

2006 MANPOWER SURVEY REPORT

AUTOMOBILE INDUSTRY

汽車業

二〇〇六年人力調查報告

AUTOMOBILE TRAINING BOARD

VOCATIONAL TRAINING COUNCIL

職業訓練局

汽車業訓練委員會

CONTENTS

	<u>Paragraphs</u>	<u>Page</u>
<u>Executive Summary</u>	1 – 14	1 – 3
 <u>Section</u>		
I	INTRODUCTION	1.1 – 1.9
II	SUMMARY OF SURVEY FINDINGS	2.1 – 2.9
III	CONCLUSIONS	3.1 – 3.14
IV	RECOMMENDATIONS	4.1 – 4.20
 <u>Appendices</u>		 43 – 70

目 錄

	<u>段 數</u>	<u>頁 數</u>
<u>報告摘要</u>	1 – 14	21 – 23
<u>章 數</u>		
第一章 緒論	1.1 – 1.9	25 – 27
第二章 調查結果摘要	2.1 – 2.9	29 – 32
第三章 結論	3.1 – 3.14	33 – 35
第四章 建議	4.1 – 4.20	37 – 42
<u>附錄</u>		44 – 70

LIST OF APPENDICES

<u>Appendix</u>	<u>Title</u>	<u>Page</u>
1	Membership	43
2	Terms of Reference	45
3	Survey Document - Questionnaire and Explanatory Note on the Questionnaire	48 – 53
4	Job Descriptions for Principal Jobs in the Automobile Industry	54 – 58
5	Manpower Statistics in the Industry	59 – 60
6	Preferred Education of Employees	61
7	Preferred Training Mode of Employees	62
8	Preferred Training Period of Employees	63
9	Distribution of Employees by Total Monthly Income Range	64 – 65
10	Vehicle Population and Manpower in the Automobile Industry	66
11	Manpower Forecasting Method	67
12	Recommended Annual Training Requirement for Workers from 2005 to 2014	69 – 70

附錄表

<u>附 錄</u>	<u>標 題</u>	<u>頁 數</u>
1	委員名單	44
2	職權範圍	46 – 47
3	調查文件 — 調查表及調查表附註	48 – 53
4	汽車業主要職務的工作說明	54 – 58
5	汽車業內的僱員統計數字	59 – 60
6	僱員宜有的教育程度	61
7	僱員宜有的訓練方式	62
8	僱員宜有的訓練期	63
9	根據每月總收入幅度劃分的僱員人數分布情況	64 – 65
10	車輛數目及汽車業人力數字	66
11	人力預測法	68
12	二〇〇七至二〇一〇年間平均每年建議培訓的僱員人數	69 – 70

Executive Summary

Report on the 2006 Manpower Survey of the Automobile Industry

Objective

The survey was conducted in April 2006 to collect the latest manpower information from the automobile industry with a view to assessing the industry's future manpower requirements.

Coverage

2. The number of establishments surveyed was 436 from some 2 236 establishments. The data collected were statistically scaled up to give the overall manpower picture of the whole automobile industry.

Survey Findings

3. The survey revealed that in April 2006, the industry employed a total of 12 099 workers in its 18 principal jobs. The most populous job was vehicle mechanic which had 6 204 workers, equivalent to 51.3% of the total manpower.

4. Employers also reported a total of 143 vacancies, representing 1.2% of the total manpower.

5. There were 588 trainees receiving various forms of training, of whom 508 were being trained for craft level jobs, amounting to 5.4% of the worker population at the same skill level.

6. Employers forecasted that by April 2007, the manpower requirement would increase from 12 242 (existing number of employees plus vacancies) to 12 382.

7. The distribution of the workforce by job level is summarized as below. Manpower statistics relating to the various principal jobs are given in the Appendices of the Report.

<u>Job Level</u>	<u>Number of Workers</u>	<u>Percentage of Total Number of Workers</u>
Technologist	242	2.0%
Technician	1 874	15.5%
Craftsman	9 383	77.5%
Unskilled	600	5.0%
	<hr/>	<hr/>
Total	12 099	100.0

Manpower Changes Since 2004

8. Comparing with the findings of the previous survey carried out in March 2004, the manpower had decreased from 12 508 to 12 099, at an average annual rate of 1.6%. The number of technologists and craftsmen had decreased from 266 to 242 and from 9 798 to 9 383, representing an average annual declining rate of 4.6% and 2.1% respectively. On the other hand, the number of technicians had increased from 1 672 to 1 874, representing an average annual growth rate of 5.9%.

9. It is worth noting that there were 1 311 workers recorded under the craft level job title 'Foreman' in the 1998 survey. As this job title was deleted in the 2000, 2002, 2004 and 2006 surveys, the Training Board estimated that some of these workers who carried out supervisory duties were reported in the above surveys under the 'Service Supervisor' and other job titles carrying out supervisory duties at technician level.

Future Manpower Requirements

10. The Training Board considers that with the improvement in the overall economic environment in Hong Kong, it is envisaged that the mild growing trend in the number of vehicles in recent years would be maintained in the foreseeable future.

11. The Training Board is optimistic about the future of the automobile industry. The Training Board considers the followings are major factors affecting the changes in the manpower of the automobile industry:

- (a) The adoption of new technologies and equipment in the maintenance and repair of vehicles resulted in less demand for traditional servicing works, but more on the use of sophisticated equipment for maintenance and diagnosis which demands higher skill level workers such as technicians.
- (b) With the advent of improved design and quality vehicles, the tightened measures in over-speed detection, and the frequent screening breath testing for driver's alcohol level, vehicle drivers are more careful on roads. Thus the demand for maintenance and repairs had been reduced.
- (c) With the recovery of the economic situation in the latest couple of years, there is mild increase in passenger and cargo transport by vehicles. This might lead to more demand in vehicle maintenance.
- (d) The implementation of the Voluntary Registration Scheme for Vehicle Mechanics in early 2007 by the Hong Kong SAR Government has aroused employers' attention for qualified craftsmen. This might attract further interest from employers to recruit more apprentices in their operations.

- (e) With the enforcement of the tightened requirement on environmental issues, sophisticated models of vehicles utilizing the latest technologies would gain popularity in Hong Kong. There would be strong demand for in-service workers to acquire such new technologies to cope with the development trend of the industry.

12. The Training Board considers that the overall demand of maintenance and repair services will likely remain steady in the near future. The Training Board also considers that the demand of higher quality workers at technician level will be growing in order to cope with the adoption of new technologies and sophisticated equipment for maintenance and diagnosis of modern vehicles. To cope with the introduction of the Voluntary Registration Scheme for Vehicle Mechanics starting from the year 2007, the Training Board also envisages that the demand for qualified craftsmen will become strong in the coming years. The Training Board recommends the industry to train up the following number of additional workers in the next four years:

<u>Skill Level</u>	<u>No. of Additional Workers</u>
Technologist	3
Technician	141 - 173
Craftsman	332 - 406

13. To cope with the developing needs of the automobile industry, it is vital for in-service workers of the industry to embark on a life-long learning philosophy during their working life. It is also of equal importance that employers recognise such a need and support their employees to undertake/participate in up-grading courses, training programmes, workshops and seminars for the acquisition of advanced technologies.

14. A wide range of full-time, part-time day-release and part-time evening training courses relevant to the automobile industry are being offered by training institutions including the Hong Kong Institute of Vocational Education and the Automobile Industry Training Centre of the Vocational Training Council. The Training Board encourages employers to make full use of the training facilities in these institutions and sponsor their employees to attend relevant courses for upgrading their technical knowledge and skills.

SECTION I

INTRODUCTION

The Automobile Training Board

1.1 The Automobile Training Board of the Vocational Training Council is required by its terms of reference to determine the manpower and training needs of the automobile industry and to make recommendations to the Council for the development of training facilities to meet such needs. The Automobile Training Board comprises members nominated by major trade associations, trade unions, professional bodies, education/training institutions and government departments. The membership and terms of reference of the Automobile Training Board are given respectively in Appendices 1 and 2.

The Manpower Survey

1.2 In fulfilling its terms of reference, the Training Board conducted a manpower survey in April 2006 to collect the latest manpower information with a view to determining the current and future manpower requirements of the industry and making recommendations to the industry and the Council to meet these requirements. The survey was carried out with the assistance of the Census and Statistics Department.

Scope of the Survey

1.3 The survey covered technical persons employed in establishments engaged in the manufacture, servicing and repair of motor vehicles. In addition, the survey also covered the technical personnel employed by members of the relevant trade associations, companies maintaining a fleet of vehicles, government departments and educational institutions.

1.4 According to the Census and Statistics Department and other sources, some 2 236 establishments as mentioned in paragraph 1.3 above were included in the survey scope. Owing to resources constraints, 436 establishments were selected for the survey, comprising:

- (i) 345 establishments recorded by the Census and Statistics Department, (selected by a stratified random sampling method):
 - (a) Manufacture of motor vehicles (HSIC 3884)
 - (b) Servicing and repairing of motor vehicles and motor-cycles (HSIC 9513)

Note: HSIC denotes Hong Kong Standard Industrial Classification

- (ii) 91 establishments not recorded by the Census and Statistics Department (excluded from HSIC 3884 and HSIC 9513):
 - (a) establishments recorded by the Office of the Director of Apprenticeship of the Vocational Training Council,
 - (b) companies maintaining a fleet of vehicles and having their own repairing facilities, and
 - (c) other establishments including garages, government departments and educational institutions.

Method of Survey

1.5 Two weeks before the survey, questionnaire together with an explanatory note (Appendix 3) and a list of job descriptions of the principal jobs in the industry (Appendix 4) were sent to the selected establishments. Prior to the fieldwork, the survey was publicized through the media and trade associations.

1.6 During the survey period from 20th February to 20th April 2006, officers of the Census and Statistics Department called at the establishments to collect the completed questionnaires and, if required, answered queries and assisted in the completion of questionnaires.

1.7 All returned questionnaires were scrutinized and, where necessary, checked with the respondents. These questionnaires were then processed by the Census and Statistics Department to produce the overall manpower statistics of the automobile industry at the time of survey.

Response to the Survey

1.8 Of these 436 establishments selected for the survey, 335 had supplied the required information. A total of 51 establishments were found to be either closed or ceased in operation. Another 24 establishments could not be contacted due to the change in address. The remaining 26 establishments were no longer engaged in the automobile trade.

The Report

1.9 This report presents the findings of the survey, the Training Board's forecast of the manpower needs of the automobile industry and its recommendations on measures to meet these needs. In the report, the terms 'manpower', 'employees' and 'workers' refer to the total number of technical persons (excluding trainees and apprentices) employed in the 18 principal jobs of the automobile industry; the term 'trainees' means all persons receiving any form of training including those under a contract of apprenticeship. The list of 18 principal jobs adopted in the survey and their job descriptions are shown in Appendix 4.

SECTION II

SUMMARY OF SURVEY FINDINGS

Number of Workers Employed (Excluding Trainees)(Appendix 5)

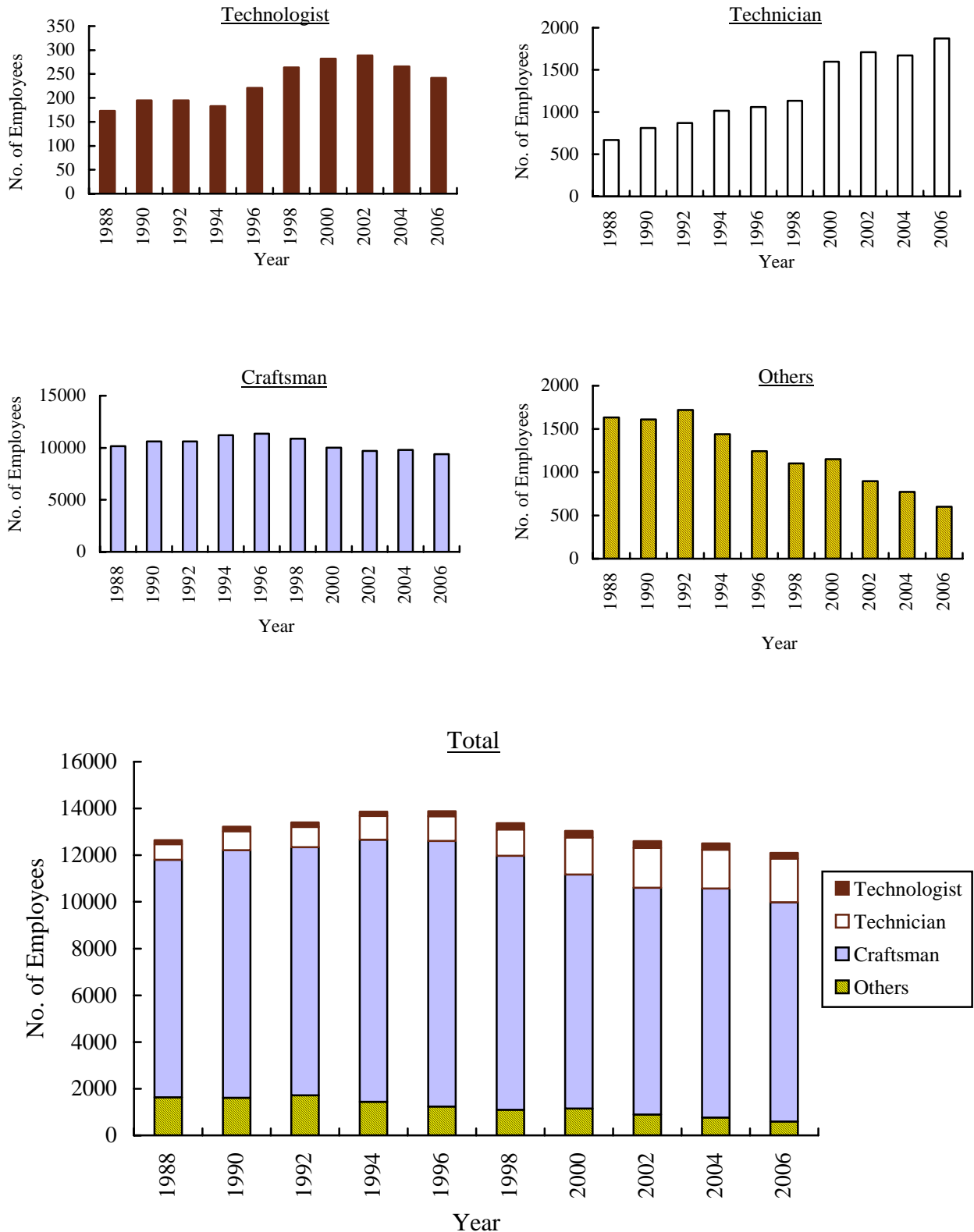
2.1 The survey revealed that in April 2006, 12 099 workers were engaged in the 18 principal jobs in the automobile industry. The distribution of workers by skill level is as follows:

<u>Skill Level</u>	<u>Number of Workers</u>	<u>Percentage of Total Manpower</u>
Technologist	242	2.0%
Technician	1 874	15.5%
Craftsman	9 383	77.5%
Unskilled	600	5.0%
	—————	—————
	12 099	100%

2.2 The occupations with the most workers were vehicle mechanic with 6 204 employees followed by vehicle body repairer with 1 157, representing 51.3% and 9.6% of the total manpower respectively.

2.3 Figure 1 shows the comparative distribution of employees by skill level based on the 10 consecutive surveys conducted by the Training Board.

Figure 1: Comparative Distribution of Employees by Skill Level in the 1988, 1990, 1992, 1994, 1996, 1998, 2000, 2002, 2004 and 2006 Manpower Surveys



Number of Trainees

2.4 At the time of the survey, a total of 588 trainees were employed in the industry. The distribution by skill level is as follows:

<u>Skill Level</u>	<u>Number of Trainees</u>	<u>Percentage of Workers at the Same Skill Level</u>
Technologist	1	0.4%
Technician	79	4.2%
Craftsman	508	5.4%

2.5 The distribution of trainees by occupation is given at Appendix 5. The job with the most trainees was vehicle mechanic, numbering 411.

Number of Vacancies

2.6 At the time of the survey, employers reported a total of 143 vacancies, representing 1.2% of the total employment in the industry. A breakdown of these vacancies by skill level is as follows:

<u>Skill Level</u>	<u>Number of Vacancies</u>	<u>Percentage of Total Vacancies</u>	<u>Percentage of Workers at the Same Skill Level</u>
Technologist	2	1.4%	0.8%
Technician	16	11.2%	0.9%
Craftsman	122	85.3%	1.3%
Unskilled	3	2.1%	0.5%
	—	—	
	143	100.0%	

Forecast Manpower Requirement by April 2007
(Excluding Trainees)

2.7 Employers estimated that by April 2007, the manpower requirement would grow from the existing 12 242 (12 099 employees plus 143 vacancies) to 12 382 workers, representing an increase of 1.1%. The following table presents the manpower requirement by April 2007 by skill level. Further details are given at Appendix 5.

<u>Skill Level</u>	<u>Number Employed by April 2006</u>	<u>Total Manpower* Requirement by April 2006</u>	<u>Employers' Forecast Manpower Requirement by April 2007</u>	<u>Employers' Estimated Net Growth in Manpower</u>
Technologist	242	244	240	-4 (-1.6%)
Technician	1 874	1 890	1 880	-10 (-0.5%)
Craftsman	9 383	9 505	9 660	155 (1.6%)
Unskilled	600	603	602	-1 (-0.2%)
	<hr/>	<hr/>	<hr/>	<hr/>
	12 099	12 242	12 382	140 (1.1%)

Note * : vacancies are included.

Preferred Education, Mode and Period of Training of Employees

2.8 Employers' views on the educational standard, mode of training and period of training they preferred their workers to have, are tabulated at Appendices 6, 7 and 8 respectively (the data on tables at Appendices 6, 7, 8 and 9 are statistically rounded up).

Distribution of Employees by Monthly Income Range

2.9 The distribution of employees by total monthly income range is tabulated at Appendix 9.

SECTION III

CONCLUSIONS

Manpower Changes

3.1 The Training Board has carefully examined the survey findings and considers that they generally reflect the employment situation of the automobile industry at the time of survey.

3.2 The workforce of the industry in April 2006 was 12 099. Compared with 12 508 in the 2004 survey, the workforce had decreased by 409 persons, i.e. at an average annual rate of 1.6%. The number of trainees had dropped from 725 to 588 in the same period.

3.3 In terms of skill level, the number of technologists and craftsmen had decreased from 266 to 242 and from 9 798 to 9 383, representing an average annual declining rate of 4.6% and 2.1% respectively over the past two years. On the other hand, the number of technicians had increased from 1 672 to 1 874, representing an average annual growth rate of 5.9% over the two years. It is worth noting that there were 1 311 workers recorded under the craftsman level job title 'Foreman' in the 1998 survey. As this job title was deleted in the 2000, 2002, 2004 and 2006 surveys, the Training Board estimated that some 260 craftsman level workers who carried out supervisory duties were reported in the above surveys under the 'Service Supervisor' and other job titles at technician level.

Business Outlook

3.4 The vehicle population in Hong Kong has maintained a double digit high growth rate between 1986 and 1994. After slowing down in 1995, it was noted that the vehicle population started to grow mildly after 1996. The total number of registered vehicles in recent years was in general quite steady for some years. However, it is observed that the number of registered vehicles grew by about 4 000, 6 000 and 8 000 in 2004, 2005 and 2006 respectively. In December 2006, the total number of registered vehicles reached a record of 609 595 in Hong Kong. A graph showing the historical trend of vehicle population and workforce is at Appendix 10.

3.5 The Training Board considers that with the improvement in the overall economic environment in Hong Kong, it is envisaged that the mild growing trend in the number of vehicles in recent years would be maintained in the foreseeable future.

3.6 The Voluntary Registration Scheme for Vehicle Mechanics was launched by the Electrical and Mechanical Services Department of the Hong Kong SAR Government in January 2007 for in-service workers of the automobile industry. Workers including vehicle mechanics, vehicle electricians, vehicle body repairers, builders and vehicle painters in possession of the necessary qualification and/or experience could be registered under the relevant categories of the scheme on voluntary basis. The scheme aims to facilitate the public to identify registered vehicle mechanics easily and will uplift the professional image of the vehicle maintenance trade. It is envisaged that employers of the trade will put up more emphasis on the recruitment and training of qualified craftsmen to cope with the development needs of the trade and the demand for qualified craftsmen will become strong in the coming years.

3.7 The Training Board is optimistic about the future of the automobile industry. The Training Board considers the followings are major factors affecting the changes in the manpower of the automobile industry:

- (a) The adoption of new technologies and equipment in the maintenance and repair of vehicles resulted in less demand for traditional servicing works, but more on the use of sophisticated equipment for maintenance and diagnosis which demands higher skill level workers such as technicians.
- (b) With the advent of improved design and quality vehicles, the tightened measures in over-speed detection, and the frequent screening breath testing for driver's alcohol level, vehicle drivers are more careful on roads. Thus the demand for maintenance and repairs had been reduced.
- (c) With the recovery of the economic situation in the latest couple of years, there is mild increase in passenger and cargo transport by vehicles. This might lead to more demand in vehicle maintenance.
- (d) The implementation of the Voluntary Registration Scheme for Vehicle Mechanics in early 2007 by the Hong Kong SAR Government has aroused employers' attention for qualified craftsmen. This might attract further interest from employers to recruit more apprentices in their operations.
- (e) With the enforcement of the tightened requirement on environmental issues, sophisticated models of vehicles utilizing the latest technologies would gain popularity in Hong Kong. There would be strong demand for in-service workers to acquire such new technologies to cope with the development trend of the industry.

Future Manpower Demand

3.8 The employers estimated that in the 12 months following the survey, the manpower requirement would grow from 12 242 (existing number of employees plus vacancies) to 12 382, i.e. an increase of 1.1%, indicating that the demand for workforce in the industry will likely stabilize at the present level.

3.9 Taking various factors into consideration and using the Adaptive Filtering Method (AFM) described in Appendix 11, the Training Board has assessed the industry's annual requirement for technologists, technicians, and craftsmen for the years from 2007 to 2010.

3.10 The Training Board also considers that in the past two years, there had been no substantial change affecting workers retiring or leaving the industry. Accordingly the Training Board adopts the following wastage rates in the manpower forecasting, i.e. 3%, 4% and 5% for manpower at the technologist, technician and craftsman levels respectively which the industry should train to cover workers retiring or leaving the industry for whatever reasons.

3.11 From the above estimates, the Training Board has projected the industry's average annual training requirement at each level for the coming 4 years which is given as follows:

**Average annual training
requirement
for workers from 2007 to 2010**

<u>Job level</u>	<u>Annual training requirement</u>
Technologist	3
Technician	141 – 173
Craftsman	332 – 406

A breakdown of these figures into various principal jobs is given at Appendix 12.

3.12 At the technologist level, the average training demand is about 3 each year. This figure will cover the natural wastage.

3.13 At the technician level, the forecast annual training demand of technicians is about 157. This figure caters for continual average growth of some 85 workers per year.

3.14 At the craftsman level, the forecast annual training demand would be about 369. This figure will cover the natural wastage.

SECTION IV

RECOMMENDATIONS

4.1 The Training Board anticipates a persistent demand for technical manpower particularly at the higher skill levels.

4.2 To meet the forecast manpower requirement the industry should embark on a manpower training programme of a scale set out in paragraph 3.11.

4.3 For manpower planning at company level, employers are requested to note that the scale when expressed in terms of existing manpower, represents an average annual intake of trainees of about 1.2%, 8.4% and 3.9% of their respective workforce at the technologist, the technician and the craftsman level.

4.4 The Training Board is aware of the operational difficulties experienced by employers in recent years. However, unless employers are willing and able to train up a sufficient number of technical people to meet their manpower needs, the development of the automobile industry will be hindered. The Training Board therefore urges employers to maintain their efforts to recruit young people to join the industry.

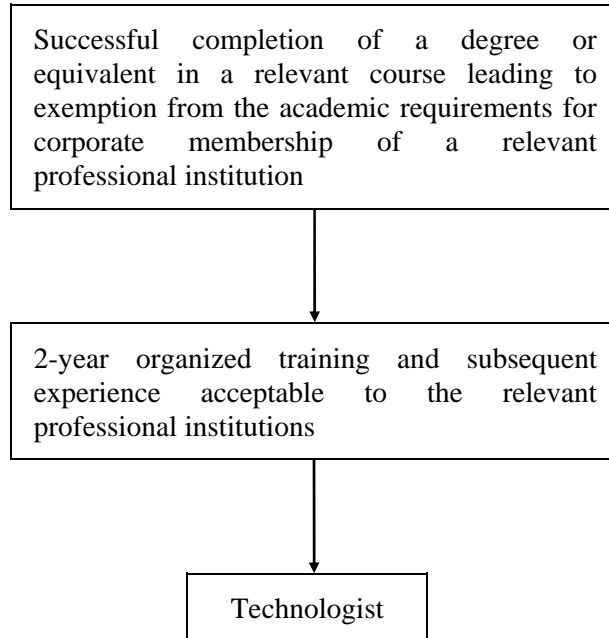
Training at Technologist Level

4.5 Technologists in the automobile industry are mostly engineers and service managers who have reached a level of professional competence in the discipline of mechanical or road transport engineering recognized by the appropriate professional institutions.

4.6 Technologists should be competent in analyzing and solving a wide range of technical problems. They should also be able to assume personal responsibility for the development and application of engineering principles, exercise original thinking and judgement, apply the latest techniques, and manage all commercial and technical activities.

4.7 The recommended route for training technologists is as follows:

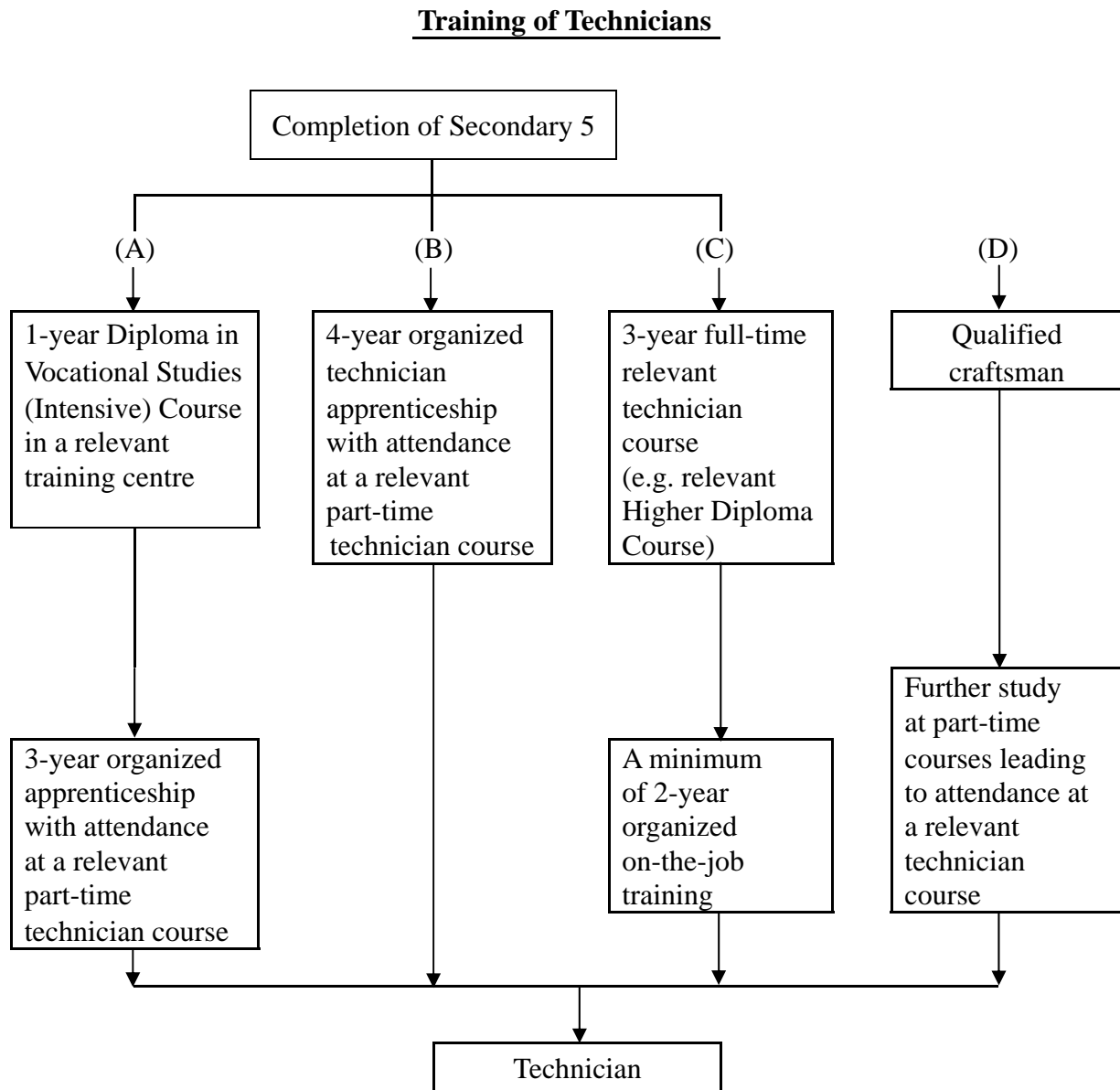
Training of Technologists



Training at Technician Level

4.8 Technicians are persons whose education, practical training and experience enable them to apply proven techniques and procedures and to carry a measure of technical responsibility, normally under the supervision of a technologist.

4.9 The recommended routes for training technicians are shown below:



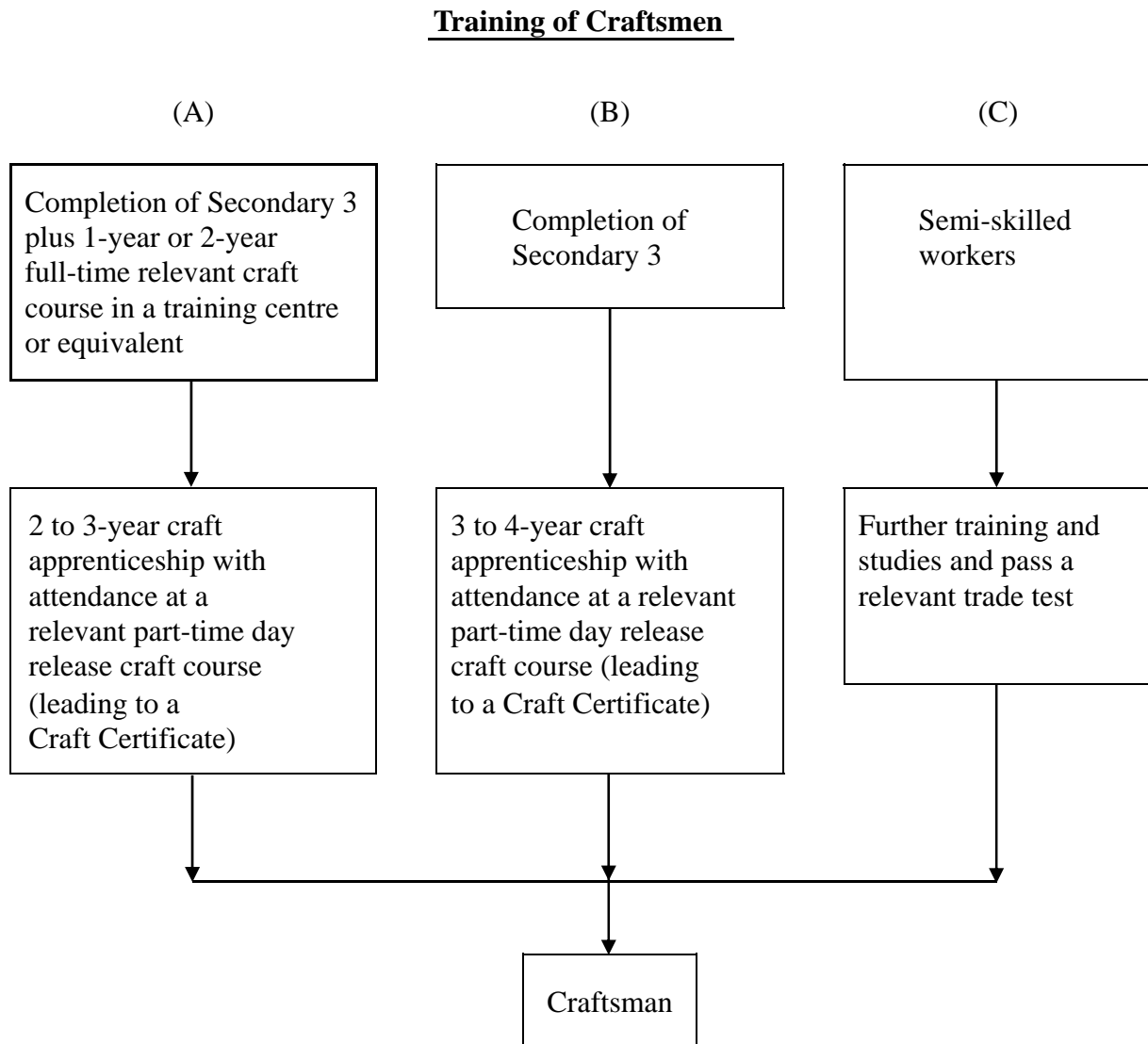
4.10 Most employers prefer their technicians to acquire Higher Diploma qualifications as a progression in their career.

4.11 Route (D), although a useful avenue for the determined craftsmen to become technicians, should not be relied upon as a regular source of technicians.

Training at Craftsman Level

4.12 Craftsmen require both a high degree of practical skills and sound technical knowledge if they are to venture into new skills resulting from technological advancement. He needs to have a general education of at least completion of Secondary 3.

4.13 The recommended routes for training craftsmen are as follows:



4.14 Of the three routes the Training Board recommends Route (A) because the apprentices will have already had some basic training prior to commencing apprenticeship and are therefore capable of doing some useful productive work right from the start of their apprenticeship.

Technical Education and Training Institutions

4.15 A wide range of full-time, part-time day-release and part-time evening training courses relevant to the automobile industry are being offered by training institutions including the Hong Kong Institute of Vocational Education and the Automobile Industry Training Centre of the Vocational Training Council. Employers are encouraged to make full use of the training facilities in these institutions and sponsor their employees to attend relevant courses for upgrading their technical knowledge and skills.

4.16 To cope with the developing needs of the automobile industry, it is vital for in-service workers of the industry to embark on a life-long learning philosophy during their working life. It is also of equal importance that employers recognise such a need and support their employees to undertake/participate in up-grading courses, training programmes, workshops and seminars for the acquisition of advanced technologies.

Development and Training Centre of the Vocational Training Council

4.17 The Training Board has been charged with the responsibility to provide advice on matters relating to the development of training services of the Department of Automotive Engineering of the Hong Kong Institute of Vocational Education, and the Automobile Industry Training Centre. The following full-time long courses are offered by the Department of Automotive Engineering and the Automobile Industry Training Centre for generating new-entrants for the industry:

Full-time Long Courses offered by the Department of Automotive Engineering of the Hong Kong Institute of Vocational Education

	<u>Course Title</u>	<u>Level</u>	<u>Duration</u>
(a)	Higher Diploma Course in Automotive Engineering	Technician	3 year
(b)	Higher Diploma Course in Automotive Technology & Systems Design	Technician	3 years
(c)	Higher Diploma Course in Automotive Business and Management	Technician	3-4 years*

* (The duration of study varies according to the entrance qualification of trainees.)

Full-time Long Courses offered by the Automobile Industry Training Centre

	<u>Course Title</u>	<u>Level</u>	<u>Duration</u>
(a)	Basic Craft Certificate Course in Vehicle Servicing	Craftsman	1 year
(b)	Diploma in Vocational Studies (DVS) Course in Automotive Technology	Technician	3 years#
(c)	Diploma in Vocational Studies (DVS) Intensive Course in Automotive Technology	Technician	1 year

(Trainees may exit with a Vocational Certificate award after a 2-year study and join the craftsman apprenticeship.)

4.18 Apart from the above full-time courses, the Department of Automotive Engineering of the Hong Kong Institute of Vocational Education, and the Automobile Industry Training Centre also offer a wide range of full-time short, part-time day-release and part-time-evening courses for in-service workers of the industry with the purpose of developing the local workforce to cope with the development needs of the automobile industry in Hong Kong. The Training Board strongly urges employers to give full support to the training services offered by Department of Automotive Engineering of the Hong Kong Institute of Vocational Education and the Automobile Industry Training Centre by recruiting their graduates and sending their in-service workers to attend the relevant up-grading courses for enhancing their technical competence in their work.

Related Training Services of the Vocational Training Council

4.19 The Vocational Training Council offers services to help employers organize their training schemes including:

- (i) The statutory **Apprenticeship Scheme**, through which technicians and craftsmen are effectively trained to meet the needs of the industry.
- (ii) The **Engineering Graduate Training Scheme**, which helps engineering students and graduates complete their professional training as engineers.
- (iii) The voluntary **Trade Testing and Certification Scheme**, which is for the purpose of ascertaining and recognizing the standards of skilled workers. Trade tests on Vehicle Mechanics, Vehicle Electricians, Vehicle Body Repairers and Vehicle Painters are also offered to the industry in recent years.
- (iv) The **New Technology Training Scheme** provides financial assistance to local companies up to a maximum of 50% of the training cost for their employees to be trained in new technologies. The Scheme covers various types of training mode including overseas training courses or working attachment; local training courses; and tailor-made local training courses/working attachments for individual companies.

4.20 The Training Board recommends employers to contact the Vocational Training Council for assistance in setting up training schemes and recruiting trainees.

汽車業二〇〇六年人力調查 報告摘要

目的

是次調查於二〇〇六年四月進行，旨在蒐集汽車業最新的人力資料，以評估未來的人力需求。

範圍

2. 本會從約 2 236 間業內機構中，抽取了 436 間進行調查；所得資料其後用統計方法倍大，以反映汽車業整體的人力情況。

調查結果

3. 調查顯示，二〇〇六年四月時，汽車業 18 個主要職務共有僱員 12 099 名，最多人從事的職務為汽車機械工，共有 6 204 名僱員，佔總人力的 51.3%。

4. 僱主亦報稱業內共有 143 個空缺，佔僱員總數 1.2%。

5. 業內共有 588 名受訓者接受各種形式的訓練，其中 508 名受訓擔任技工級工作，佔同級僱員總數 5.4%。

6. 僱主預測，至二〇〇七年四月時，本業所需的僱員將由 12 242 人（現有僱員人數加空缺數目）增至 12 382 人。

7. 各主要職務的人力統計數字分佈如下；人力統計與各項的主要相關工作則載於附錄。

<u>技能等級</u>	<u>僱員人數</u>	<u>佔總人力百分率</u>
技師	242	2.0%
技術員	1 874	15.5%
技工	9 383	77.5%
非技術工人	600	5.0%
	<hr/>	<hr/>
	12 099	100.0%

二〇〇四年後的人力轉變情況

8. 本業的僱員總數由二〇〇四年三月調查時的 12 508 人，減至是次調查時的 12 099 人，每年平均跌幅為 1.6%。技師由 266 名減至 242 名，技工則由 9 789 名減至 9 383 名，每年平均減幅分別為 4.6% 及 2.1%。至於技術員人數，則由 1 672 名增至 1 874 名，每年平均增幅為 5.9%。

9. 值得注意的是，九八年調查時，技工級「管工」職務下共錄有 1 311 人。由於二〇〇〇年、二〇〇二年、二〇〇四年及是次調查均已刪除上述職務，故這類負責督導工作的技工，部分需納入技術員級內的「維修監督」或其他職務。

未來人力需求

10. 本會認為在香港整體經濟環境改善下，預期在未來幾年車輛數量將會有溫和增長的趨勢。

11. 本會對汽車業未來發展抱有樂觀態度。本會認為汽車行業人力變化的主要原因如下：

- (i) 因應用新技術和設備在維修和保養的工作，傳統技術的工作需求因此下降，而先進設備在維修和保養工作方面的需求將更多。因此，高技術水平員工如技術員的需求將更多。
- (ii) 隨著更優質的汽車設計出現，配合更嚴厲的超速偵測及更多的酒精指標測試，司機在路面上更小心駕駛，因此導致汽車維修工作的需求下降。
- (iii) 近年經濟形勢開始復蘇，客運和貨運的需求有所增加，因此汽車維修保養需求有所增加。
- (iv) 由香港特別行政區政府在二〇〇七年初實施的「車輛維修技工自願註冊計劃」

為符合資格的技工註冊已引起僱主的注意，亦進一步吸引僱主對招聘技工學徒的興趣。

- (v) 為符合更高的環保要求，運用最新科技的汽車將被廣泛使用。在職技工更需要獲取新技術以應付行業的發展趨勢。

12. 本會認為汽車維修保養的需求於此數年間將保持穩定。本會亦察覺，業內大量採用先進的汽車維修技術及診斷儀器，對高質素技術員級僱員的需求將有所增加。為了應付二〇〇七年實施的車輛維修技工自願註冊計劃，本會預計來年業內對合資格的技工需求將會有所增長。本會建議未來四年內，行業每年應額外培訓如下數目的人手：

<u>技能等級</u>	<u>須增加的人手</u>
技師	3
技術員	141 - 173
技工	332 - 406

13. 為了應付汽車業的發展需要，為在職從業員推行終身學習的理念極為重要。僱主對此理念的認同並推舉其僱員參加技能提升計劃課程、專業訓練課程、專題工作坊和研討會以掌握最先進的行業技術也是極為重要。

14. 職業訓練局轄下的香港專業教育學院及汽車業訓練中心為汽車業僱員提供全日制課程、日間部分時間制及夜間訓練課程。本會籲請業內僱主充分使用此等培訓機構所提供的培訓課程，並保送屬下員工修讀有關的增修課程，以提升員工的專業知識及技能。

第一章

緒 論

汽車業訓練委員會

1.1 職業訓練局屬下汽車業訓練委員會須根據職權範圍，確定汽車業的人力及訓練需求，並就發展訓練設施向局方提出建議，以應付行業所需。汽車業訓練委員會(下稱本會)委員均由主要商會、工會、專業團體、教育／訓練機構及政府部門提名；本會的委員名單及職權範圍分別載於附錄 1、2。

人力調查

1.2 本會根據職權範圍，於二〇〇六年四月進行人力調查，蒐集最新的人力資料，以便確定汽車業目前及未來的人力需求，並就此等需求，向業內人士及職業訓練局提供建議。是次調查在政府統計處協助下進行。

調查範圍

1.3 調查對象為汽車製造及維修機構的技術人員。此外，有關行業團體會員機構、擁有龐大車隊的公司、政府部門及教育機構所僱用的技術人員，亦包括在內。

1.4 根據政府統計處紀錄及其他資料，第 1.3 段所述的機構約有 2 236 間。由於資源所限，本會選出 436 間機構作為調查對象，其中包括：

(i) 政府統計處紀錄中的 345 間機構（以分層隨機抽樣方法選出）：

(a) 汽車製造（HSIC 3884）；

(b) 汽車及電單車維修服務（HSIC 9513）；

註 HSIC指香港行業分類

(ii) 91 間並無在政府統計處紀錄的機構（HSIC 3884 及 HSIC 9513 以外機構）：

(a) 職業訓練局屬下學徒事務署紀錄中的機構；

(b) 擁有龐大車隊並自行負責維修工作的公司；

(c) 其他機構，包括車房、政府部門及教育機構。

調查方法

1.5 調查前兩週，本會將調查表、調查表附註（附錄 3），以及本業各主要職務工作說明（附錄 4），寄送各選定機構。實地調查工作開始前，已向本地媒介與業界廣作宣傳。

1.6 調查期內，即二〇〇六年二月二十日至四月二十日期間，政府統計處職員到各廠號及機構收集填妥的調查表，並於有需要時，解答詢問和協助填寫調查表。

1.7 交回的調查表均經詳細審核，並於有需要時，與填覆廠號核對，然後交由政府統計處處理，以用作處理汽車行業內整體人力之統計。

調查所得反應

1.8 436 間接受調查機構中，335 間提供所需資料，其中 51 間或已關閉，或已轉營他業，另外 24 間因地址不符而聯絡不上，其餘 26 間表示將不再參與汽車行業。

調查報告

1.9 本報告書列出是次調查結果、預測汽車業人力需求，並就此等需求，建議有關措施。報告書內，「人力」、「僱員」及「工人」均指所有在調查期間受僱從事業內 18 個主要職務的專門職務的人員（受訓者及學徒除外）。「受訓者」指正在接受各種形式訓練，包括簽有學徒合約人士。是次人力調查所包括的 18 個主要職務，以及這些職務的工作說明，載於附錄 4。

第二章

調查結果摘要

現有僱員人數（受訓者除外）（附錄 5）

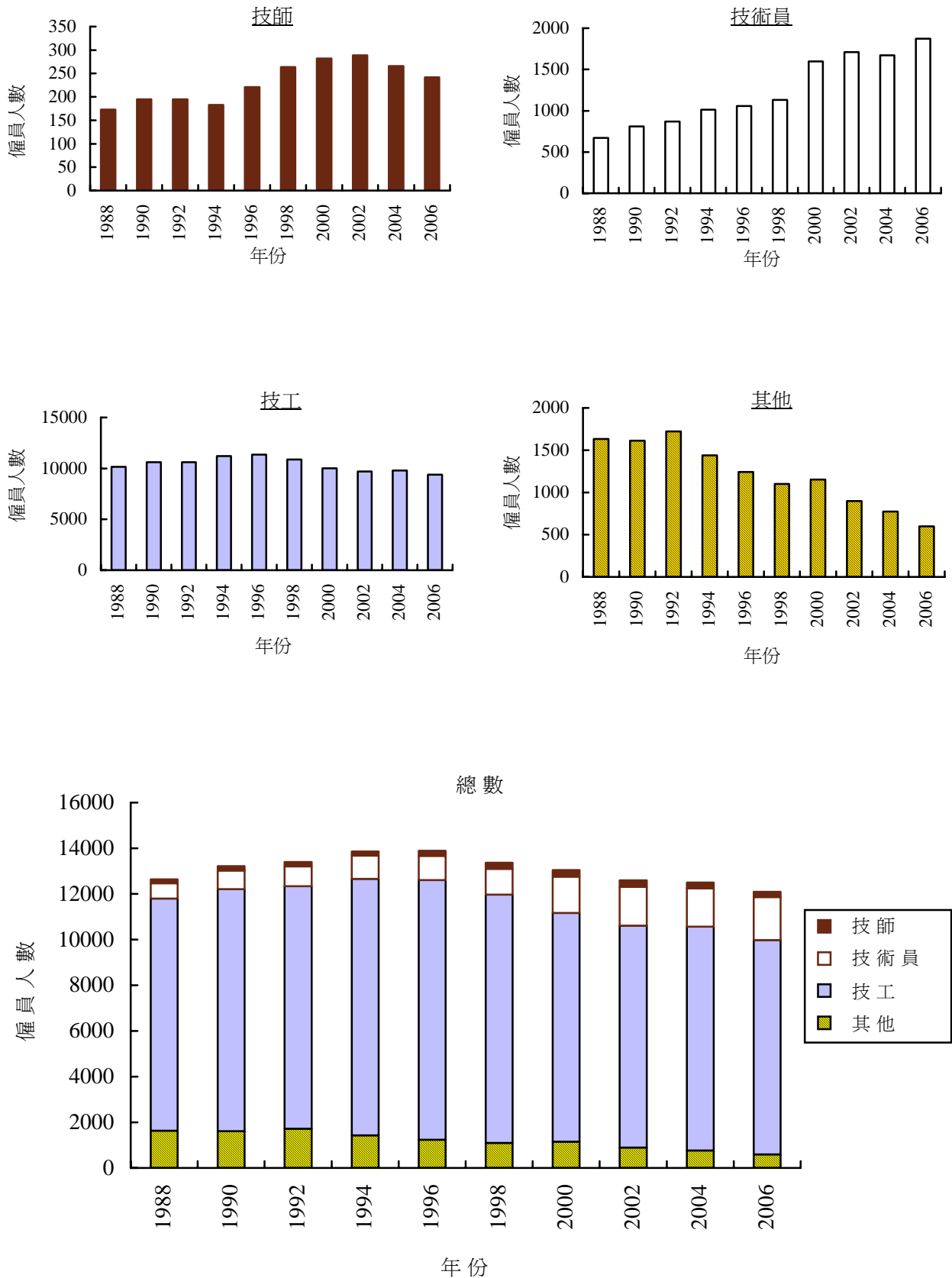
2.1 調查顯示，二〇〇六年四月時，共有 12 099 名僱員從事汽車業內 18 個主要職務。各技能等級僱員分布情況如下：

<u>技能等級</u>	<u>僱員人數</u>	<u>佔總人力百分率</u>
技師	242	2.0%
技術員	1 874	15.5%
技工	9 383	77.5%
非技術工人	600	5.0%
	<hr/>	<hr/>
	12 099	100.0%

2.2 僱員最多職務為汽車機械工，共有 6 204 名；其次是車身修理工，有 1 157 名；兩個職務的人數分別佔總人力的 51.3% 及 9.6%。

2.3 圖 1 比較本會二〇〇六年與之前十次人力調查各技能等級僱員的分布情況。

圖 1：一九八八、九〇、九二、九四、九六、九八、二〇〇〇、二〇〇二、二〇〇四、二〇〇六年人力調查各技能等級僱員分布情況



受訓者人數

2.4 調查期間，本業共有 588 名受訓者。各技能等級受訓者分布情況如下：

<u>技能等級</u>	<u>受訓者數目</u>	<u>佔同級僱員總數百分率</u>
技師	1	0.4%
技術員	79	4.2%
技工	508	5.4%

2.5 各職務受訓者分布情況載於附錄 5。受訓者最多職務是汽車機械工，有 411 名。

空缺數目

2.6 調查期間業內共有 143 個空缺，佔本業僱員總數的 1.2%。各技能等級空缺數目如下：

<u>技能等級</u>	<u>空缺數目</u>	<u>佔空缺總數百分率</u>	<u>佔同級僱員總數百分率</u>
技師	2	1.4%	0.8%
技術員	16	11.2%	0.9%
技工	122	85.3%	1.3%
非技術工人	3	2.1%	0.5%
	——	——	
	143	100.0%	

預測至二〇〇七年四月所需的僱員人數（受訓者除外）

2.7 僱主預測，到二〇〇七年四月時，本業所需人力將由現有的 12 242 人（12 099 名僱員加 143 個空缺），增至 12 382 人，增幅為 1.1%。僱主預測至二〇〇七年四月各技能等級所需僱員人數見下表；有關詳情則載於附錄 5。

技能等級	二〇〇六年四月時 僱員人數	二〇〇六年四月時 總人力需求 *	預測至 二〇〇七年四月時 所需僱員人數	僱員人數 增長淨額
技師	242	244	240	-4 (-1.6%)
技術員	1 874	1 890	1 880	-10 (-0.5%)
技工	9 383	9 505	9 660	155 (1.6%)
非技術工人	600	603	602	-1 (-0.2%)
	<hr/>	<hr/>	<hr/>	<hr/>
	12 099	12 242	12 382	140 (1.1%)

註*：包括空缺額在內

僱員宜有教育程度、訓練方式及訓練期

2.8 附錄 6、7、8 分別臚列僱主認為其僱員宜有的教育程度、所需訓練方式及訓練期（附錄 6、7、8、9 圖表內為四捨五入後的數據）。

僱員每月收入幅度分布情況

2.9 僱員每月總收入幅度分布情況載於附錄 9。

第三章

結 論

人力變化

3.1 本會詳細分析調查結果後，認為所得資料大致能反映調查期間汽車業的就業情況。

3.2 二〇〇六年四月時，汽車業共有 12 099 名僱員，與二〇〇四年調查時的 12 508 名比較，僱員總數減少了 409 人，平均每年減幅為 1.6%。同期，受訓者數目亦由 725 名減至 588 名。

3.3 各技能等級中，技師及技工的人數均有減少。技師人數由 266 名減至 242 名，技工人數由 9 798 名減至 9 383 名，平均每年減幅分別為 4.6% 及 2.1%。至於技術員人數，則由 1 672 名增至 1 874 名，平均每年增幅為 5.9%。值得注意的是，九八年調查時，技工級「管工」職務下共錄有 1 311 人。由於二〇〇〇年、二〇〇二、二〇〇四及二〇〇六年調查已刪除上述職務，估計約有 260 名負責督導工作的技工於上述調查中，被列入技術員級內的「維修監督」或其他職務。

行業前景

3.4 本港車輛數目在一九八六年至一九九四年之間維持雙位數的增長。在一九九五年增長放緩後，車輛數目在一九九六年開始輕微地增長，而登記車輛總數近年來亦保持穩定。然而，觀察所得，登記車輛數目在二〇〇四年，二〇〇五年和二〇〇六年分別增長大約 4 000，6 000 和 8 000 輛。直至二〇〇六年十二月，本港登記的車輛總數達到了有紀錄的 609 595 輛。附錄 10 顯示車輛總數及汽車業人力數字的近年趨勢。

3.5 本會認為在香港整體經濟環境改善下，預期在未來幾年車輛數量將會有溫和增長的趨勢。

3.6 香港特別行政區政府轄下機電工程署於二〇〇七年一月為在職車輛維修技工推行了「車輛維修技工自願註冊計劃」。擁有必要的資格和經驗之技工，包括汽車機械工、汽車電工、車身修理工、車身建造工和汽車噴漆工根據該計劃可於相關的類別作自願註冊。此計劃可幫助公眾更容易地辨認註冊的汽車技工，並可提升汽車維修行業的專業形像。行業僱主將會更積極聘用具資格的技工及訓練此等人才，以應付行業發展的需要。

3.7 本會對汽車業未來發展抱有樂觀態度。本會認為汽車行業人力變化的主要原因如下：

- (i) 因應用新技術和設備在維修和保養的工作，傳統技術的工作需求因此下降，而先進設備在維修和保養工作方面的需求將更多。因此，高技術水平員工如技術員的需求將更多。
- (ii) 隨著更優質的汽車設計出現，配合更嚴厲的超速偵測及更多的酒精指標測試，司機在路面上更小心駕駛，因此導致汽車維修工作的需求下降。
- (iii) 近年經濟形勢開始復蘇，客運和貨運的需求有所增加，因此汽車維修保養需求有所增加。
- (iv) 由香港特別行政區政府在二〇〇七年初實施的「車輛維修技工自願註冊計劃」為符合資格的技工註冊已引起僱主的注意，亦進一步吸引僱主對招聘技工學徒的興趣。

- (v) 為符合更高的環保要求，運用最新科技的汽車將被廣泛使用。在職技工更需要獲取新技術以應付行業的發展趨勢。

未來人力需求

3.8 僱主預測，調查後的十二個月內，所需的僱員會由 12 242 人（包括現有僱員人數及空缺數目）增至 12 382 人，增幅為 1.1%。這反映出業內的人力需求應會維持現有水平。

3.9 本會考慮各種因素，並採用附錄 11 所載的調節過濾人力預測方法後，推算出二〇〇七至二〇一〇年間本業每年所需的技師、技術員及技工級僱員數目。

3.10 考慮到過去兩年本業發展穩定，沒有大量員工退休或離職，故本會應用下列的流失率，即本業須額外訓練 3% 的技師級、4% 的技術員級及 5% 的技工級僱員，以填補僱員因退休或其他原因離職所造成的人力流失。

3.11 根據上述預測，未來四年汽車業每年平均須培訓的僱員人數如下：

<u>二〇〇七至二〇一〇年間</u>	
<u>每年平均須培訓的僱員人數</u>	
<u>技能等級</u>	<u>每年須培訓的人數</u>
技 師	3
技術員	141 – 173
技 工	332 - 406

各技能等級各主要職務須培訓的僱員人數見附錄 12。

3.12 就技師級而言，每年平均須培訓約 3 人；數字剛填補人力自然流失。

3.13 技術員級方面，預計本業每年須培訓約 157 人，即平均每年增加 85 人。

3.14 至於技工級，預計業內每年須培訓約 369 人，約等於自然流失的人數。

第四章

建 議

4.1 預計業內對技術人員會續有需求，特別是較高技能等級者。

4.2 為應付預計的人力需求，本業應推行培訓計劃，規模如第3.11段所述。

4.3 僱主進行人力策劃時，可參考每年平均須招聘的受訓者人數，分別約為現時技師、技術員及技工級人數的 1.2%、8.4% 及 3.9%。

4.4 本會了解近年經營汽車業務所遇到的困難。然而，培訓足夠的技術人才乃必需的工作，否則業內的發展將會受到限制。本會強力推薦僱主繼續加強有關工作，吸引更多青年人投身汽車業。

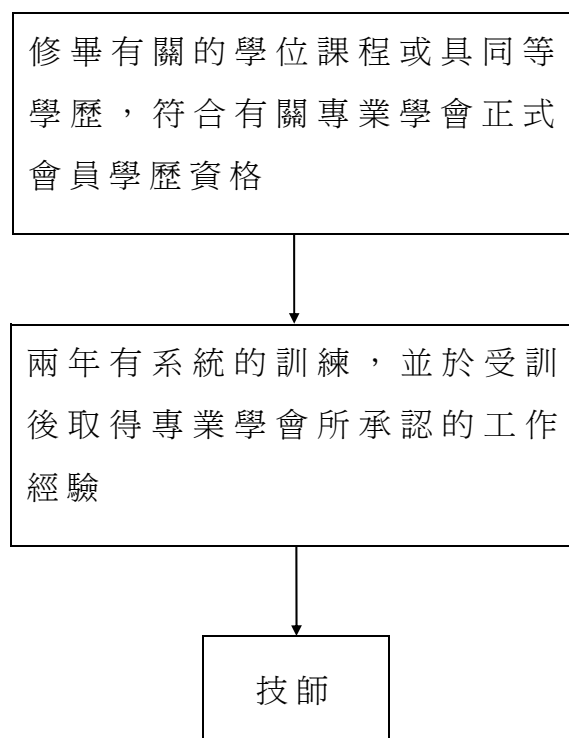
技師級訓練

4.5 本業的技師，通常擔任工程師和修理部經理職務。他們在機械工程或道路運輸工程方面的專業知識，應達專業學會認可的水平。

4.6 技師應能勝任以下工作：分析、解決廣泛的技術問題；運用、發展工程學的原理；獨立思考，作出判斷；在工作上運用最新的科技知識；管理各種商業及技術職務。

4.7 建議訓練技師的途徑如下：

技師訓練

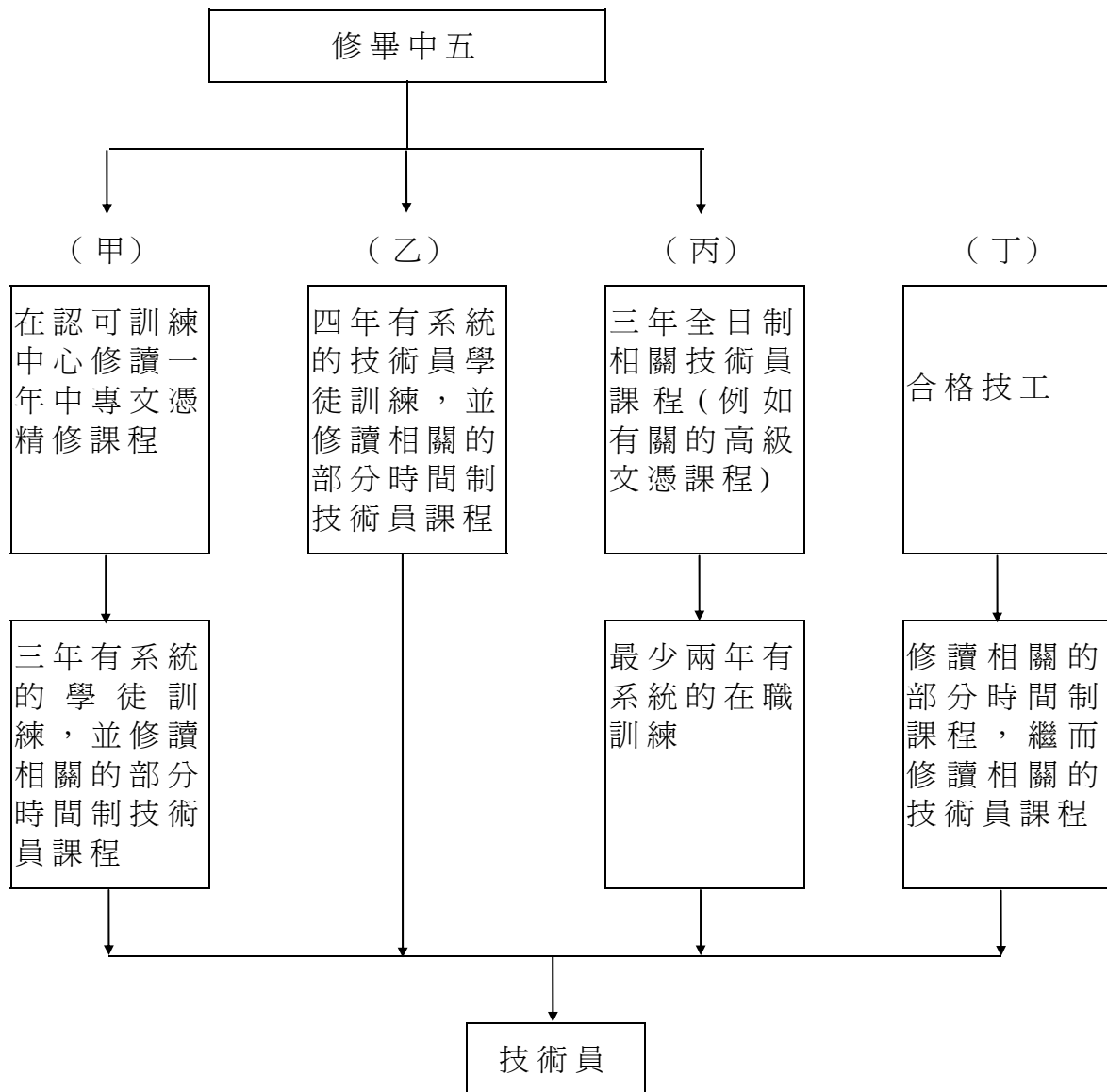


技術員級訓練

4.8 技術員須接受過適當教育及實務訓練，具備工作經驗，一般能夠在技師督導下，運用已確立的技術及工作程序，並能負起相當的技術責任。

4.9 建議訓練技術員的途徑如下：

技術員訓練



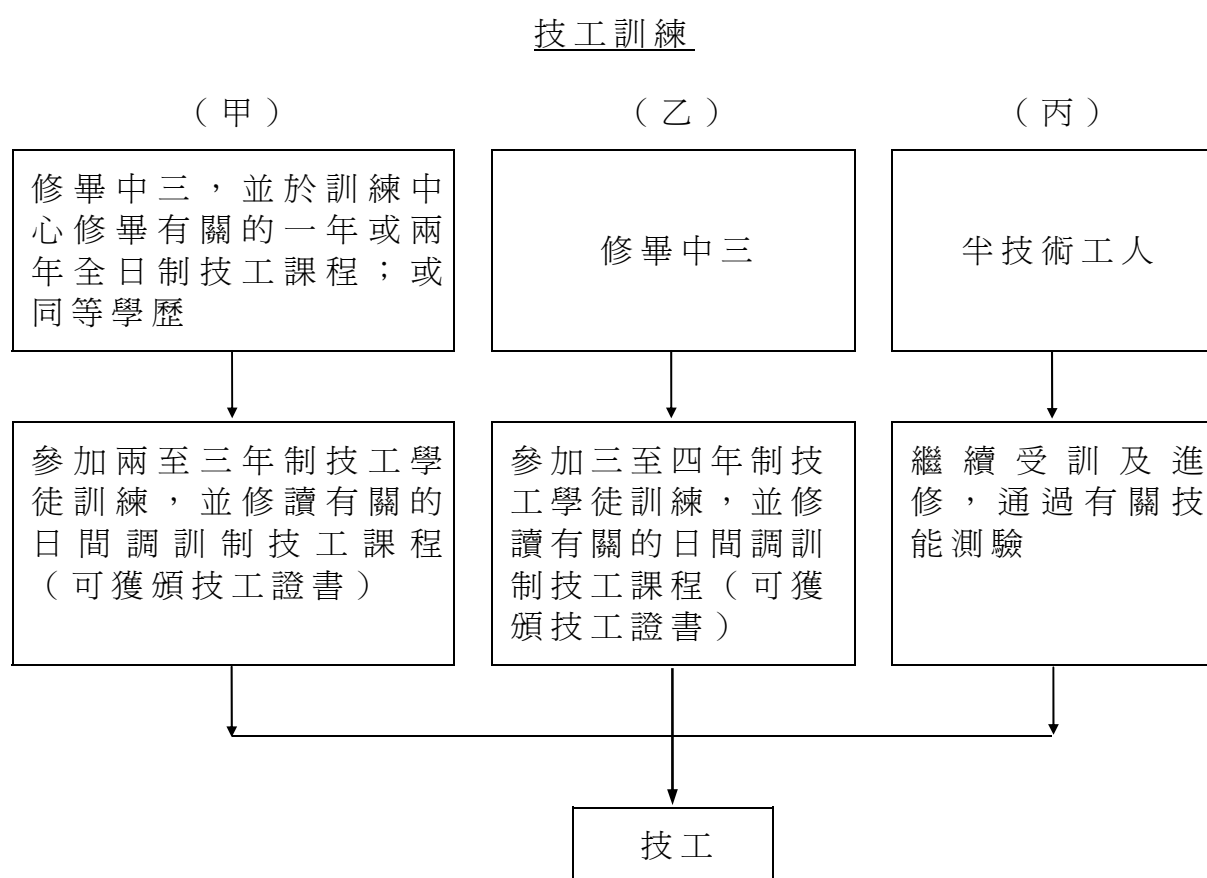
4.10 大部分僱主均認為技術員考獲有關高級文憑資格乃其事業的進階途徑。

4.11 途徑(丁)雖可為有志的技工提供晉升機會，但不宜過度倚賴這個途徑訓練技術員。

技工級訓練

4.12 技工須具備高度的實務技能，以及相當的技術知識，才能夠配合最新的科技發展。修畢中三課程乃技工需具的最低學歷。

4.13 建議訓練技工的途徑如下：



4.14 三個訓練途徑中，本會推薦途徑（甲），因為參加學徒訓練者已接受基本訓練，故一開始即能投入工作。

工業教育及訓練機構

4.15 職業訓練局轄下香港專業教育學院及汽車業訓練中心辦有多項與汽車業有關的全日制、日間部分時間給假調訓制及夜間制訓練課程。本會籲請僱主充分利用這些院校及機構的訓練設施，保送員工修讀有關課程，提升其專業知識及技能。

4.16 為應付汽車業的發展需要，從業員必須不斷進修、終身學習，僱主亦須了解僱員在進修上的需要，鼓勵他們修讀增修／訓練課程、參加研習班或研討會，學習先進科技。

職業訓練局屬下發展及訓練中心

4.17 本會負責就發展香港專業教育學院汽車工程系及汽車業訓練中心的培訓服務提供意見。汽車工程系及汽車業訓練中心提供下列全日制課程，為本業培訓新血：

香港專業教育學院汽車工程系提供全日制長時間課程：

<u>課程名稱</u>	<u>程度</u>	<u>訓練期</u>
(1) 汽車工程高級文憑課程	技術員	三年
(2) 汽車科技及系統設計高級文憑課程	技術員	三年
(3) 汽車商務及管理高級文憑課程	技術員	三至四年

汽車業訓練中心提供全日制長時間課程：

<u>課程名稱</u>	<u>程度</u>	<u>訓練期</u>
(1) 汽車維修基本技術證書課程	技工	一年
(2) 中專文憑（汽車科技）課程	技術員	三年#
(3) 一年制中專文憑精修課程 — 汽車科技	技術員	一年

〈學員修畢第二年的證書課程後，可參與技工學徒訓練計劃〉

4.18 除上述全日制課程外，香港專業教育學院汽車工程系及汽車業訓練中心亦為汽車業僱員提供其他全日制、日間部分時間給假調訓制及夜間訓練課程，目的是培訓本地從業員，配合香港汽車業的發展所需。本會籲請業內僱主全力支持汽車工程系及汽車業訓練中心的工作，僱用修畢課程的學員，並保送屬下員工修讀有關的增修課程，增強其專業技術，滿足工作需求。

職業訓練局相關的培訓服務

4.19 職業訓練局為僱主提供服務，協助籌辦訓練計劃，包括：

- (i) 法定的**學徒訓練計劃** — 為技術員及技工提供完善訓練，應付業內需求；
- (ii) **工科畢業生訓練計劃** — 協助工科學生及畢業生完成工程師專業訓練；
- (iii) 自願性質的**技能測驗及證書頒發制度** — 旨在確立及承認技術工人的水平。本會舉辦汽車機械工、汽車電工、汽車修理工及汽車噴漆工等各種技能測驗；
- (iv) **新科技培訓計劃** — 資助本地機構保送僱員學習新科技，資助金額可達訓練費用的 50%。計劃涵蓋各類訓練模式，包括海外課程或實習、本地訓練課程，以及專為個別機構而設的本地訓練課程／實習。

4.20 建議僱主在擬定訓練計劃和僱用受訓者時與職業訓練局聯絡。

Membership of the Automobile Training Board
(as at 1 July 2007)

Chairman:

Mr LEE Yiu-pui, Ringo (nominated by the Hong Kong Vehicle
Repair Merchants Association Ltd.)

Members:

Mr CHAN Yan-ting, Gordon (nominated by Hong Kong Auto Parts Industry
Association)

Mr CHENG Chung-yan, Ramuel (nominated by a bus company)

Mr LAM Hing-cheong (nominated by a motor vehicle servicing
establishment other than vehicle distributors)

Mr LAU Kai-sing, Ted (nominated by a motor vehicle distributor)

Ir Kenny PAK (nominated by the Service Managers Association)

Mr TANG Kwok-fai (nominated by the Motor Transport Workers
General Union)

Mr TONG Kwok-kei (nominated by a motor vehicle distributor)

Mr WONG Sui-wan (nominated by a motor vehicle distributor)

Mr YEUNG Kin-fai, Frankie (nominated by a motor vehicle Distributor)

Mr CHAU Chi-ming, Thomas (representative of the Director of Environmental
Protection Department)

Mr KWOK Kai-hing, Daniel (representative of the Executive Director of the
Vocational Training Council)

Mr NG Chi-hung (representative of the Commissioner for Labour)

Mr Kenneth SHE (representative of the Director of Electrical and
Mechanical Services)

Mr TSANG Man-wai, David (representative of the Commissioner for Transport)

In-attendance:

Mr Iain Seymour-Hart (nominated by the Hong Kong Institute of
Vocational Education)

Mr WONG Chun-keung (Manager of the Automobile Industry Training
Centre)

Mr TAM Wing-sing, Vincent (Vocational Training Council)

Secretary:

Mr LO Shiu-wing, Daniel (Vocational Training Council)

汽車業訓練委員會
委員名單
(二〇〇七年七月一日時)

主席：

李耀培先生 (香港汽車修理同業商會有限公司提名)

委員：

陳仁錠先生 (香港汽車零部件工業協會提名)
鄭中仁先生 (某巴士公司提名)
林慶昌先生 (汽車分銷商以外的汽車維修機構提名)
劉啓成先生 (某汽車分銷商提名)
白正曦先生 (汽車維修管理協會提名)
鄧國輝先生 (汽車交通運輸業總工會提名)
湯國基先生 (某汽車分銷商提名)
黃瑞雲先生 (某汽車分銷商提名)
楊建輝先生 (某汽車分銷商提名)
仇志明先生 (環境保護署署長代表)
郭啓興先生 (職業訓練局執行幹事代表)
吳志鴻先生 (勞工處處長代表)
余少權先生 (機電工程署署長代表)
曾文瑋先生 (運輸署署長代表)

列席者：

施文彥先生 (香港專業教育學院提名)
黃振強先生 (汽車業訓練中心主任)
譚榮星先生 (職業訓練局)

秘書：

羅兆榮先生 (職業訓練局)

Terms of Reference

1. To determine the manpower demand of the industry, including the collection and analysis of relevant manpower and student/trainee statistics and information on socio-economic, technological and labour market developments.
2. To assess and review whether the manpower supply for the industry matches with the manpower demand.
3. To recommend to the Vocational Training Council the development of vocational education and training facilities to meet the assessed manpower demand.
4. To advise the Hong Kong Institute of Vocational Education (IVE) and training & development centres on the direction and strategic development of their programmes in the relevant disciplines.
5. To advise on the course planning, curriculum development and quality assurance systems of the IVE and training & development centres.
6. To prescribe job specifications for the principal jobs in the industry defining the skills, knowledge and training required.
7. To advise on training programmes for the principal jobs in the industry specifying the time a trainee needs to spend on each skill elements.
8. To tender advice in respect of skill assessments, trade tests and certification for in-service workers, apprentices and trainees, for the purpose of ascertaining that the specified skill standards have been attained.
9. To advise on the conduct of skill competitions in key trades in the industry for the promotion of vocational education and training as well as participation in international competitions.
10. To liaise with relevant bodies on matters pertaining to the development and promotion of vocational education and training in the industry, including employers, employers' associations, trade unions, professional institutions, training and educational institutions and government departments.
11. To organize seminars/conferences/symposia on vocational education and training for the industry.
12. To advise on the publicity relating to the activities of the Training Board and relevant vocational education and training programmes of the VTC.
13. To submit to the Council an annual report on the Training Board's work and its recommendations on the strategies for programmes in the relevant disciplines.
14. To undertake any other functions delegated by the Council in accordance with Section 7 of the Vocational Training Council Ordinance.

職權範圍

1. 確定業內的人力需求，包括收集、分析相關的人力和學生／學員統計數字，以及關於社會經濟、科技及人力市場發展的資料。
2. 評估及研究本業的人力供求是否平衡。
3. 就發展業內專業教育訓練設施應付人力需求，向職業訓練局提供意見。
4. 就相關學科的課程發展方向及策略，向香港專業教育學院（IVE）、訓練及發展中心提出建議。
5. 就 IVE、訓練及發展中心的課程策劃、課程發展及質素保證制度提供意見。
6. 擬定本業主要職務的工作範圍，界定所需技能、知識及訓練。
7. 建議本業主要職務訓練方案，訂定每種技能所需的訓練期。
8. 對技術評估、技能測驗及證書頒發制度提供意見，以確定從業員、學徒及見習員的技能水平。
9. 就本業主要行業舉辦技能比賽提供意見，以推廣專業教育與訓練，和派員參加國際賽事。
10. 就本業專業教育訓練的發展與推廣事宜，與僱主、僱主聯會、工會、專業團體、訓練及教育機構、政府部門等聯絡。
11. 為本業舉辦有關專業教育及訓練的研討會與會議。
12. 就業內訓練委員會工作、有關職訓局專業教育及訓練課程的宣傳事宜提供意見。

13. 每年向局方呈交提供訓練委員會工作報告，以及相關學科課程發展的策略建議。
14. 根據《職業訓練局條例》第 7 條，負責局方所委派的其他工作。

Part II 第二部份

1. Professional Qualification 專業資格	For establishments which employ mechanical engineers (automotive). Please indicate how many of them are professional mechanical engineers such as corporate members of the Hong Kong Institution of Engineers, or Institution of Mechanical Engineers, i.e. MHKIE, FHKIE, MIMechE or FIMechE. 僱有汽車機械工程師的機構，請在此處說明具備專業學院正式會員資格(如香港工程師學會或機械工程師學會會員或院士)的工程師人數								
Rec. Type 3 8 9	For Official Use Only: 此欄毋須填寫							10	
2. Education and Training an Employee Should Have 僱員宜有的教育及訓練	Technologist 技師			Technician 技術員			Craftsman 技工		
Education 教育	Training Mode 訓練方式	Training Period 訓練時間	Education 教育	Training Mode 訓練方式	Training Period 訓練時間	Education 教育	Training Mode 訓練方式	Training Period 訓練時間	
11	12	13	14	15	16	17	18	19	
Please enter in the above boxes the education and training an employee should have according to the following codes: 請將僱員宜有的教育及訓練按照下列類別編號填入上項的格內：									
Code 編號	Education 教育	Code 編號	Training Mode 訓練方式	Code 編號	Training Period 訓練時間				
1	Degree or equivalent 大學學位	1	Graduate traineeship 工科畢業生訓練	1	4 years or above 四年或以上				
2	Higher Diploma 高級文憑	2	On-the-job training 在職訓練	2	3 to less than 4 years 三年至四年以下				
3	Diploma 技術員文憑	3	Apprenticeship 學徒訓練	3	2 to less than 3 years 二年至三年以下				
4	Higher Certificate/Certificate 高級證書/證書	4	Others 其他	4	1 to less than 2 years 一年至二年以下				
5	Advanced Craft Certificate/Craft Certificate 技工深造證書/技工證書				5	6-11 months 六至十一個月			
6	Secondary 5 中五				6	Below 6 months 六個月以下			
7	Secondary 3 or below 中三或以下								

Appendix A
附錄 A

CONFIDENTIAL	填入數據後即成
WHEN ENTERED WITH DATA	機密文件

VOCATIONAL TRAINING COUNCIL
職業訓練局
THE 2006 MANPOWER SURVEY OF THE AUTOMOBILE INDUSTRY
汽車業二〇〇六年人力調查
QUESTIONNAIRE
調查表

PLEASE READ THE EXPLANATORY NOTES BEFORE COMPLETING THIS QUESTIONNAIRE
 填表前，請參閱附註

For Official Use Only: 此欄毋須填寫							
Rec. Type	Survey Code	Industry Code	Establishment No.	Enumerator's No.	Editor's No.	Check Digit	No. of Employees Covered by the Questionnaire
1	0 1 2 3	4 5 6 7 8 9	10 11 12 13 14 15	16 17	18 19	20 21 22	23 24 25 26 27

NAME OF ESTABLISHMENT: 機構名稱	ADDRESS: 地址
TYPE OF PRODUCTS/SERVICE: 產品種類/服務性質	TOTAL NO. OF PERSONS: 僱員總數
NAME OF PERSON TO CONTACT: 聯絡人姓名	POSITION: 職位
TEL. NO.: 電話	FAX NO.: 圖文傳真
E-MAIL: 電郵	

VTC-AU-01

(A) Job 工作		(B) Average Monthly Income 每月平均 收入		(C) No. Employed (excl. trainees) 僱員人數 (受訓者除外)	(D) Forecast of No. Employed 12 Months from Now (excl. trainees) 預計 十二個月後 僱員人數 (受訓者除外)	(E) No. of Vacancies at Date of Survey (excl. trainees) 現有 空缺額 (受訓者 除外)	(F) No. of Trainees at Date of Survey 現有 受訓者 人數	Average Monthly Income 每月平均收入
Title 職稱	Rec. Type	Job No. 編號	Code 編號					Enter in column B employee's average monthly income range according to the following code: 請將僱員每月平均收入幅度 按照下列類別編號填入B欄內：
Please ignore these numbers 請毋須理會欄中 的號碼	→	8 - 10	11	12 - 15	16 - 19	20 - 22	23 - 25	
TECHNOLOGIST LEVEL 技師級								
Mechanical Engineer (Automotive) 汽車機械工程師	2	1 0 1						1 Under \$5,001 以下
Service Manager 維修部經理	2	1 0 2						2 \$5,001 - \$6,000
TECHNICIAN LEVEL 技術員級								3 \$6,001 - \$8,000
Service Instructor 維修教導員	2	2 0 1						4 \$8,001 - \$10,000
Motor Vehicle Examiner/Tester 汽車檢查員/測試員	2	2 0 2						5 \$10,001 - \$15,000
Service Supervisor 維修監督	2	2 0 3						6 \$15,001 - \$20,000
Service Adviser/Receptionist 維修服務員/款待員	2	2 0 4						7 \$20,001 - \$25,000
Engineering Technician 工程技術員	2	2 0 5						8 Over \$25,000 以上
Parts Supervisor 配件監督	2	2 0 6						
CRAFTSMAN LEVEL 技工級								
Vehicle Mechanic 汽車機械工	2	3 0 1						
Vehicle Electrician 汽車電工	2	3 0 2						
Vehicle Body Repairer 車身修理工	2	3 0 3						
Vehicle Body Builder 車身建造工	2	3 0 4						
Vehicle Painter 汽車噴漆工	2	3 0 5						
Vehicle Air-conditioning Mechanic 汽車冷氣工	2	3 0 6						
Vehicle Upholsterer 車內裝飾工	2	3 0 7						
Machinist 機床工	2	3 0 8						
Industrial Vehicle Mechanic 工業機車技工	2	3 0 9						
UNSKILLED LEVEL 非技術工人級								
General Worker/Cleaner/Greaser 雜工/清潔工/加滑油工	2	4 0 1						
	2							
	2							

Note 1 If additional lines are necessary, please tick here and enter on supplementary sheet(s).
附註一 如此頁填滿，請先將 (✓) 號填入此 內，然後在附頁繼續填寫。

Note 2 The term 'trainees' includes all trainees receiving any form of training and apprentices under a contract of apprenticeship.
附註二 「受訓者」包括正在接受各種訓練的人士，以及簽有學徒合約的登記學徒。

to be continued ...
續後頁

The 2006 Manpower Survey of
the Automobile Industry
汽車業二〇〇六年人力調查

Explanatory Note
附註

1. When filling the questionnaire, please ignore the numbers in the row immediately beneath the headings. They are purely column numbers for data processing.
填寫調查表時，請毋須理會標題下的編號；這些編號是分欄編號，只供資料處理時使用。
2. Before completing the questionnaire, please read carefully the job titles and job descriptions in Appendix C.
填寫調查表前，請先參閱附錄 C 所列的職稱與工作說明。
3. Please complete all columns of the questionnaire from 'A' to 'F' which are applicable and insert a zero (0) for any column not applicable to your establishment.
請填寫‘A’至‘F’各欄，並在不適用於貴機構的各欄內填入(0)符號。
4. Please fill in information as accurate as possible because the information collected from this survey is vital for determining the training needs of the industry in order that the Automobile Training Board can make meaningful recommendations to Government on how to meet these training needs.
請填入準確資料，因這些資料對於確定本業的訓練需求極為重要，而汽車業訓練委員會，亦會就應付這些訓練需求，向政府提出建議。
5. Job Titles - Column 'A'
職稱 — ‘A’ 欄
 - (a) The job titles and code numbers are pre-printed.
職稱及職務編號已代為印上。
 - (b) Please add in column 'A' any other job titles not mentioned in Appendix C, briefly describe the jobs and indicate their skill levels as well.
如貴機構另有職稱未有載於附錄 C，請一併填入‘A’欄內，並扼要說明其工作性質及技能等級。

- (c) Please classify an employee according to his main duty irrespective of any additional secondary duties he may be required to perform, e.g. a craftsman who works mainly as a vehicle mechanic but is also required to perform the work of a vehicle electrician occasionally should be classified as a vehicle mechanic but not as a vehicle electrician.

請根據僱員的主要職務分類，毋須理會該僱員所兼任的其他職務。例如：一名技工的主要職務為汽車機械工，但有時亦須兼任汽車電工，則應歸類為汽車機械工而非汽車電工。

6. Average Monthly Income - Column 'B'

每月平均收入 — 'B' 欄

Please enter into this column the average monthly income range code for each type of employees. This should include basic wages, overtime pay, cost of living allowance, meal allowance, guaranteed year-end bonus etc., if any. If you have more than one employees doing the same job, please enter the average figure.

請在此欄填入各類僱員每月平均收入幅度的編號，包括底薪、超時工作工資、生活津貼、膳食津貼、固定發放的年終花紅等。若從事同類工作的僱員超過一名，則請填寫月入的平均數字。

7. Number Employed (excluding trainees) - Column 'C'

現有僱員人數（受訓者除外） — 'C' 欄

Please fill in the total number of employees (excluding trainees) employed in your establishment at date of survey.

請將現時的僱員總數（受訓者除外）填入此欄。

8. Forecast of Number Employed 12 Months from Now (excluding trainees) - Column 'D'

預計十二個月後的僱員總數（受訓者除外） — 'D' 欄

The forecast of number employed means the number of employees (excluding trainees) you will be employing 12 months from now.

預計僱員人數，是指貴機構於十二個月後所雇用的人數（受訓者除外）

9. Number of Vacancies at Date of Survey (excluding trainees) - Column 'E'

現有空缺額（受訓者除外） — 'E' 欄

Please fill in the number of existing vacancies.

請填入貴機構現有的空缺額。

'Existing Vacancies' refer to those unfilled, immediately available job openings for which the establishment is actively trying to recruit personnel at date of survey.

「現有空缺額」是指該職位仍然懸空，須立刻填補，而貴機構現正積極招聘人員填補。

10. Number of Trainees at Date of Survey - Column 'F'

現有受訓者人數 — 'F' 欄

Please fill in the total number of employees undergoing training.

請將正在受訓的僱員總數填入此欄。

11. Education and Training an Employee Should Have

僱員宜有的教育及訓練

The purpose of this column is to solicit your view on the education, mode and period of training which an employee (not as a trainee) should have in a particular job (please refer to the codes in the same page of the questionnaire).

此欄旨在調查閣下對各類職務僱員（非受訓者）宜有教育程度、訓練方式及訓練期的意見（請參閱調查表同一頁內的類別編號）。

12. Example

例子

To facilitate proper completion, an example is given below for your reference.

下列例子，可供填寫時參考。

(A) Job 工作		(B) Average Monthly Income 每月平均 收入		(C) No. Employed (excl. trainees) 僱員人數 (受訓者除外)	(D) Forecast of No. Employed 12 Months from Now (excl. trainees) 預計 十二個月後 僱員人數 (受訓者除外)	(E) No. of Vacancies at Date of Survey (excl. trainees) 現有 空缺額 (受訓者 除外)	(F) No. of Trainees at Date of Survey 現有 受訓者 人數	Average Monthly Income 每月平均收入
Title 職稱	Rec. Type	Job No. 編號	Code 編號					Enter in column B employee's average monthly income range according to the following code: 請將僱員每月平均收入幅度 按照下列類別編號填入B欄內：
Please ignore these numbers 請毋須理會欄中 的號碼		8 - 10	11	12 - 15	16 - 19	20 - 22	23 - 25	Monthly Income Range 每月平均收入幅度
TECHNOLOGIST LEVEL 技師級								
Mechanical Engineer (Automotive) 汽車機械工程師	2	1 0 1						1 Under \$5,001 以下
Service Manager 維修部經理	2	1 0 2						2 \$5,001 - \$6,000
TECHNICIAN LEVEL 技術員級								
Service Instructor 維修教導員	2	2 0 1						3 \$6,001 - \$8,000
Motor Vehicle Examiner/Tester 汽車檢查員/測試員	2	2 0 2						4 \$8,001 - \$10,000
Service Supervisor 維修監督	2	2 0 3	6		1		0	5 \$10,001 - \$15,000
Service Adviser/Receptionist 維修服務員/款待員	2	2 0 4						6 \$15,001 - \$20,000
Engineering Technician 工程技術員	2	2 0 5						7 \$20,001 - \$25,000
Parts Supervisor 配件監督	2	2 0 6						8 Over \$25,000 以上
CRAFTSMAN LEVEL 技工級								
Vehicle Mechanic 汽車機械工	2	3 0 1	5		4		5	
Vehicle Electrician 汽車電工	2	3 0 2	5		1		1	0
Vehicle Body Repairer 車身修理工	2	3 0 3						
Vehicle Body Builder 車身建造工	2	3 0 4						
Vehicle Painter 汽車噴漆工	2	3 0 5						
Vehicle Air-conditioning Mechanic 汽車冷氣工	2	3 0 6						
Vehicle Upholsterer 車內裝飾工	2	3 0 7						
Machinist 機床工	2	3 0 8						
Industrial Vehicle Mechanic 工業機車技工	2	3 0 9						
UNSKILLED LEVEL 非技術工人級								
General Worker/Cleaner/Greaser 雜工/清潔工/加滑油工	2	4 0 1	1		1		1	0
	2							
	2							

Remarks 備注

Note 1 If additional lines are necessary, please tick here and enter on supplementary sheet(s).
附註一 如此頁填滿，請先將 (✓) 號填入此 內，然後在附頁繼續填寫。

Note 2 The term 'trainees' includes all trainees receiving any form of training and apprentices under a contract of apprenticeship.
附註二 「受訓者」包括正在接受各種訓練的人士，以及簽有學徒合約的登記學徒。

to be continued ...
續後頁

JOB DESCRIPTIONS FOR PRINCIPAL JOBS
IN THE AUTOMOBILE INDUSTRY

汽車業主要職務的工作說明

Code No. 編號	Job Title 職稱	Job Description 工作說明
TECHNOLOGIST LEVEL 技師級		
101	Mechanical Engineer (Automotive) 汽車機械工程師	<p>Engages in one or more of the following activities:</p> <ol style="list-style-type: none"> (1) Carrying out feasibility studies. (2) Procurement of vehicles and workshop equipment, including devising of technical specifications, tender assessment and commissioning. (3) Making modification or improvement on vehicles and auxiliary equipment. (4) Investigating, analysing and compiling reports on vehicle failures. (5) Undertaking inspections and tests, assessing equipment performance and giving technical advice. (6) Devising preventive maintenance programme for large fleet of vehicles. (7) Managing engineering activities of an organization engaged in motor vehicle repairs and servicing, including safety and health matters. <p>從事下列一項或多項工作：</p> <ol style="list-style-type: none"> 1. 進行可行性研究； 2. 負責購置汽車及工場設備，並製訂技術規格、評估標書及驗收； 3. 為汽車及輔助設備進行改裝或改良； 4. 調查與分析汽車故障，並編製報告；

Code No. 編號	Job Title 職稱	Job Description 工作說明
TECHNOLOGIST LEVEL (Continued) 技師級 (續)		
		5. 進行檢查及測試，評估設備性能以及提供技術方面的意見； 6. 為大型車隊訂定預防性維修計劃； 7. 負責管理汽車維修機構內一切工程及有關事宜，包括工作安全及員工健康。
102	Service Manager 維修部經理	Manages all commercial and technical activities of an organization engaged in motor vehicle repairs and servicing, including safety and health matters. 負責管理汽車維修機構內一切業務及技術方面的工作，包括工作安全及員工健康。
TECHNICIAN LEVEL 技術員級		
201	Service Instructor 維修教導員	Instructs apprentices, trainees and other employees in motor vehicle servicing and repairs. 教導學徒、受訓者及其他僱員有關汽車維修的知識及技能。
202	Motor Vehicle Examiner/Tester 汽車檢查員／測試員	Inspects and tests motor vehicles for their conditions and road-worthiness compliance, including inspection before and after repairs, as well as testing in compliance with legal requirements. 檢查及測試汽車的狀況和路面行駛性能，包括維修前或維修後檢查或測試有關車輛是否符合法例的規定。
203	Service Supervisor	Performs supervisory duties contributory to: <ul style="list-style-type: none"> (i) the planning and allocation of tasks to foremen and other employees, (ii) the inspection, servicing and repairs of motor vehicles, and (iii) the installation and maintenance of workshop equipment.

Code No. 編號	Job Title 職稱	Job Description 工作說明
TECHNICIAN LEVEL (Continued) 技術員級 (續)		
	維修監督	執行下列監督工作，以便協助： <ul style="list-style-type: none"> (i) 策劃及分配工作予管工及其他僱員； (ii) 檢查與維修汽車； (iii) 安裝與維修工場設備。
204	Services Adviser/ Receptionist 維修服務員／款待員	Records customers' requirements, recommends repairs and servicing, advises and liaises with customers regarding progress of work. 記錄顧客的要求，建議適當的維修服務，並與顧客聯絡，知會有關工作的進展。
205	Engineering Technician 工程技術員	Performs technical tasks contributory to the modification or improvement work on vehicles, the design, installation and maintenance of workshop facilities, and technical support for vehicle servicing, either independently or under the direction of a mechanical engineer (automotive) or a service manager. 獨立或在汽車機械工程師／維修部經理的指導下執行技術職務，以協助進行：汽車的改裝或改良；工場設備的設計、安裝及維修；汽車維修方面的技術支援。
206	Parts Supervisor 配件監督	Engages in identification and control of stock, promotion and effect of the sales of automotive parts and accessories. 負責辨別與管理貨物，推銷、出售汽車零件及附件。

Code No. 編號	Job Title 職稱	Job Description 工作說明
CRAFTSMAN LEVEL 技工級		
301	Vehicle Mechanic 汽車機械工	Services and repairs all types of vehicles. 維修各類型汽車。
302	Vehicle Electrician 汽車電工	Services and repairs electrical and electronic systems and components of motor vehicles. 維修汽車電氣、電子系統和組件。
303	Vehicle Body Repairer 車身修理工	Repairs motor vehicle bodies. 修理汽車車身。
304	Vehicle Body Builder 車身建造工	Constructs and converts motor vehicle bodies. 建造與改裝汽車車身。
305	Vehicle Painter 汽車噴漆工	Prepares and paints vehicle bodies. 負責噴漆前的準備工作以及噴塗車身。
306	Vehicle Air-Conditioning Mechanic 汽車冷氣工	Installs, services and repairs vehicle air-conditioners. 安裝與維修汽車冷氣機。
307	Vehicle Upholsterer 車內裝飾工	Provides seats, seat covers, floor covers and interior trim in vehicles. 製造及裝設車椅、車椅面、車地板面及車內一切裝飾。
308	Machinist 機床工	Produces and reconditions vehicle components by the use of common or special purpose machine tools. 使用一般或專門的機床生產與整修汽車零件。

Code No. 編號	Job Title 職稱	Job Description 工作說明
CRAFTSMAN LEVEL (Continued) 技工級 (續)		
309	Industrial Vehicle Mechanic 工業機車技工	Services and repairs all types of industrial vehicles (e.g. fork lift truck, straddle carrier, shovel loader, etc.). 維修各類型工業機車（例如：叉式鏟車、貨櫃搬機車及鏟斗式裝載車等）。
UNSKILLED LEVEL 非技術工人級		
401	General Worker/ Cleaner/Greaser 雜工／清潔工／ 加滑油工	Performs duties of a general nature not requiring any training or skill, such as cleaning, greasing, lubricating and polishing of motor vehicles after repairs and servicing, and tidying up garage. 擔任不需專門訓練或技能的一般性質工作，例如汽車維修後的清抹、加渴油與滑油，以及車房的清潔工作。

- The End -
完

MANPOWER STATISTICS - AUTOMOBILE INDUSTRY (April 2006)
汽車業內的僱員統計數字 (二〇〇六年四月)

Job Title 職稱	Number of Workers Employed (Excluding Trainees) 現有僱員人數 (受訓者除外)	Number of Trainees 現有的受 訓者人數	Number of Vacancies at Date of Survey 調查期間 的空缺額	Forecast of Total Workforce by April 2007 估計二〇〇七年 四月時的僱員總數
TECHNOLOGIST LEVEL 技師級				
Mechanical Engineer (Automotive) 汽車機械工程師	76	1	1	75
Service Manager 維修部經理	166	0	1	165
Sub-total 分類總數	242	1	2	240
TECHNICIAN LEVEL 技術員級				
Service Instructor 維修教導員	47	0	0	47
Motor Vehicle Examiner/ Tester 汽車檢查員/測試員	324	0	0	324
Service Supervisor 維修監督	619	0	5	622
Service Adviser/ Receptionist 維修服務員/款待員	310	9	7	312
Engineering Technician 工程技術員	432	70	3	434
Parts Supervisor 配件監督	142	0	1	141
Sub-total 分類總數	1 874	79	16	1 880
CRAFTSMAN LEVEL 技工級				
Vehicle Mechanic 汽車機械工	6 204	411	106	6 400
Vehicle Electrician 汽車電工	802	41	7	845
Vehicle Body Repairer 車身修理工	1 157	30	6	1 182

Job Title 職稱	Number of Workers Employed (Excluding Trainees) 現有僱員人數 (受訓者除外)	Number of Trainees 現有的受 訓者人數	Number of Vacancies at Date of Survey 調查期間 的空缺額	Forecast of Total Workforce by April 2007 估計二〇〇七年 四月時的僱員總數
CRAFTSMAN LEVEL (Continued) 技工級 (續)				
Vehicle Body Builder 車身建造工	200	2	1	201
Vehicle Painter 汽車噴漆工	661	16	0	667
Vehicle Air-Conditioning Mechanic 汽車冷氣工	164	2	0	164
Vehicle Upholsterer 車內裝飾工	49	0	0	49
Machinist 機床工	76	4	0	80
Industrial Vehicle Mechanic 工業機車技工	70	2	2	72
Sub-total 分類總數	9 383	508	122	9 660
UNSKILLED LEVEL 非技術工人級				
General Worker/ Cleaner/Greaser 雜工/清潔工/ 加滑油工	600	0	3	602
Sub-total 分類總數	600	0	3	602
GRAND TOTAL 總數	12 099	588	143	12 382

PREFERRED EDUCATION OF EMPLOYEES

僱員宜有的教育程度

Level 級別	Degree or Equivalent 大學學位	Higher Diploma 高級文憑	Diploma 技術員文憑	Higher Certificate/ Certificate 高級證書／證書	Advanced Craft Certificate/ Craft Certificate 技工深造證書／ 技工證書	Secondary 5 中五	Secondary 3 or Below 中三或以下
Technologist 技師	171	68	1	1	-	-	-
Technician 技術員	1	16	652	1 155	40	-	-
Craftsman 技工	-	-	-	27	5 544	2 730	1 066
Grand Total 總數	172	84	653	1 183	5 584	2 730	1 066

PREFERRED TRAINING MODE OF EMPLOYEES

僱員宜有的訓練方式

Level 級別	Graduate Traineeship 工科畢業生訓練	On-the-Job Training 在職訓練	Apprenticeship 學徒訓練
Technologist 技師	89	152	-
Technician 技術員	-	1 041	823
Craftsman 技工	-	2 780	6 587
Grand Total 總數	89	3 973	7 410

PREFERRED TRAINING PERIOD OF EMPLOYEES

僱員宜有的訓練期

Level 級別	4 Years or Above 四年或以上	3 to Less Than 4 Years 三至四年內	2 to Less Than 3 Years 二至三年內	1 to Less Than 2 Years 一至二年內	6-11 Months 六至十一個月
Technologist 技師	42	5	125	63	6
Technician 技術員	1 042	531	291	0	0
Craftsman 技工	3 239	5 992	97	39	0
Grand Total 總數	4 323	6 528	513	102	6

DISTRIBUTION OF EMPLOYEES BY TOTAL MONTHLY INCOME RANGE*

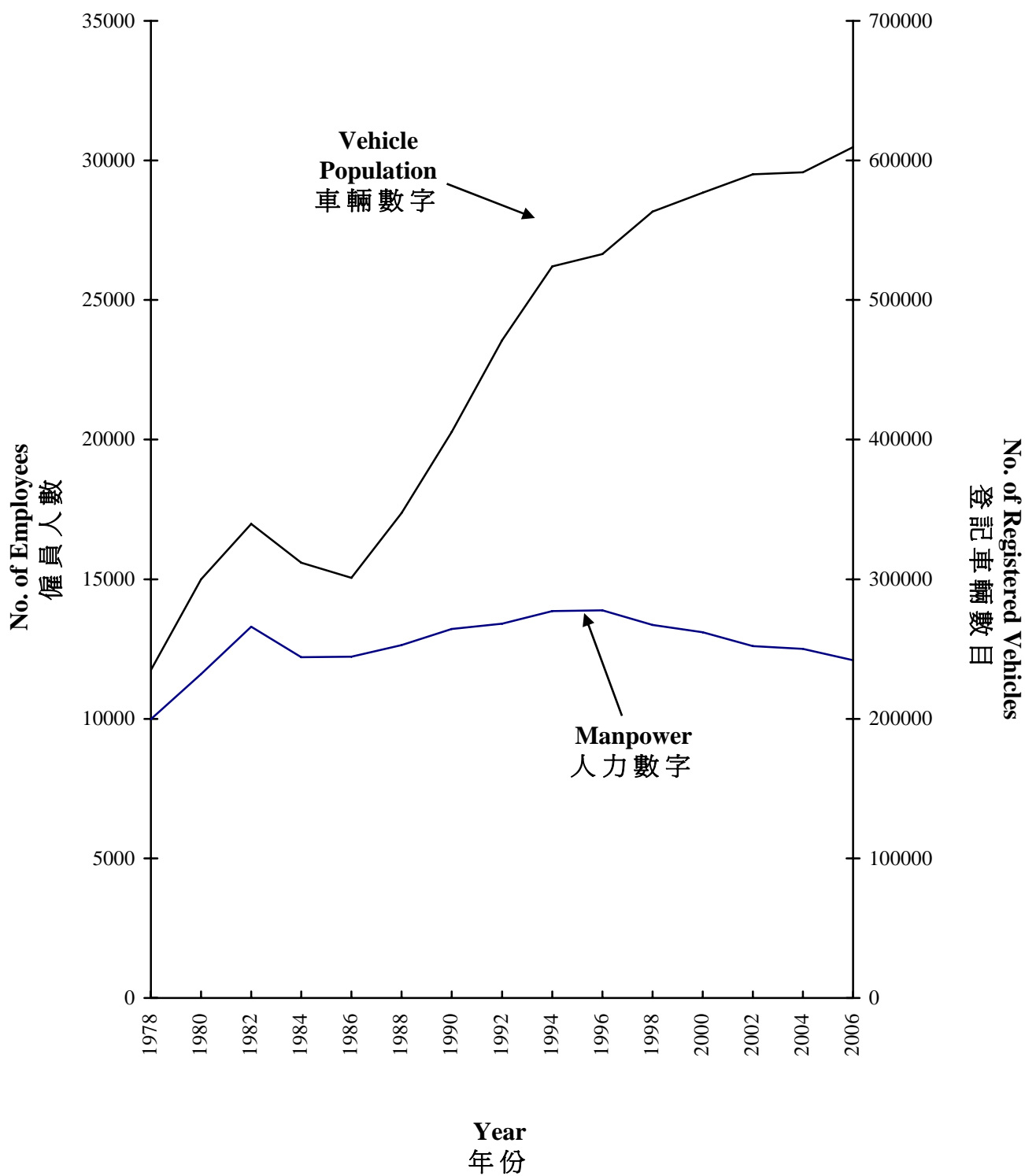
根據每月總收入幅度劃分的僱員人數分佈情況*

Job Title 職稱	Under \$5,001 以下	\$5,001 - \$6,000	\$6,001 - \$8,000	\$8,001 - \$10,000	\$10,001 - \$15,000	\$15,001 - \$20,000	\$20,001 - \$25,000	Over \$25,000 以上
TECHNOLOGIST LEVEL 技師級								
Mechanical Engineer (Automotive) 汽車機械工程師	0	0	0	0	0	4	41	31
Service Manager 維修部經理	0	0	0	0	0	9	36	121
Sub-total 分類總數	0	0	0	0	0	13	77	152
TECHNICIAN LEVEL 技術員級								
Service Instructor 維修教導員	0	0	0	0	12	4	4	27
Motor Vehicle Examiner/ Tester 汽車檢查員/測試員	0	0	0	1	155	60	108	0
Service Supervisor 維修監督	0	0	0	13	174	282	144	2
Service Adviser/Receptionist 維修服務員/款待員	0	0	0	38	167	103	0	0
Engineering Technician 工程技術員	0	0	0	27	112	264	13	13
Parts Supervisor 配件監督	0	0	0	10	37	94	1	0
Sub-total 分類總數	0	0	0	89	657	807	270	42
CRAFTSMAN LEVEL 技工級								
Vehicle Mechanic 汽車機械工	0	38	151	3 188	2 611	178	0	0
Vehicle Electrician 汽車電工	0	0	13	474	243	44	26	0
Vehicle Body Repairer 車身修理工	0	0	10	562	530	40	12	0
Vehicle Body Builder 車身建造工	0	0	0	93	103	1	0	0
Vehicle Painter 汽車噴漆工	0	0	0	219	402	33	0	0
Vehicle Air-Conditioning Mechanic 汽車冷氣工	0	0	25	51	81	6	1	0
Vehicle Upholsterer 車內裝飾工	0	0	6	17	22	2	0	0
Machinist 機床工	0	0	0	30	45	1	0	0
Industrial Vehicle Mechanic 工業機車技工	0	0	0	14	32	24	0	0
Sub-total 分類總數	0	38	205	4 648	4 069	329	39	0

* Total monthly income includes basic wage, overtime pay, cost of living allowance, meal allowance, etc.
每月總收入包括底薪、超時工作津貼、生活津貼及膳食津貼等。

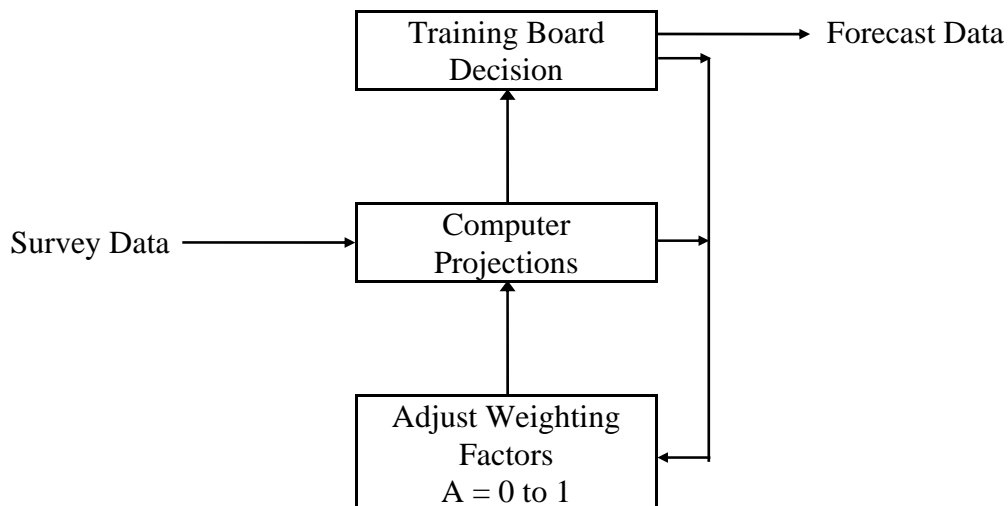
Job Title 職稱	Under \$5,001 以下	\$5,001 - \$6,000	\$6,001 - \$8,000	\$8,001 - \$10,000	\$10,001 - \$15,000	\$15,001 - \$20,000	\$20,001 - \$25,000	Over \$25,000 以上
UNSKILLED LEVEL	非技術工人級							
General Worker/ Cleaner Greaser 雜工／清潔工／ 加滑油工	32	87	384	84	9	0	0	0
Sub-total 分類總數	32	87	384	84	9	0	0	0
GRAND TOTAL 總數	32	125	589	4 821	4 735	1 149	386	194

**Vehicle Population and
Manpower in the Automobile Industry**
車輛總數
及汽車業人力數字



Manpower Forecasting Method

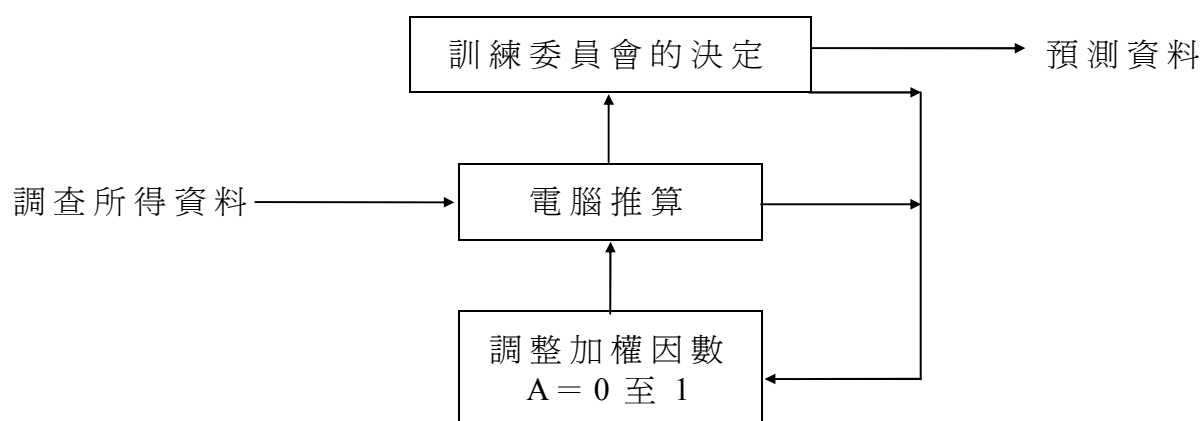
The Industrial Training Division of the Vocational Training Council has developed an “adaptive filtering” forecasting method for determining future manpower requirements of the industry. The method is illustrated diagrammatically below:



In this method, past survey data are weighted and the weights used are in geometric series such that heavier weighting is given to the more recent data. Thus, the results of the forecast will be more dependent on the recent and less on past data. The degree of emphasis on the more recent data can be controlled by varying the weighting factors A . A computer is used to track growth rates and to project the survey data into the “future” for a number of values of A , i.e. to produce a number of “possibilities”. The Board may then select the best projection based on those factors which may affect manpower changes such as vehicle population in future years, the possible changes in transport pattern, the recovery of local economy etc. The accuracy of the forecast will be checked against future survey results and errors, if any, will be taken into account in the subsequent forecast.

人力預測法

職業訓練局工業訓練科所制訂的「調節過濾」預測法，可用以確定工業界未來的人力需求。現將該項辦法以圖解方式說明如下：



該方法將過去調查所得資料權重，而所用加權輕重率乃屬幾何級數，資料愈新，所得的權重亦愈大。因此，推算結果大半有賴較新資料，而與以往資料關連較少。新資料的權重程度可由加權因數(A)控制。委員會利用電腦分析增長率，並將調查所得資料以不同數值的加權因數(A)進行預測，即估計若干「可能性」。委員會會考慮下列可能引致人力變動的因素，例如未來汽車的數量、運輸形式的演變、本港經濟復蘇等，從而作出適當的預測。預測數字會與調查結果作比較，以了解其準確程度；若有任何差誤，將於下次預測時加以調整。

Recommended Annual Training Requirement
for Workers from 2007/2010

二〇〇七年至二〇一〇年間
平均每年建議培訓的僱員人數

Job Title 職稱	No. of Workers Employed (Excluding Trainees) 現有僱員人數 (受訓者除外)	Annual Training Requirement 每年建議培訓的 僱員人數
TECHNOLOGIST LEVEL 技師級		
Mechanical Engineer (Automotive) 汽車機械工程師	76	1
Service Manager 維修部經理	166	2
Sub-total 分類總數	242	3
TECHNICIAN LEVEL 技術員級		
Service Instructor 維修教導員	47	4
Motor Vehicle Examiner/Tester 汽車檢查員／測試員	324	24 – 30
Service Supervisor 維修監督	619	46 – 57
Service Adviser/Receptionist 維修服務員／款待員	310	23 – 29
Engineering Technician 工程技術員	432	33 – 40
Parts Supervisor 配件監督	142	11 – 13
Sub-total 分類總數	1874	141 – 173
CRAFTSMAN LEVEL 技工級		
Vehicle Mechanic 汽車機械工	6204	220 – 268
Vehicle Electrician 汽車電工	802	28 – 35
Vehicle Body Repairer 車身修理工	1157	41 – 50

Job Title 職稱	No. of Workers Employed (Excluding Trainees) 現有僱員人數 (受訓者除外)	Annual Training Requirement 每年建議培訓的 僱員人數
CRAFTSMAN LEVEL (Continued) 技工級 (續)		
Vehicle Body Builder 車身建造工	200	7 – 9
Vehicle Painter 汽車噴漆工	661	23 – 29
Vehicle Air-conditioning Mechanic 汽車冷氣工	164	6 – 7
Vehicle Upholsterer 車內裝飾工	49	2
Machinist 機床工	76	3
Industrial Vehicle Mechanic 工業機車技工	70	2 – 3
Sub-total 分類總數	9383	332 - 406