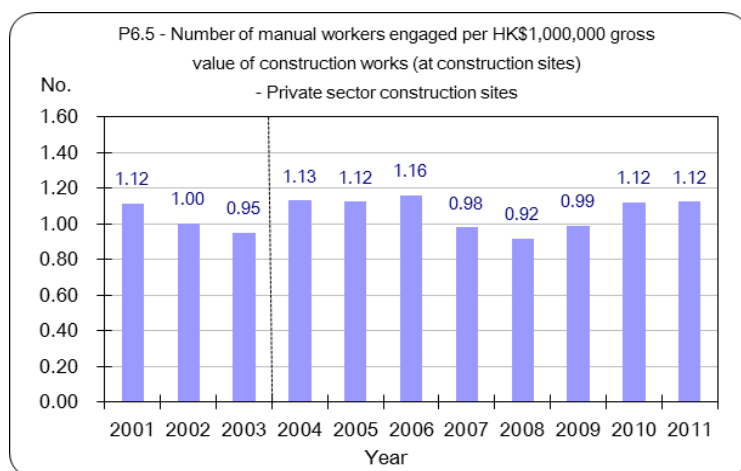
Source: Census and Statistics Department

#### P6.5 – Private Sector Construction Sites

**Category:** N/A

**Sector:** Private (Construction Sites)

The number of manual workers per HK\$1,000,000 gross value of private works has shown an increasing trend in recent years.



Source: Census and Statistics Department

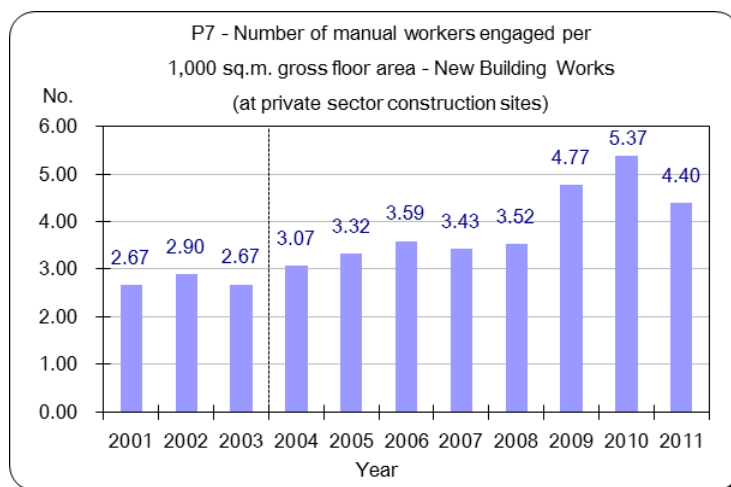
## PRODUCTIVITY KPIs

### P7 Number of Manual Workers Engaged per 1,000 sq. m. Gross Floor Area

**Category:** New Building Works (at private sector construction sites)

**Sector:** Private (Construction sites)

In general, the number of manual workers engaged per 1,000 sq. m. gross floor area showed an increasing trend. In 2011, however, the number decreased significantly by 18.2%, compared to the year before.



Source: Census and Statistics Department

- Note 1 – Number of manual workers engaged per 1,000 sq. m. gross floor area  
 = Average number of manual workers engaged for each year at construction sites (Private sector construction site)  
 Gross floor area (completed and under construction) in a year / 1,000 sq. m.
- Note 2 – Number of manual workers before 2003 excludes E&M workers and those workers work at the sites under the charge of the Electrical and Mechanical Services Department and the Environmental Protection Department but the data includes those workers after 2003.
- Note 3 – Number of manual workers excludes the workers work for RMAA works. For sites under the charge of Government departments, manual workers in some 40 selected major occupations at the skilled and semi-skilled levels are covered in the administrative returns furnished by the respective Government departments.
- Note 4 – Gross floor area in a year = gross floor area completed at the end of the year + gross floor area under construction in the year



## **4. HEALTH & SAFETY KPIs**

## HEALTH & SAFETY KPIs

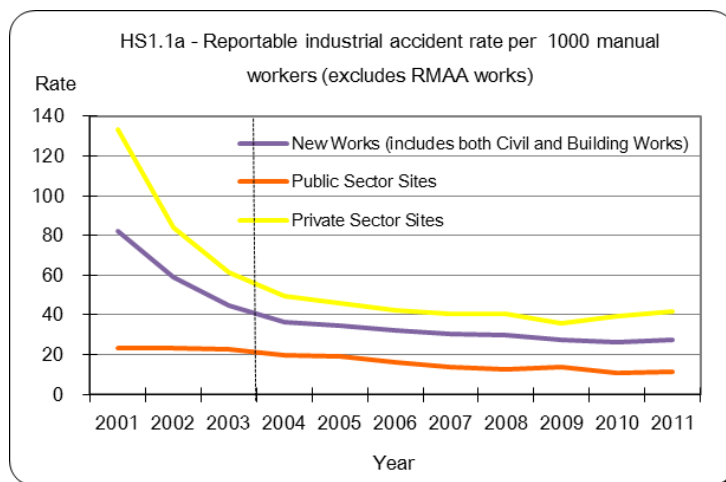
### HS1 Industrial Accident Number / Rate (Reportable Industrial Accidents per 1,000 Manual Workers)

#### HS1.1 Whole Industry (Number)

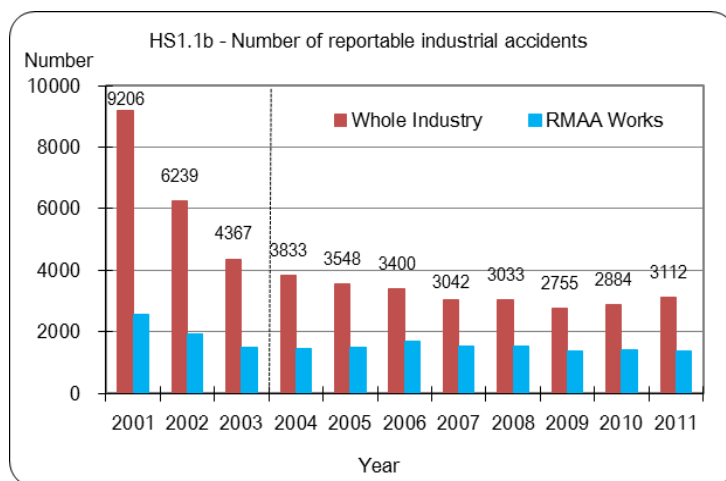
**Category:** Whole Industry

**Sector:** N/A

The industrial accident number for the Whole Industry showed a rapid decrease from 2001 to 2004. This rapid decreasing trend also happened in the industrial accident rates for New Works and Private Sector Sites. For RMAA Works, the industrial accident number remained steady in the past few years. The industrial accident rate for Public Sector Sites has also been kept at a comparatively low rate over the past 11 years. In general, the public sector demonstrated a better performance than the private sector.



Source: Census and Statistics Department and Labour Department



Source: Census and Statistics Department and Labour Department

- Note 1 – Industrial accidents rate =  $\frac{\text{Number of industrial accidents (Respective categories / sectors)}}{\text{Average number of manual workers engaged for each year at construction sites (Respective categories / sectors) / 1000}}$
- Note 2 – Number of reportable industrial accidents (Whole Industry) = Reportable industrial accidents (New Works includes both Civil and Building Works) + Reportable industrial accidents number (RMAA Works)
- Note 3 – Reportable industrial accidents (New Works includes both Civil and Building Works) = Reportable industrial accidents (Public Sector Sites) + Reportable industrial accidents (Private Sector Sites).
- Note 4 – Number of manual workers before 2003 excludes E&M workers and those workers work at the sites under the charge of the Electrical and Mechanical Services Department and the Environmental Protection Department but the data includes those workers after 2003.
- Note 5 – Number of manual workers excludes the workers work for RMAA works. For sites under the charge of Government departments, manual workers in some 40 selected major occupations at the skilled and semi-skilled levels are covered in the administrative returns furnished by the respective Government departments.
- Note 6 – The industrial accident rates for Whole Industry and RMAA Works are not available due to the exclusion of workers for RMAA Works in the overall number of manual workers as mentioned in Note 5 above. Hence, only the total number of industrial accidents is presented for these two categories.

## HEALTH & SAFETY KPIs

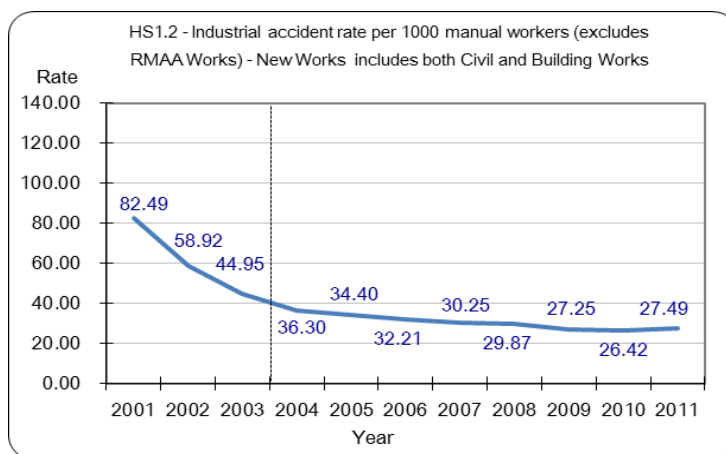
### HS1 Industrial Accident Number / Rate (Reportable Industrial Accidents per 1,000 Manual Workers)

#### HS1.2 – New Works (Rate)

**Category:** New Works (both Civil and Buildings)

**Sector:** N/A

The safety performance improved rapidly from 2001 to 2004 and has generally kept on improving in subsequent years.



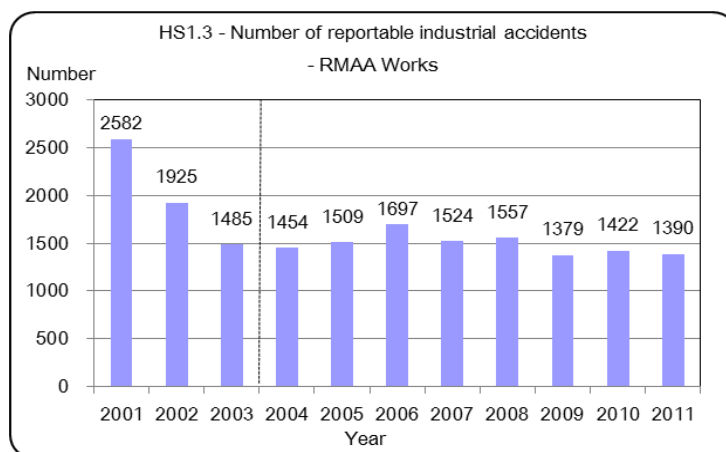
Source: Census and Statistics Department and Labour Department

#### HS1.3 – RMAA Works (Number)

**Category:** RMAA Works

**Sector:** N/A

The safety performance improved rapidly from 2001 to 2003, and has fluctuated over the recent years.



Source: Census and Statistics Department and Labour Department

## HEALTH & SAFETY KPIs

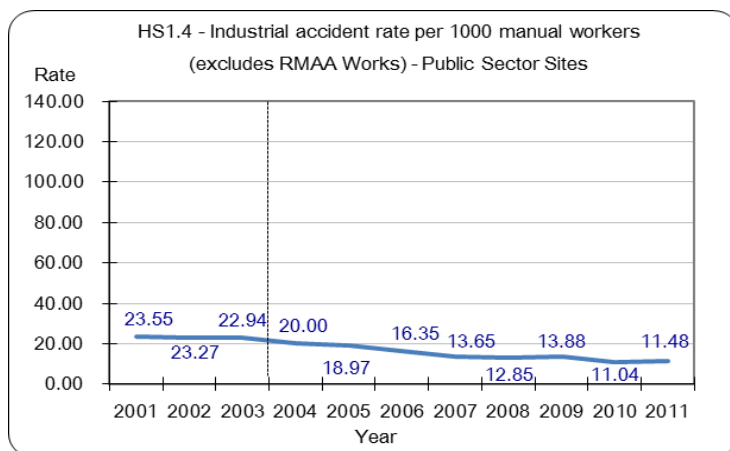
### HS1 Industrial Accident Number / Rate (Reportable Industrial Accidents per 1,000 Manual Workers)

#### HS1.4 – Public Sector Sites (Rate)

**Category:** N/A

**Sector:** Public Sector Sites

The safety performance has been improving since 2001 but the rate has recently rebounded mildly in 2011.



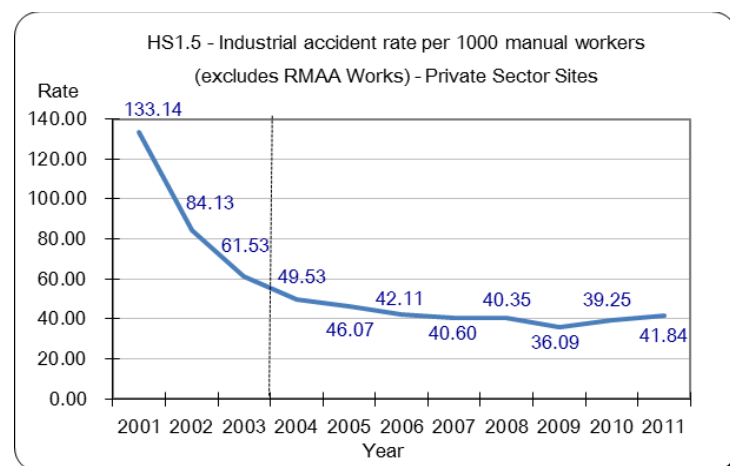
Source: Census and Statistics Department and Labour Department

#### HS1.5 – Private Sector Sites (Rate)

**Category:** N/A

**Sector:** Private Sector Sites

The safety performance improved rapidly from 2001 to 2003, and has kept on improving until 2009.



Source: Census and Statistics Department and Labour Department

## HEALTH & SAFETY KPIs

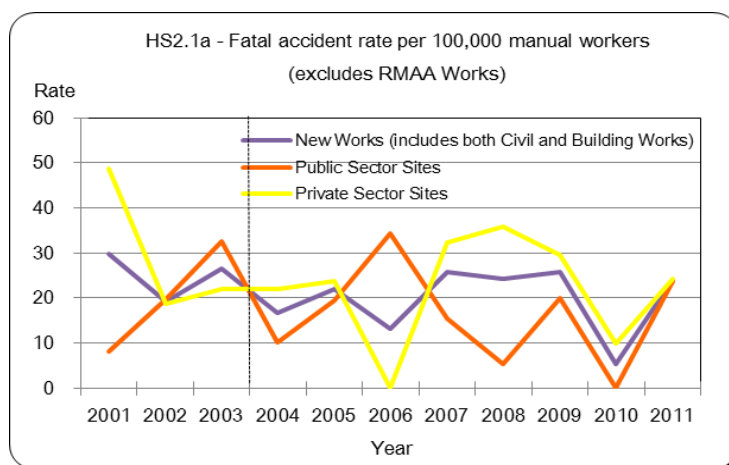
### HS2 Fatal Accident Number / Rate (Fatal Accidents per 100,000 Manual Workers)

#### HS2.1 Whole Industry (Number)

**Category:** Whole Industry

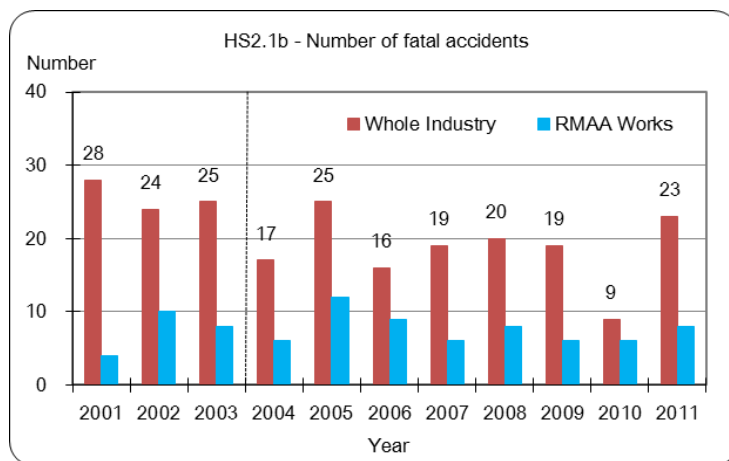
**Sector:** N/A

The fatal accident rate and number fluctuated over the past 11 years. The number of fatal accidents for the Whole Industry was below 30 in each year. The fatal accident number for Private Sector Sites fluctuated between 0 to 21 in the past 11 years, whilst the number for the Public Sector Sites maintained below 10.



HS2a - Number of fatal accidents											
Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
New Works	24	14	17	11	13	7	13	12	13	3	15
Public Sector Site	3	6	9	3	5	7	3	1	4	0	7
Private Sector Site	21	8	8	8	8	0	10	11	9	3	8

Source: Census and Statistics Department and Labour Department



HS2b - Number of fatal accidents											
Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Whole Industry	28	24	25	17	25	16	19	20	19	9	23
RMAA Works	4	10	8	6	12	9	6	8	6	6	8

Source: Census and Statistics Department and Labour Department

- Note 1 – Fatal accidents rate =  $\frac{\text{Number of fatal accidents (Respective categories / sectors)}}{\text{Average number of manual workers engaged for each year at construction sites (Respective categories / sectors) / 100,000}}$
- Note 2 – Number of fatal accidents (Whole Industry) = Fatal accidents (New Works includes both Civil and Building Works) + Fatal accidents number (RMAA Works)
- Note 3 – Fatal accidents (New Works includes both Civil and Building Works) = Fatal accidents (Private Sector Sites) + Fatal accidents (Public Sector Sites)
- Note 4 – Number of manual workers before 2003 excludes E&M workers and those workers work at the sites under the charge of the Electrical and Mechanical Services Department and the Environmental Protection Department but the data includes those workers after 2003.
- Note 5 – Number of manual workers excludes the workers work for RMAA works. For sites under the charge of Government departments, manual workers in some 40 selected major occupations at the skilled and semi-skilled levels are covered in the administrative returns furnished by the respective Government departments.
- Note 6 – The fatal accident rates for Whole Industry and RMAA Works are not available due to the exclusion of workers for RMAA Works in the overall number of manual workers as mentioned in Note 5 above. Hence, only the total number of industrial accidents is presented for these two categories.

## HEALTH & SAFETY KPIs

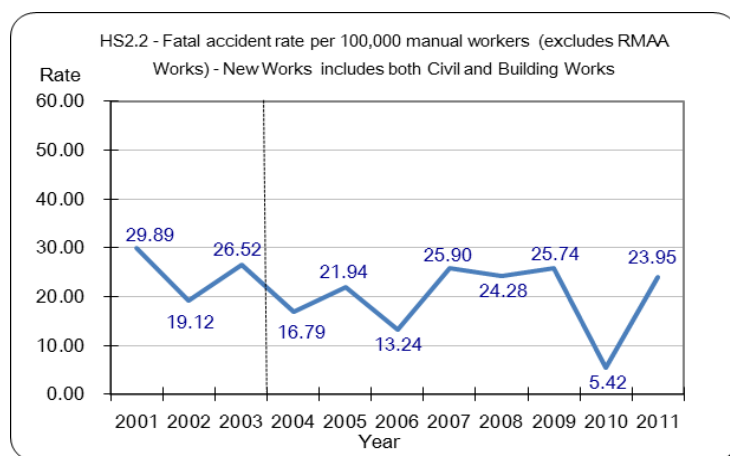
### HS2 Fatal Accident Number / Rate (Fatal Accidents per 100,000 Manual Workers)

#### HS2.2 – New Works (Rate)

**Category:** New Works (both Civil and Buildings)

**Sector:** N/A

Performance fluctuated in the last 11 years, but showed a significant improvement in 2010.



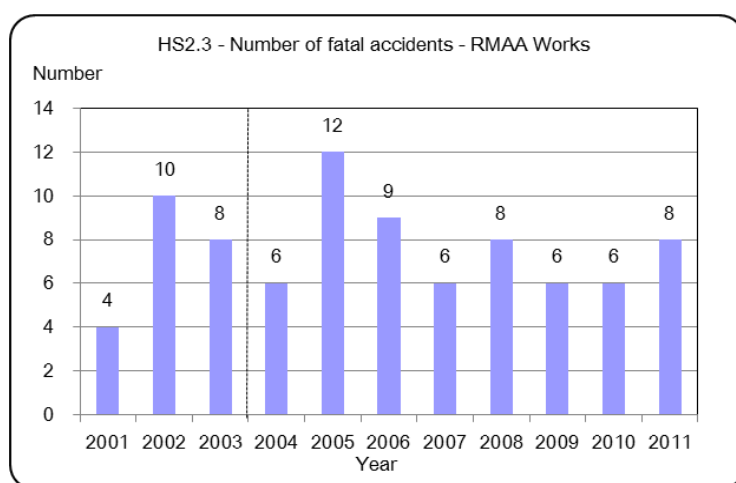
Source: Census and Statistics Department and Labour Department

#### HS2.3 – RMAA Works (Number)

**Category:** RMAA Works

**Sector:** N/A

Performance fluctuated over the past 11 years. The highest number of fatal accidents was 12 in 2005, whilst the lowest number was 4 in 2001.s.



Source: Census and Statistics Department and Labour Department

## HEALTH & SAFETY KPIs

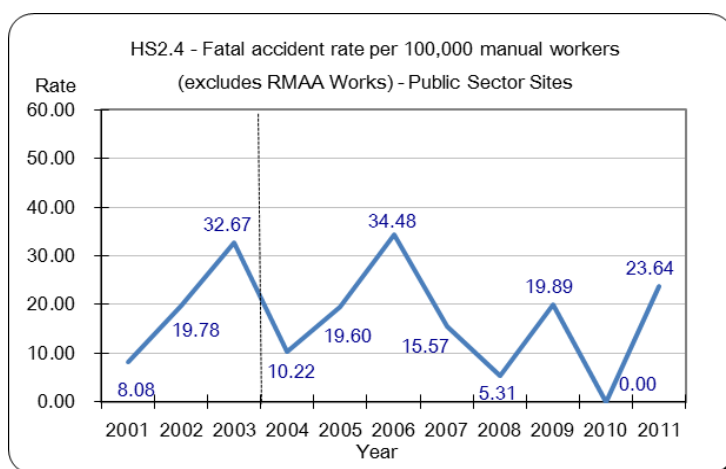
### HS2 Fatal Accident Number / Rate (Fatal Accidents per 100,000 Manual Workers)

#### HS2.4 – Public Sector Sites (Rate)

**Category:** N/A

**Sector:** Public Sector Sites

Performance fluctuated over the past 11 years. The fatal accident rate for Public Sector Sites fluctuated from 0 to 34.5.



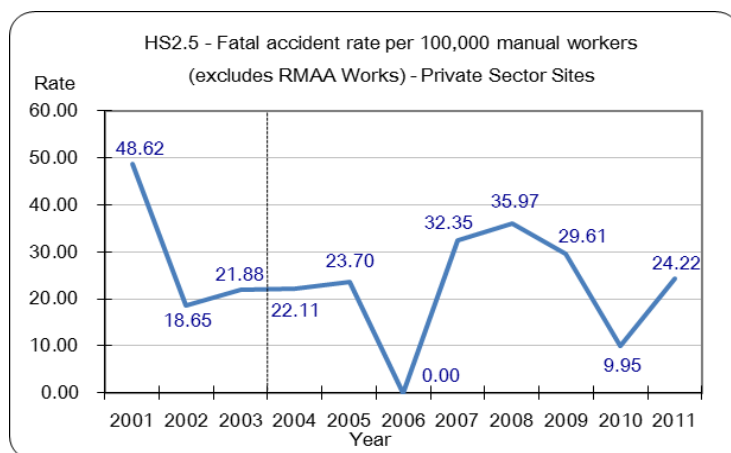
Source: Census and Statistics Department and Labour Department

#### HS2.5 – Private Sector Sites (Rate)

**Category:** N/A

**Sector:** Private Sector Sites

There was a great improvement between 2001 and 2002 but the performance has been fluctuating since 2003.



Source: Census and Statistics Department and Labour Department

## HEALTH & SAFETY KPIs

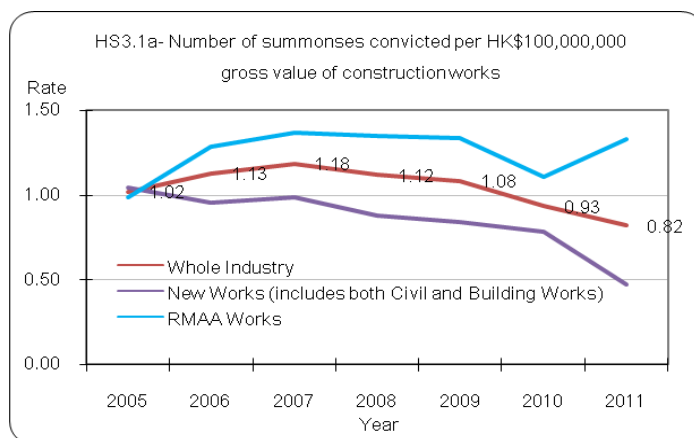
### HS3 Number of Summonses Convicted per HK\$100,000,000 Gross Value of Construction Works

#### HS3.1 Whole Industry

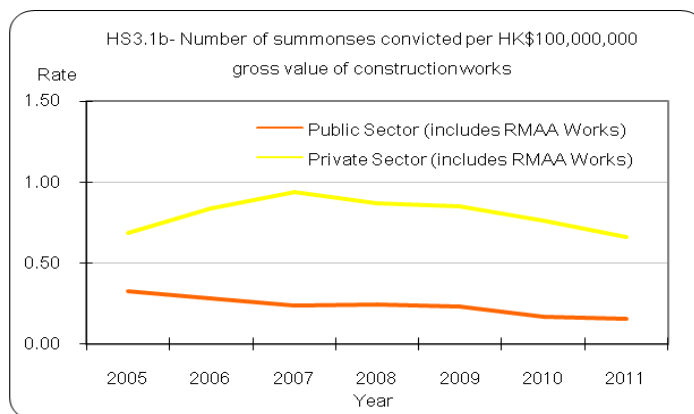
**Category:** Whole Industry

**Sector:** N/A

Overall performance demonstrated an improving trend except RMAA works. Performance in the public sector was generally better than that in the private sector in the last few years. The rate for Public Sector was kept below 0.5 over the past 7 years.



Source: Census and Statistics Department and Labour Department



Source: Census and Statistics Department and Labour Department

- Note 1 – Number of summonses convicted per HK\$100,000,000 gross value of construction works  

$$= \frac{\text{Number of summonses convicted (Whole Industry / Respective categories or sectors)}}{\text{Gross value of construction works (Whole Industry / Respective categories or sectors) (at constant (2000) market prices) / 100,000,000}}$$
- Note 2 – Number of summonses convicted (Whole Industry) can be calculated by the formulas below:  
 a) Number of summonses convicted (New Works includes both Civil and Building Works) + Number of summonses convicted (RMAA Works), or;  
 b) Number of summonses convicted (Private Sector) + Number of summonses convicted (Public Sector)
- Note 3 – Gross value of construction works (Whole Industry) = Gross value of construction works (at construction sites) + Gross value of construction works (at locations other than sites = RMAA Works).
- Note 4 – Gross value of construction works (at construction sites) can be calculated by using the formulas below:  
 a) Gross value of construction works (Civil Works (Structure & Facilities)) + Gross value of construction works (New Building Works (Buildings)) or;  
 b) Gross value of construction works (Public sector construction sites) + Gross value of construction works (Private sector construction sites)
- Note 5 – Number of summonses convicted per HK\$100,000,000 gross value of construction works (Whole Industry), Number of summonses convicted per HK\$100,000,000 gross value of construction works (New Works) and Number of summonses convicted per HK\$100,000,000 gross value of construction works (RMAA Works) are calculated by the number of summonses convicted divided by the HK\$100,000,000 gross value of construction works in respective work type x 100,000,000.
- Note 6 – Number of summonses convicted per HK\$100,000,000 gross value of construction works (Public sector) and Number of summonses convicted per HK\$100,000,000 gross value of construction works (Private sector) are calculated by the number of summonses convicted divided by the gross value of construction works (Whole industry) instead of the respective sector due to the different in the coverage for RMAA Works.
- Note 7 – Based on notes 5 & 6 above, index group of those for Whole Industry, New Works and RMAA Works cannot be compared directly with the index group for Public Sector and Private Sector.
- Note 8 – Data for 2001 to 2004 is not available.



## HEALTH & SAFETY KPIs

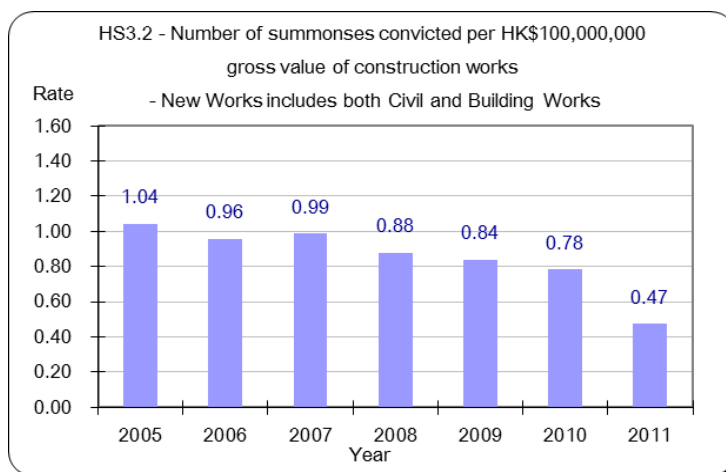
### HS3 Number of Summonses Convicted per HK\$100,000,000 Gross Value of Construction Works

#### HS3.2 – New Works

**Category:** New Works (both Civil and Buildings)

**Sector:** N/A

There has been an improving trend since 2008 for New Works. The rate dropped by 40% in 2011 compared with the year before.



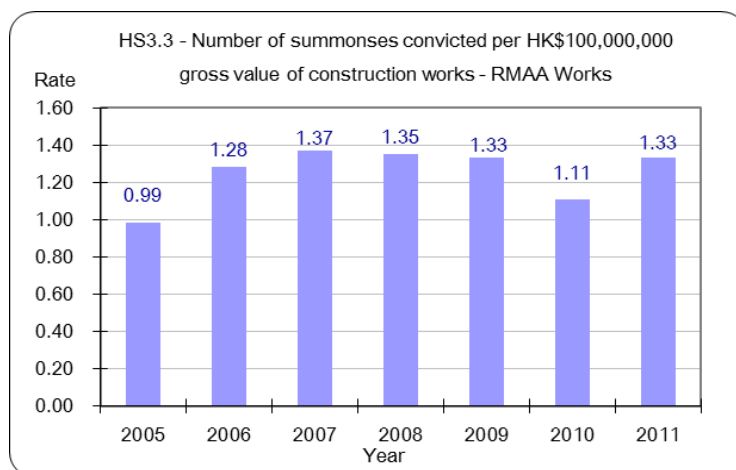
Source: Census and Statistics Department and Labour Department

#### HS3.3 – RMAA Works

**Category:** RMAA Works

**Sector:** N/A

Performance has been fluctuating in recent years. The rate increased again in 2011, by 20% compared with the year before.



Source: Census and Statistics Department and Labour Department

## HEALTH & SAFETY KPIs

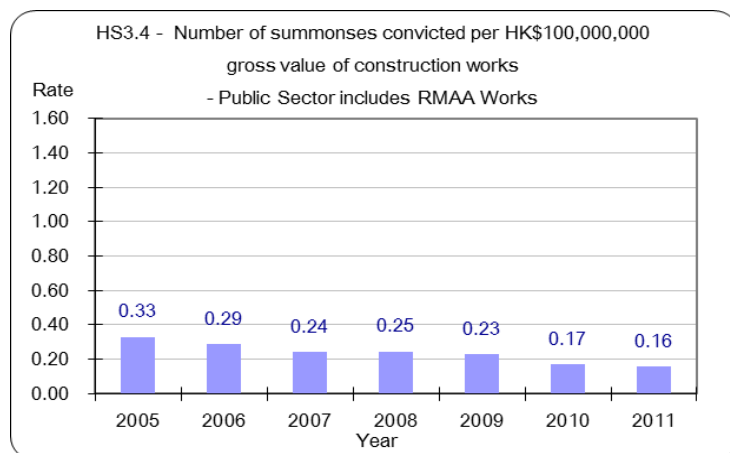
### HS3 Number of Summonses Convicted per HK\$100,000,000 Gross Value of Construction Works

#### HS3.4 – Public Sector

**Category:** N/A

**Sector:** Public Sector

Significant improvement was noted in recent years. The rate for Public Sector was kept below 0.4 over the past few years.



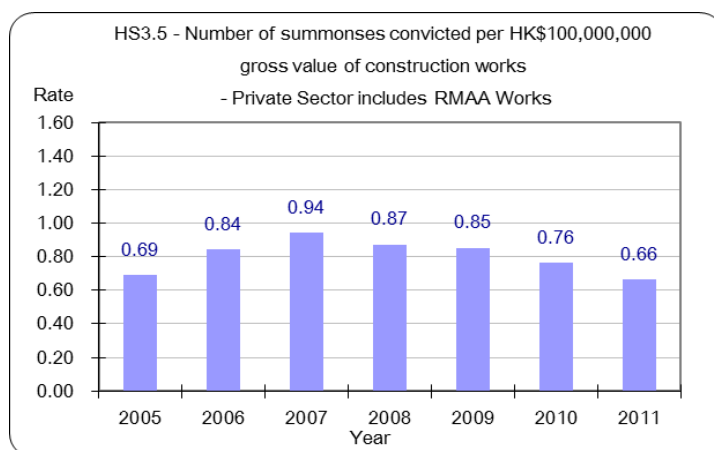
Source: Census and Statistics Department and Labour Department

#### HS3.5 – Private Sector

**Category:** N/A

**Sector:** Private Sector

The rate for Private Sector increased from 2005 to 2007. Performance has been improving in recent years. The rate dropped by 30% in total between 2007 to 2011.



Source: Census and Statistics Department and Labour Department

## **5. MANPOWER KPIs**

## MANPOWER KPIs

### M1 Workers' Wage Index

**Category:** Whole Industry (Employed Persons' Median Wage)

**Sector:** N/A

The salaries of craft and related workers/elementary occupations were lower than the Hong Kong median monthly earnings and also the industry median monthly earning, whilst the managers and administrators/professionals/associate professionals had a higher salary than the Hong Kong median monthly earnings and also the industry median. The salary differences between different groups of employees remained largely unchanged over the last 4 years.

	2008				2009				2010				2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Hong Kong Median monthly earnings	11,000	10,500	10,500	10,525	10,600	10,500	10,500	10,500	11,000	10,500	11,000	11,000	11,000	11,000	11,500	12,000
Construction Industry																
Managers and administrators/ Professionals/Associate professionals			20,000				20,000				20,000				20,000	
Craft and related workers/ Elementary occupations			9,000				9,000				9,500				10,500	
Others (Service workers and shop sales workers/ Plant and machine operators and assemblers)			10,000				10,000				10,300				11,000	
Construction Industry Overall			10,000				10,300				10,500				11,000	

Source: Census and Statistics Department

Note 1 – As confirmed by Census and Statistics Department, Median monthly employment earnings in the report are nominal values not subject to any adjustment

Note 2 – Median monthly employment earnings in construction industry by occupation for 2008 to 2011 are provided by Census and Statistics Department.

Note 3 – Data for years 2001 to 2007 are not available.

## MANPOWER KPIs

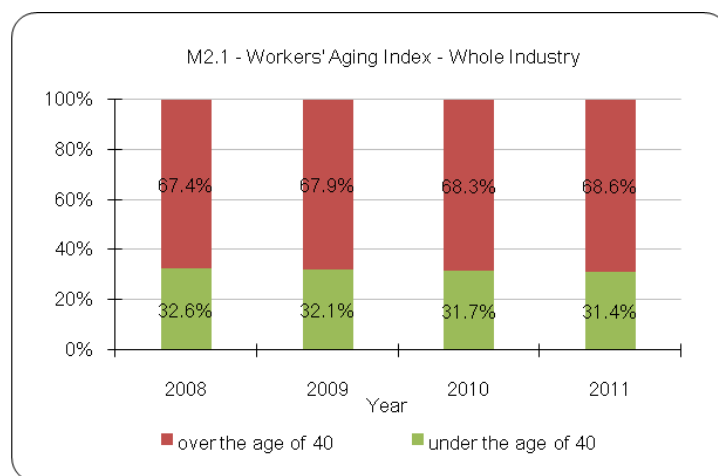
### M2 Workers' Aging Index - % of Registered Workers Under and Above the Age of 40

#### M2.1 – Whole Industry

**Category:** Whole Industry

**Sector:** N/A

The workers' aging index aims to keep track of the aging situation for the purpose of manpower planning. It is revealed that just over 30% of the current registered workers are under the age of 40.



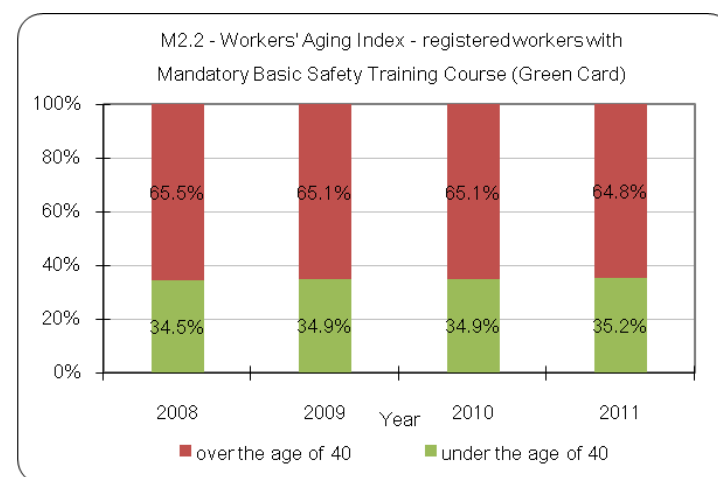
Source: Construction Workers Registration Authority

#### M2.2 – Registered Workers with Mandatory Basic Safety Training Course (Green Card)

**Category:** Whole Industry

**Sector:** N/A

It is revealed that just around 35% of the registered workers with mandatory basic safety training course (green card) are under the age of 40. This number has remained largely unchanged over the last 4 years



Source: Construction Workers Registration Authority

Note 1 – The data was provided by Construction Workers Registration Authority.

Note 2 – Data for each year was counted from 1 January to 31 December

Note 3 – Data for year 2001 to 2007 is not available.

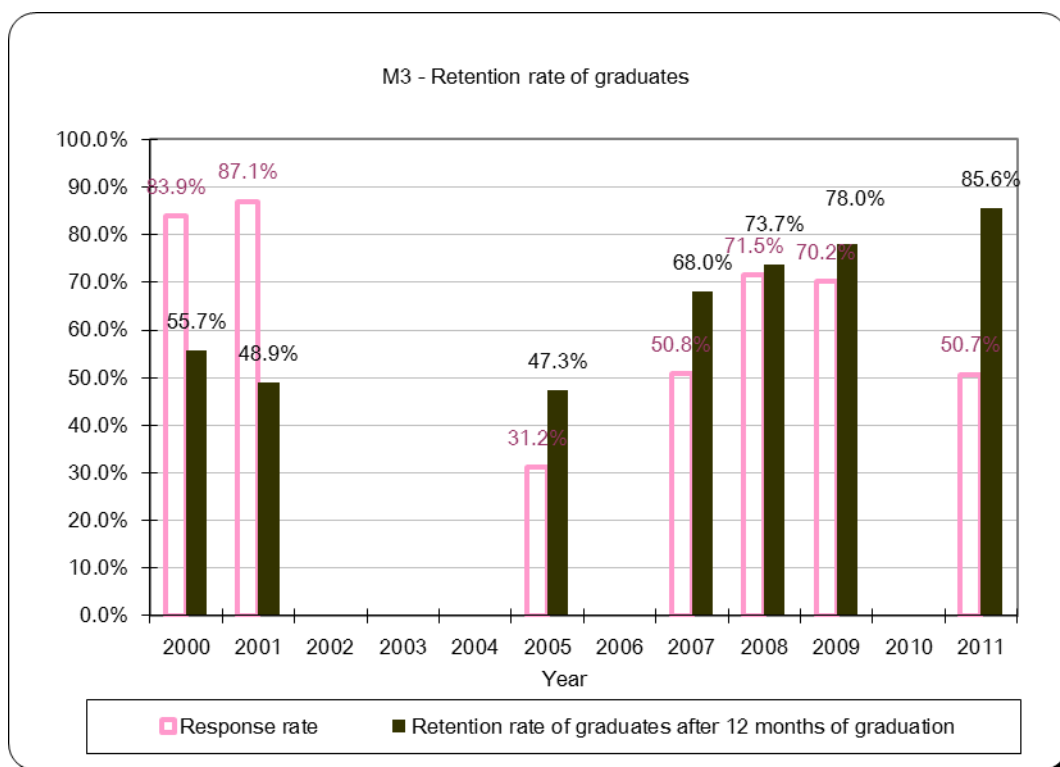
## MANPOWER KPIs

### M3 Retention Rate of Graduates (Basic craft courses and Construction Supervisor / Technician Programme provided by Construction Industry Council Training Academy)

**Category:** Whole Industry

**Sector:** N/A

The response rate fluctuated over the past years. The graduates' retention rate had been decreasing since 2000 until 2005. The graduates' retention rate showed a significant improvement since 2007. The retention rate was 85.6% in 2011.



Source: Construction Industry Council Training Academy

Note 1 – The data was obtained from the Construction Industry Council Training Academy.

Note 2 – Retention rate of graduates after 12 months of graduation was calculated based on results of graduate survey on basic craft courses and Construction Supervisor / Technician Programme provided by the Construction Industry Council Training Academy. However, it is understood that the graduates should also cover the adult short courses. Retention rate of graduates of short courses after 3 months of graduation may be provided in future for further reference.

Note 3 – The response rate means the number of survey returned and the retention rate was calculated based on the returned survey but not the number of all the graduates.

Note 4 – Year represents the year of graduation of the workers

Note 5 – Data for years 2002 to 2004, 2006 and 2010 is not available

## Annex A – Data Sources

Data	Relevant KPIs	Data Sources		Category / Sector	Remarks
Construction Cost Indices	P3	P3.1	Rider Levett Bucknall – Quarterly publication – Hong Kong Report – Quarterly Construction Cost Update (December 2012)  <a href="http://rlb.com/index.php/hong-kong-and-china/research">http://rlb.com/index.php/hong-kong-and-china/research</a>	Measures tender price movements of <b>Builder's Works in Private Sector</b>	Adopt data from 1Q2001 to 4Q2011
		P3.2	Architectural Services Department – Quarterly update – Building Works Tender Price Index (BWTPi)  <a href="http://www.archsd.gov.hk/en/reports/building-works-tender-price-index.aspx">http://www.archsd.gov.hk/en/reports/building-works-tender-price-index.aspx</a>	Indication of the level of tender prices for <b>new building works (excluding building services works)</b> undertaken by <b>Architectural Services Department</b>	Adopt data from 1Q2001 to 4Q2011
		P3.3	Architectural Services Department – Quarterly update – Building Services Tender Price Index (BSTPI)  <a href="http://www.archsd.gov.hk/en/reports/the-building-services-tender-price-index.aspx">http://www.archsd.gov.hk/en/reports/the-building-services-tender-price-index.aspx</a>	Indication of the level of tender prices for <b>major building services installations in new building works</b> undertaken by <b>Architectural Services Department</b>	Adopt data from 1Q2008 to 4Q2011 based on the new base schedule 2007  BSTPI based on old base schedule 1998 has not been included
Gross Domestic Product (GDP)	P4 (includes P4.1 to P4.6)	Census and Statistics Department – quarterly publication – Gross Domestic Product (Quarterly) (4Q2012 Report)  <a href="http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/national_income_and_bop/index_cd_B1030001_dt_detail.jsp">http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/national_income_and_bop/index_cd_B1030001_dt_detail.jsp</a>		Hong Kong Annual Situation ( <b>Table 1, GDP, at current market prices</b> )	Adopt GDP (HK\$ Million; at current market price) from 2002 to 2011

Data	Relevant KPIs	Data Sources		Category / Sector	Remarks
Gross value of construction works	P4, P5, P6	P4.1/ P5.1 / P6.1	Census and Statistics Department – quarterly publication – Report on the Quarterly Survey of Construction Output (3Q2004 Report to 3Q2012 Report)  <a href="http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/commerce_and_industry/index_cd_B1090002_dt_detail.jsp">http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/commerce_and_industry/index_cd_B1090002_dt_detail.jsp</a>	<b>P4.1</b> (Table 1A – Gross value of construction works <b>in nominal terms</b> performed by contractors analysed by broad trade group – <b>Overall total</b> of Main Contractor)	Construction Industry Annual Situation and adopt data (HK\$ Million) from 2001 to 2011  Information collected through survey forms The survey covers all construction establishments engaged in all new architectural and civil engineering works, as well as demolition, repair and maintenance works at existing structures Statistics provide prompt indications of current output levels and trends in the construction industry “Overall total” is defined as “Whole Industry”
				<b>P5.1</b> (Table 1B – Gross value of construction works <b>at constant (2000) market prices</b> performed by main contractors analysed by broad trade group – <b>Overall total</b> )	
				<b>P6.1</b> (Table 1B – Gross value of construction works <b>at constant (2000) market prices</b> performed by main contractors analysed by broad trade group – <b>Construction Works at construction sites</b> )	
		P4.2/ P5.2/ P6.2	Same report as P4.1/5.1/6.1	<b>P4.2</b> (Table 2A – Gross value of construction works <b>in nominal terms</b> performed by main contractors at construction sites analysed by broad end-use group – <b>Structures &amp; facilities</b> )  <b>P5.2 and P6.2</b> (Table 2B – Gross value of construction works <b>at constant (2000) market prices</b> performed by main contractors at construction sites analysed by broad end-use group – <b>Structures &amp; facilities</b> )	Construction Industry Annual Situation and adopt data (HK\$ Million) from 2001 to 2011  “Structures & facilities” is defined as “Civil Works”



Data	Relevant KPIs	Data Sources		Category / Sector	Remarks
		P4.3/ P5.3/ P6.3	Same report as P4.1/5.1/6.1	<b><u>P4.3</u></b> ( <b>Table 2A</b> – Gross value of construction works <b>in nominal terms</b> performed by main contractors at construction sites analysed by broad end-use group – <b>Buildings</b> )	Construction Industry Annual Situation and adopt data (HK\$ Million) from 2001 to 2011  “Buildings” is defined as “New Building Works”
				<b><u>P5.3 and P6.3</u></b> ( <b>Table 2B</b> – Gross value of construction works <b>at constant (2000) market prices</b> performed by main contractors at construction sites analysed by broad end-use group – <b>Buildings</b> )	
		P4.4/ P5.4	Same report as P4.1/5.1/6.1	<b><u>P4.4</u></b> ( <b>Table 1A</b> – Gross value of construction works <b>in nominal terms</b> performed by contractors analysed by broad trade group – <b>Construction works at locations other than sites</b> )	Construction Industry Annual Situation and adopt data (HK\$ Million) from 2001 to 2011  Construction works at locations other than sites include:- General trades – decoration, repair and maintenance, and construction works at minor work locations such as site investigation, demolition, and structural alternation and addition works - Special trades – carpentry, electrical equipment, ventilation, gas and water fitting installation and maintenance, etc.  “Construction works at locations other than sites” is defined as “RMAA Works” which means repair, maintenance, alteration and additions...
				<b><u>P5.4</u></b> ( <b>Table 1B</b> – Gross value of construction works <b>at constant (2000) market prices</b> performed by main contractors analysed by broad trade group – <b>Construction works at locations other than sites</b> )	

Data	Relevant KPIs	Data Sources		Category / Sector	Remarks
		P4.5/ P5.5/ P6.4	Same report as 4.1/5.1/6.1	<b><u>P4.5</u></b> ( <b>Table 1A</b> – Gross value of construction works <b>in nominal terms</b> performed by contractors analysed by broad trade group – <b>Public sector construction sites</b> )	Construction Industry Annual Situation and adopt data (HK\$ Million) from 2001 to 2011  Includes projects commissioned by the Government of the Hong Kong Special Administrative Region, MTR Corporation Limited and Airport Authority. Projects under the Home Ownership Scheme, which are commissioned by the Housing Authority, are also included.
				<b><u>P5.5 and P6.4</u></b> ( <b>Table 1B</b> – Gross value of construction works <b>at constant (2000) market prices</b> performed by main contractors analysed by broad trade group – <b>Public sector construction sites</b> )	
		P4.6/ P5.6/ P6.5	Same report as 4.1/5.1/6.1	<b><u>P4.6</u></b> ( <b>Table 1A</b> – Gross value of construction works <b>in nominal terms</b> performed by contractors analysed by broad trade group – <b>Private sector construction sites</b> )	Construction Industry Annual Situation and adopt data (HK\$ Million) from 2001 to 2011  Include projects commissioned by private developers. Projects under the Private Sector Participation Scheme are also included
				<b><u>P5.6 and P6.5</u></b> ( <b>Table 1B</b> – Gross value of construction works <b>at constant (2000) market prices</b> performed by main contractors analysed by broad trade group – <b>Private sector construction sites</b> )	
Percentage contribution of construction activities to GDP at basic prices	P4a	Same report as P4		Hong Kong Annual Situation <b>Table 11</b> - GDP by major economic activity at current prices – <b>Percentage contribution to GDP at basic prices (%) - Construction</b>	Adopt % contribution of construction activities to GDP prices from 2001 to 2011

Data	Relevant KPIs	Data Sources		Category / Sector	Remarks
Capita (Mid-year Population)	P5	Census and Statistics Department – Annual Press Release – Mid-year Population for 2012 [dated 13.08.2012]  <a href="http://www.censtatd.gov.hk/press_release/pressReleaseDetail.jsp?charsetID=1&amp;pressRID=2994">http://www.censtatd.gov.hk/press_release/pressReleaseDetail.jsp?charsetID=1&amp;pressRID=2994</a>		Hong Kong Annual Situation	Based on the population benchmark from the results of the 2011 Population Census, the population figures for end-2006 to mid-2011 have been revised
No of Manual Workers	P6, P7, HS1.2, 1.4-1.5 HS2.2, 2.4-2.5	P6.1	Census and Statistics Department – Quarterly publication- Quarterly Report of Employment and Vacancies at Construction Sites (2001 to 2011 reports)  <a href="http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/labour/index_cd_B1050004_dt_detail.jsp">http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/labour/index_cd_B1050004_dt_detail.jsp</a>	(Table 1 – Number of construction sites, manual workers engaged, vacancies and job opportunities in public and private sector sites analysed by type of site – <b>All sites – Total</b> )	Average the data for every March, June, September and December in each year  <u>Survey coverage:</u> <ul style="list-style-type: none"> <li>- All sites = Civil engineering sites + Building sites OR Public sector sites + Private sector sites</li> <li>- Civil engineering site – railways, roads, water works, drainage, reclamation and excavation works</li> <li>- Building site – residential buildings, commercial buildings and general superstructure erection</li> <li>- Private sector sites where the contracting party is a private company and registered with the Buildings Department;</li> <li>- Public sector sites - site under the control of Government departments or under the control of Airport Authority (AA) and the MTR Corporation Limited (MTR) (except superstructures registered with Buildings Department on MTR sites)</li> </ul> Exclusion <ul style="list-style-type: none"> <li>- Construction projects for <b>small houses</b> in the New Territories, and <b>minor alternations, repairs, maintenance and interior</b></li> </ul>
		P6.2	Same report as 6.1	(Table 1 – Number of construction sites, manual workers engaged, vacancies and job opportunities in public and private sector sites analysed by type of site – <b>All sites – Civil engineering sites</b> )	
		P6.3	Same report as 6.1	(Table 1 — Number of construction sites, manual workers engaged, vacancies and job opportunities in public and private sector sites analysed by type of site – <b>All sites – Building sites</b> )	
		P6.4	Same report as 6.1	(Table 1 – Number of construction sites, manual workers engaged, vacancies and job opportunities in public and private sector sites analysed by type of site – <b>Public sector sites – Total</b> )	

Data	Relevant KPIs	Data Sources		Category / Sector	Remarks
		P6.5	Same report as 6.1	(Table 1 – Number of construction sites, manual workers engaged, vacancies and job opportunities in public and private sector sites analysed by type of site – <b>Private sector sites – Total</b> )	<p><b>decoration of existing buildings</b> are <b>NOT</b> included. Term maintenance contracts and term contractors for <b>maintenance works or repair</b> are also <b>EXCLUDED</b>.</p> <p>- Number of manual worker before 2003 excludes E&amp;M workers and those workers work at the sites under the charge of the Electrical and Mechanical Services Department and the Environmental Protection Department but the data includes those workers after 2003</p>
		P7	Same report as 6.1	(Table 1 – Number of construction sites, manual workers engaged, vacancies and job opportunities in public and private sector sites analysed by type of site – <b>Total</b> )	
Gross floor area (new building projects)	P7	Census and Statistics Department – Annual publication – Key Statistics on Business Performance and Operating Characteristics of the Building, Construction and Real Estate Sectors (2001 to 2011 reports)  <a href="http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/commerce_and_industry/index_cd_B1080011_dt_latest.jsp">http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/commerce_and_industry/index_cd_B1080011_dt_latest.jsp</a>		Hong Kong Annual Situation (Table 4.4 – Land Area and Gross Floor Area of Real Estate Projects by Status of Project at end of the year – Total Gross floor area of buildings when completed)	Adopt data from 2001 to 2011

Data	Relevant KPIs	Data Sources	Category / Sector	Remarks
No. of reportable industrial accidents	HS1	Labour Department – data obtained through email enquiry (dated 1/11/2011 for 2010 data, 19/4/2011 for 2000-2009 data, 8/11/2012 for 2011 data)	—	<p>New Works – refers to those construction sites where new development or redevelopment works are being carried out. This includes but not limited to, building, piling, demolition, site formation and civil engineering works.</p> <p>RMAA Works – means repair, maintenance, alteration &amp; addition and refers to those minor works such as construction projects for village type houses in the N.T., minor alternations, repairs maintenance and interior decoration of existing buildings.</p>
No. of fatal accidents	HS2	Labour Department – data obtained through email enquiry (dated 1/11/2011 for 2010 data, 19/4/2011 for 2000-2009 data, 8/11/2012 for 2011 data)	—	Ditto
No. of summonses convicted	HS3	Labour Department – data obtained through email enquiry (dated 26/10/2011 for 2000-2010 data, 30/10/2012 for 2011 data)	—	Ditto

Data	Relevant KPIs	Data Sources	Category / Sector	Remarks
Workers' wages Index	M1	<p>1) Census and Statistics Department – Quarterly publication – Quarterly Report on General Household Survey (2008 to 2011 reports) and</p> <p>2) Median monthly employment earnings in construction industry by occupation as provided by C&amp;SD through email enquiry (dated 20/11/2012 for 2011 data and 28/2/2013 for 2008 to 2010 data)</p> <p><a href="http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/labour/index_cd_B1050001_dt_detail.jsp">http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/labour/index_cd_B1050001_dt_detail.jsp</a></p>	<p>(Section 4 – <b>Summary Statistics</b> – Median monthly employment earnings (HK\$))</p> <p>Table 1 : Number of employees and median monthly employment earnings in construction industry by occupation – Overall HK\$</p>	<p>As confirmed by C&amp;SD, Median monthly employment earnings in the report are nominal values not subject to any adjustment. It includes Chinese New Year bonus/double pay.</p> <p>Construction – including building construction, civil engineering, demolition and site preparation, building services installation and maintenance; and decoration and repair.</p>
Registered Workers under and above 40	M2	Construction Workers Registration Authority – data obtained through email enquiry (dated 1/11/2011 for 2007 to 2010 data and 19/10/2012 for 2011 data)	—	—
Total number of Registered workers	M2	Ditto	—	—
Graduates retained in the industry after 12 months working	M3	Construction Industry Council Training Academy –Trainees Recruitment & Placement Department – data obtained through email enquiry (dated 27/2/2013 for 2000 to 2011 data)	—	—
No. of construction graduate	M3	Ditto	—	—

## Annex B – Terms and Definitions

Civil Works	<p>Following the <b>Report on the Quarterly Survey of Construction Output</b>, civil works refer to construction works performed by main contractors at construction sites by end-use group nature named “Structures and facilities” which include transport, other utilities &amp; plant, environment and sports &amp; recreation.</p> <p>Following the definition under the <b>Report on the Quarterly Report of Employment and Vacancies at Construction Sites</b>, civil engineering works include railways, roads, highways, bridges, airport, port works, water works, drainage, reclamation, excavation works, site formation, rest gardens, open spaces, sport grounds, other urban services facilities, service stations and plant and other related construction project.</p>
New Building Works	<p>Following the <b>Report on the Quarterly Survey of Construction Output</b>, new building works refer to the construction works performed by main contractors at construction sites by end-use group nature named “Buildings” which include residential, commercial, industrial &amp; storage and service.</p> <p>Following the definition under the <b>Report on the Quarterly Report of Employment and Vacancies at Construction Sites</b>, building works include residential buildings, commercial buildings, industrial buildings and general superstructure erection depending on its nature of works or the end-use of the construction project.</p>
RMAA works	<p>Following the <b>Report on the Quarterly Survey of Construction Output</b>, RMAA works refers to the construction works at locations other than sites, including general trades and special trades.</p> <p>General trades include decoration, repair and maintenance and construction works at minor work locations such as site investigation, demolition, and structural alternation and addition works.</p> <p>Special trades include carpentry, electrical equipment, ventilation, gas and water fitting installation and maintenance etc.</p> <p><b>Labour Department</b> defines RMAA works as those repair, maintenance, alteration &amp; addition works and also refer to those minor works such as construction projects for village type houses in the N.T., minor alterations, repairs, maintenance and interior decoration of existing buildings.</p>
New Works	<p><b>Labour Department</b> defines New Works as those construction sites where new development or re-development works are being carried out. This included, without limited to, building, piling, demolition, site formation and civil engineering works.</p>
Construction Site	<p>It refers to a demarcated locality where one or more stages of construction work are being carried on.</p>

Public Sector	<p>Following the <b>Report on the Quarterly Survey of Construction Output</b>, public sector construction works includes project commissioned by the Government of the Hong Kong Special Administrative Region, MTR Corporation Limited and Airport Authority. Projects under the Home Ownership Scheme, which are commissioned by Housing Authority, are also included.</p> <p>Following the <b>Report on the Quarterly Report of Employment and Vacancies at Construction Sites</b>, public sector sites refer to those under the control of Government departments, the Airport Authority and the MTR.</p>
Private Sector	<p>Following the <b>Report on the Quarterly Survey of Construction Output</b>, private sector construction works includes projects commissioned by private developers. Project under the Private Sector Participation Scheme are also included.</p> <p>The private sector data in Table 3 includes those construction works carried out at locations other than sites, i.e. decoration, repair and maintenance, works at minor works location, etc.</p> <p>Following the <b>Report on the Quarterly Report of Employment and Vacancies at Construction Sites</b>, private sector sites refer to those registered with the Buildings Department, including superstructure on sites above the MTR Stations.</p>
Intermediate consumption	<p>The intermediate consumption of the construction industry comprise the expenses on consumption of building materials and supplies on sites and sundry supplies in business operation, rentals, expenses on repair and maintenance and other services such as transportation, technical consultancy, insurance, etc. Consumption of materials and supplies is obtained by adjusting the value of purchases by changes in inventories net of price appreciation. Payments to labour-only sub-contractors are included in compensation of employees.</p>
Public Sector Site (H&S indicators)	<p>Public sector sites include sites under the Development Bureau, Housing Authority, other government departments, MTR Corporation Limited and Airport Authority.</p>
Private Sector Site (H&S indicators)	<p>Private sector sites refer to sites other than public sector sites (Development Bureau, Housing Authority, other government departments, MTR Corporation Limited and Airport Authority).</p>
Manual Workers	<p>Following the <b>Report on the Quarterly Report of Employment and Vacancies at Construction Sites</b>, manual workers at construction site are people either directly employed by the main contractor, or being called upon by sub-contractors or gangers to work in the construction site on the survey reference date. They include skilled, semi-skilled and general workers. Professional and administrative personnel such as architects, engineers, surveyors, contract managers, site agents, clerks of works, technicians, site foremen and general clerical staff are <b>EXCLUDED</b>. Number of manual workers also excludes the workers work for RMAA works. For sites under the charge of Government departments, manual workers in some 40 selected major occupations at the skilled and semi-skilled levels are covered in the administrative returns furnished by the respective Government departments.</p>