

**2004 MANPOWER SURVEY REPORT  
AUTOMOBILE INDUSTRY**

**汽車業**

**二 四年人力調查報告**

**AUTOMOBILE TRAINING BOARD  
VOCATIONAL TRAINING COUNCIL**

**職業訓練局**

**汽車業訓練委員會**

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**Executive Summary**  
**Report on the 2004 Manpower Survey**  
**of the Automobile Industry**

Objective

The survey was conducted in March 2004 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 415 from some 2798 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 March 2004, the industry employed a total of 12 508 workers in its 18 principal jobs. The most populous job was vehicle mechanic which had 6471 workers, equivalent to 51.7% of the total manpower.

4. Employers also reported a total of 115 vacancies, representing 0.9% of the total manpower.

5. There were 725 trainees receiving various forms of training, of whom 634 were being trained for craft level jobs, amounting to 6.5% of the worker population at the same skill level.

6. Employers forecasted that by March 2005, the manpower requirement would increase from 12 623 (existing number of employees plus vacancies) to 12 662.

7. Manpower statistics relating to the various principal jobs are given in the Appendices.

## Manpower Changes Since 2002

8. Comparing with the findings of the previous survey carried out in March 2002, the manpower had decreased from 12 604 to 12 508, at an average annual rate of 0.4%. The number of technologists and technicians had decreased from 289 to 266 and from 1 710 to 1 672, representing an average annual rate of 4% and 1.1% respectively. On the other hand, the number of craftsmen had increased from 9 709 to 9 798, representing an average annual rate of 0.5%.

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 and 2004 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 the overall demand of maintenance and repair services will likely remain at the current level in the near future, and concurrently the workforce will only fluctuate slightly in accordance with the workload. The Training Board also considers that the demand of higher quality workers at technician level will remain steady as to cope with the adoption of new technologies and sophisticated equipment for maintenance and diagnosis. The Training Board recommends the industry to train up following number of additional workers in the next ten years:

<u>Skill Level</u>	<u>No. of Additional Workers</u>
Technologist	8
Technician	72 - 88
Craftsman	363 - 443

## SECTION I

### INTRODUCTION

#### The Training Board

1.1 The Automobile Training Board of the Vocational Training Council is required to determine the manpower demand of the automobile industry. The membership and terms of reference of the Training Board are given respectively in Appendices 1 and 2.

#### Purpose of the Survey

1.2 In fulfilling its terms of reference, the Training Board conducted a manpower survey in March 2004 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 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 2798 establishments as mentioned in paragraph 1.3 above were included in the survey scope. Owing to resources constraints, 415 establishments were selected for the survey, comprising:

- (i) 294 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) 121 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 local press and in-trade associations.

1.6 During the survey period from 27<sup>th</sup> February to 30<sup>th</sup> March 2004, 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.

### Response to the Survey

1.8 Of these 415 establishments selected for the survey, 327 had supplied the required information. The remaining 88 establishments had either closed or were not engaged in the 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) in employment; the term 'trainees' means all persons receiving any form of training including those under a contract of apprenticeship.

## SECTION II

### SUMMARY OF SURVEY FINDINGS

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

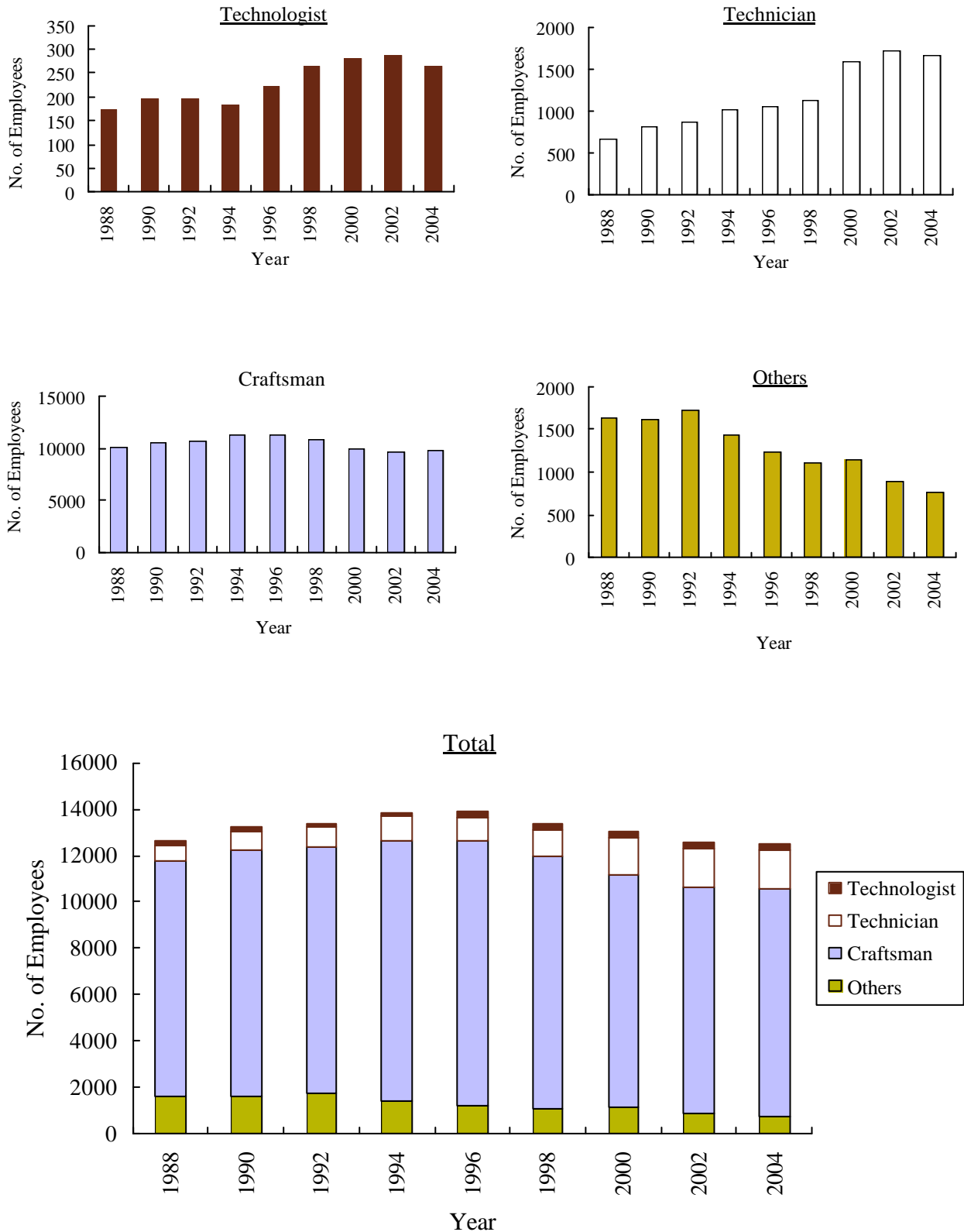
2.1 The survey revealed that in March 2004, 12 508 workers were engaged in the 18 principal jobs in the industry. The distribution of workers by skill level is as follows:

<u>Skill Level</u>	<u>Number of Workers</u>	<u>Percentage of Total Manpower</u>
Technologist	266	2.1%
Technician	1 672	13.4%
Craftsman	9 798	78.3%
Unskilled	772	6.2%
	—————	—————
	12 508	100%

2.2 The occupations with the most workers were vehicle mechanic with 6471 employees followed by vehicle body repairer with 1 249, representing 51.7% and 10% of the total manpower respectively.

2.3 Figure 1 shows the comparative distribution of employees by skill level based on the 9 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 and 2004 Manpower Surveys**



### Number of Trainees

2.4 At the time of the survey, a total of 725 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	4	1.5%
Technician	87	5.2%
Craftsman	634	6.5%

2.5 The distribution of trainees by occupation is given at Appendix 5. The job with the most trainees was vehicle mechanic, numbering 465.

### Number of Vacancies

2.6 At the time of the survey, employers reported a total of 115 vacancies, representing 0.9% 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	0	0%	0%
Technician	1	0.9%	0.1%
Craftsman	114	99.1%	1.2%
Unskilled	0	0%	0%
	—	—	
	115	100.0%	

Forecast Manpower Requirement by March 2005  
(Excluding Trainees)

2.7 Employers estimated that by March 2005, the manpower requirement would grow from the existing 12 623 (12 508 employees plus 115 vacancies) to 12 662 workers, representing an increase of 0.3%. The following table presents the manpower requirement by March 2005 by skill level. Further details are given at Appendix 5.

<u>Skill Level</u>	<u>Number Employed by March 2004</u>	<u>Total Manpower* Requirement by March 2004</u>	<u>Employers' Forecast Manpower Requirement by March 2005</u>	<u>Employers' Estimated Net Growth in Manpower</u>
Technologist	266	266	266	0 (0%)
Technician	1 672	1 673	1 673	0 (0%)
Craftsman	9 798	9 912	9 956	44 (0.4%)
Unskilled	772	772	767	-5 (-0.6%)
	<u>12 508</u>	<u>12 623</u>	<u>12 662</u>	<u>39 (0.3%)</u>

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

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 March 2004 was 12 508. Compared with 12 604 in the 2002 survey, the workforce had decreased by 96 persons, i.e. at an average annual rate of 0.4%. The number of trainees had dropped from 846 to 725 in the same period.

3.3 In terms of skill level, the number of technologists and technicians had decreased from 289 to 266 and from 1710 to 1672, representing an average annual rate of 4% and 1.1% respectively. On the other hand, the number of craftsmen had increased from 9709 to 9798, representing an average annual rate of 0.5%. It is worth noting that there were 1311 workers recorded under the craftsman level job title 'Foreman' in the 1998 survey. As this job title was deleted in the 2000, 2002 and 2004 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.

3.4 From the survey data, it was noted that the total number of establishments had increased. A more detailed breakdown of the statistics showed that the number of establishments employing over 19 workers had decreased and the number of establishments employing less than 10 workers had increased considerably. The above changes correlated with the decrease of workers at technologist and technician levels and increase of workers at craftsman level. The table below shows the details:

<u>No. of Workers Employed</u>	<u>Number of Establishments</u>	
	<u>2004</u>	<u>2002</u>
1 – 9 workers	2 171	1 870
10 – 19 workers	96	78
20 & over workers	64	73
	<hr/>	<hr/>
	2 331	2 021

3.5 Both vehicle population, vehicles' average age and the quantity of cargo/passenger transport are factors affecting the demand of maintenance and repair services. Comparing with 2001, 2002 and 2003, the total number of vehicles remains at the same level with little changes. However, the number of new registered vehicles had dropped in 2002 and 2003, leading to vehicles having higher average age. Concurrently, both the cargo/passenger movements on in/out Hong Kong routings increased in 2002 and 2003. Above are some of the favourable factors contributing to the steady demand of vehicle maintenance and repair services. A graph showing the historical trend of vehicle population and workforce is at Appendix 10.

3.6 The Training Board considers that the overall demand of maintenance and repair services will likely remain at the current level in the near future, and concurrently the workforce will only fluctuate slightly in accordance with the workload. The Training Board also considers that the demand of higher quality workers at technician level will remain steady as to cope with the adoption of new technologies and sophisticated equipment for maintenance and diagnosis.

3.7 The employers estimated that in the 12 months following the survey, the manpower requirement would grow from 12 623 (existing number of employees plus vacancies) to 12 662, i.e. an increase of 0.3%, indicating that the demand for workforce in the industry will likely stabilize at the present level.

3.8 Taking various factors into consideration and using the adaptive filtering method described in Appendix 11, the Training Board has assessed the industry's annual requirement for technologists, technicians, and craftsmen for the years from 2005 to 2014.

3.9 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 same wastage rates used in the last 4 manpower surveys, i.e. 3%, 4% and 4% 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.

3.10 From the above estimates, the Training Board has projected the industry's annual training requirement in each of the next ten years as follows:

**Average annual training requirement  
for workers from 2005 to 2014**

<u>Job level</u>	<u>Annual training requirement</u>
Technologist	8
Technician	72 – 88
Craftsman	363 – 443

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

3.11 At the technologist level, the average training requirement is about 8 each year. This figure will cover the natural wastage.

3.12 At the technician level, the forecast annual training requirement of technicians is about 80. This figure caters for continual average growth of some 13 workers per year.

3.13 At the craftsman level, the forecast annual training requirement would be about 403. This figure is in line with 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 3.10.

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 3%, 4.8% and 4.1% 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.

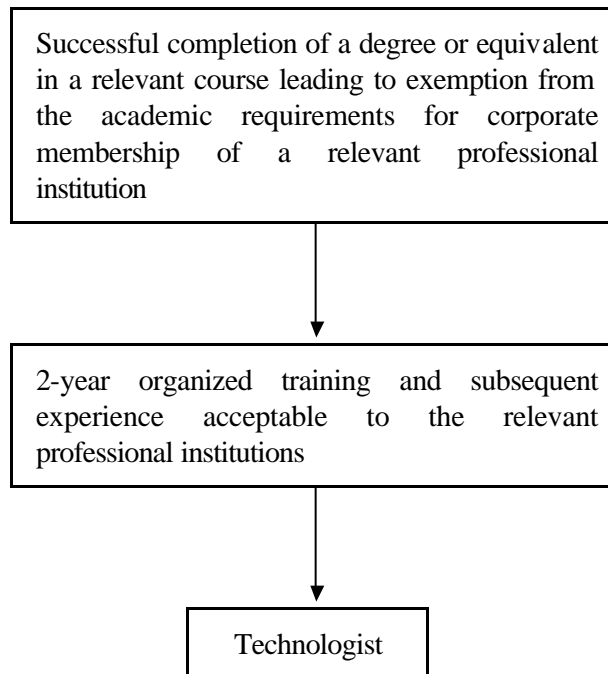
#### Training at Technologist Level

4.5 Technologists in this 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:

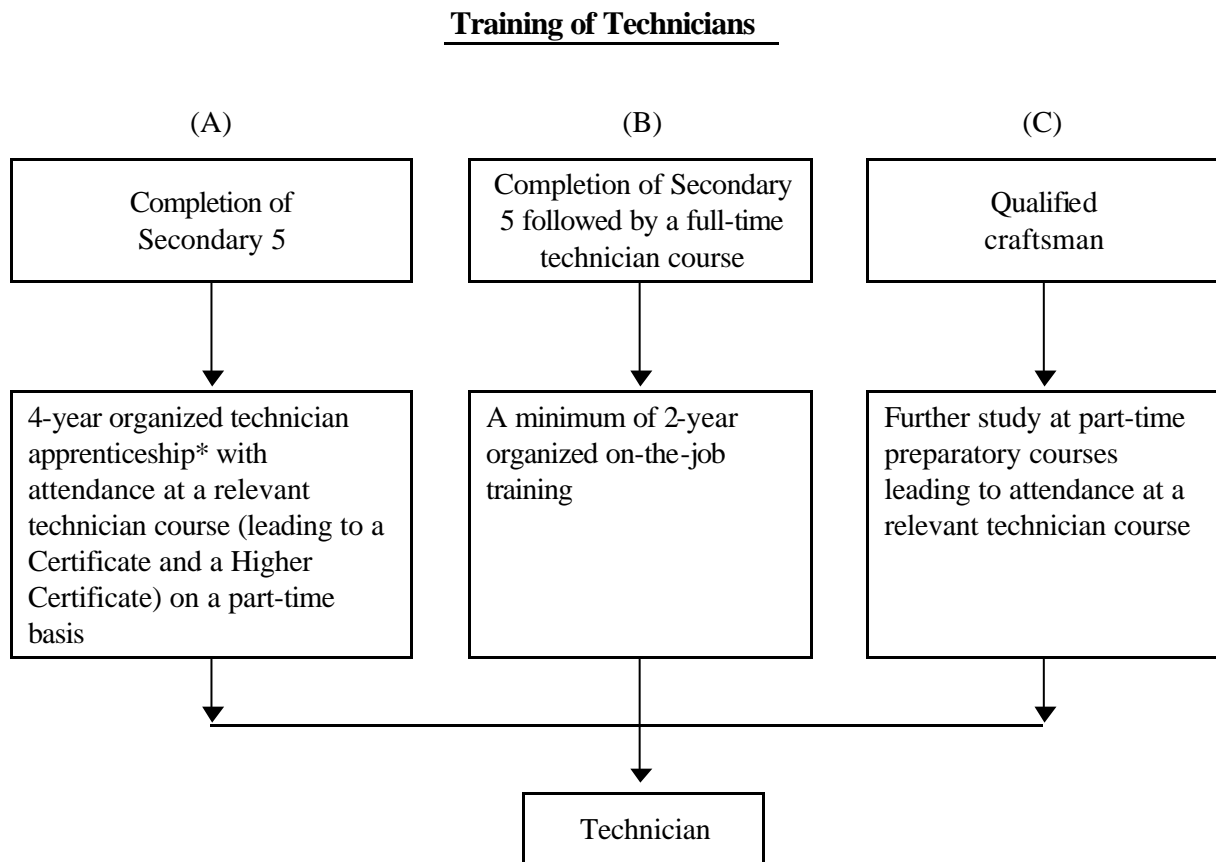
### Training of Technologists



### 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:



\* Apprentices who have satisfactorily completed a relevant one-year full-time technician foundation course in a training centre may be exempted from the first year of a technician apprenticeship.

4.10 While possession of a higher certificate is desirable, most employers accept certificate holders for technician jobs.

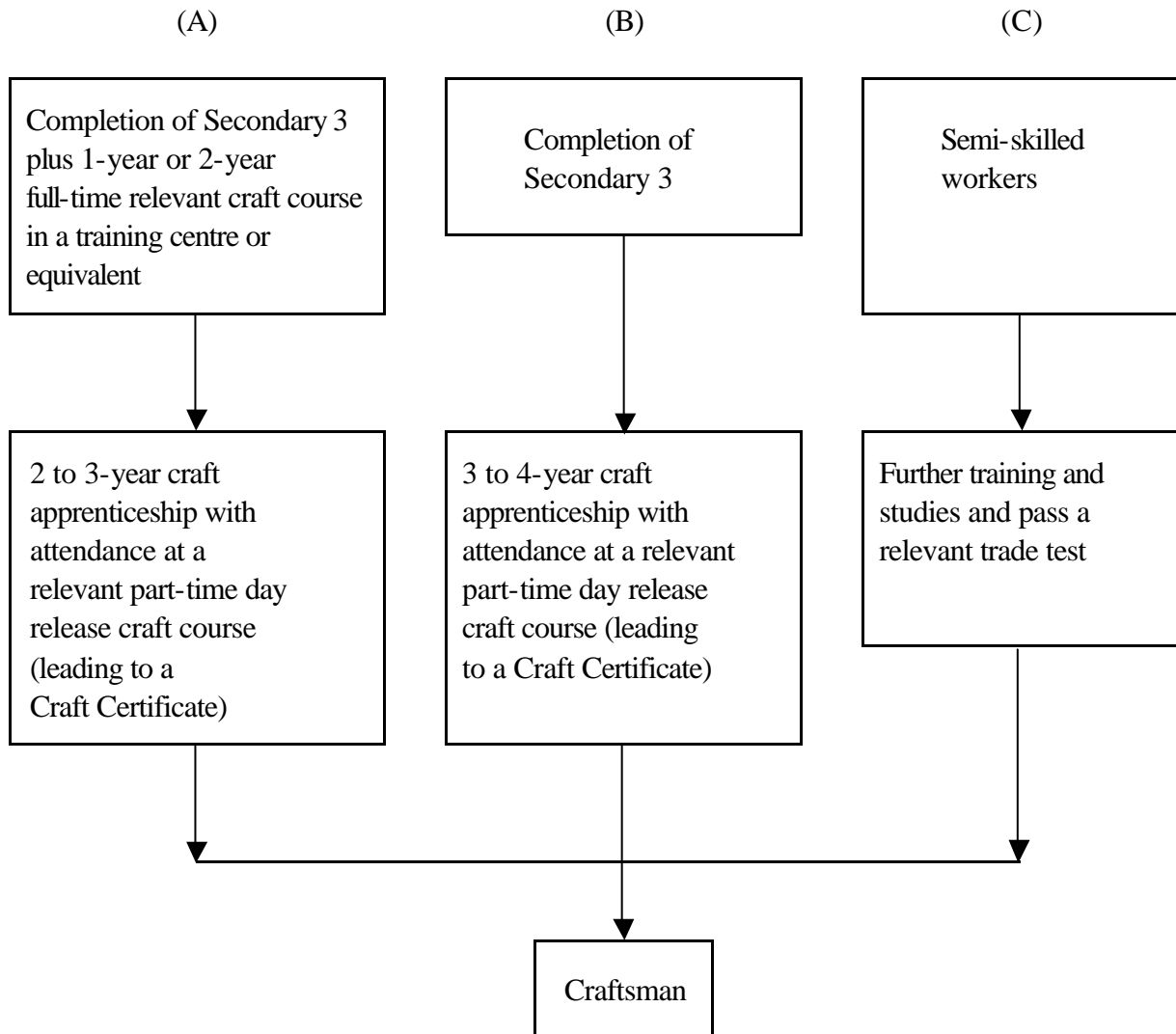
4.11 Route (C), although a useful avenue for the determined craftsmen to become technicians, should not be relied upon as a regular source of technicians.

#### 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 about Secondary 3.

4.13 The recommended routes for training craftsmen are as follows:

### Training of Craftsmen



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.

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## 汽車業二〇〇四年人力調查 報告摘要

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### 目的

是次調查於二〇〇四年三月進行，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 2 798 間業內機構中，抽取了 415 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，二〇〇四年三月時，汽車業 18 個主要職務共有僱員 12 508 名，最多人從事的職務為汽車機械工，共有 6 471 名僱員，佔總人力的 51.7%。

4. 僱主亦報稱業內共有 115 個空缺，佔僱員總數 0.9%。

5. 業內共有 725 名受訓者接受各種形式的訓練，其中 634 名受訓擔任技工級工作，佔同級僱員總數 6.5%。

6. 僱主預測，至二〇〇五年三月時，本業所需的僱員將由 12 623 人（現有僱員人數加空缺數目）增至 12 662 人。

7. 各主要職務的人力統計數字載於附錄。

### 二〇〇二年後的人力轉變情況

8. 本業的僱員總數由二〇〇二年三月調查時的 12 604 人，減至是次調查時的 12 508 人，每年平均跌幅為 0.4%。技師由 289 名減至 266 名，技術員則由 1 710 名減至 1 672 名，每年平均減幅分別為 4% 及 1.1%。至於技工人數，則由 9 709 名增至 9 798 名，每年平均增幅為 0.5%。

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。由於二〇〇一年、二〇〇二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. 本會認為汽車維修的需求於此數年間將保持現狀，人力的需求亦根據市場而略為調整。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，對高質素的技術員級僱員有穩定的需求。本會建議未來十年內，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	8
技術員	72 - 88
技工	363 - 443

## 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，負責確定業內的人力需求。本會的委員名單及職權範圍分別載於附錄 1、2。

#### 調查目的

1.2 本會根據職權範圍，於二〇〇四年三月進行人力調查，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 2 798 間。由於資源所限，本會選出 415 間機構作為調查對象，其中包括：

(i) 政府統計處紀錄中的 294 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) 121 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，已向本地報章發送新聞稿，亦向業界廣作宣傳。

1.6 調查期內，即二〇一四年二月二十七日至三月三十一日期間，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。

## 調查所得反應

1.8 415 間接受調查機構中，327 間提供所需資料，其餘 88 間或已關閉，或已轉營他業。

## 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」均指所有在調查期間受僱從事業內專門職務的人員（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。

## 第二章

### 調查結果摘要

#### 現有僱員人數（受訓者除外）（附錄 5）

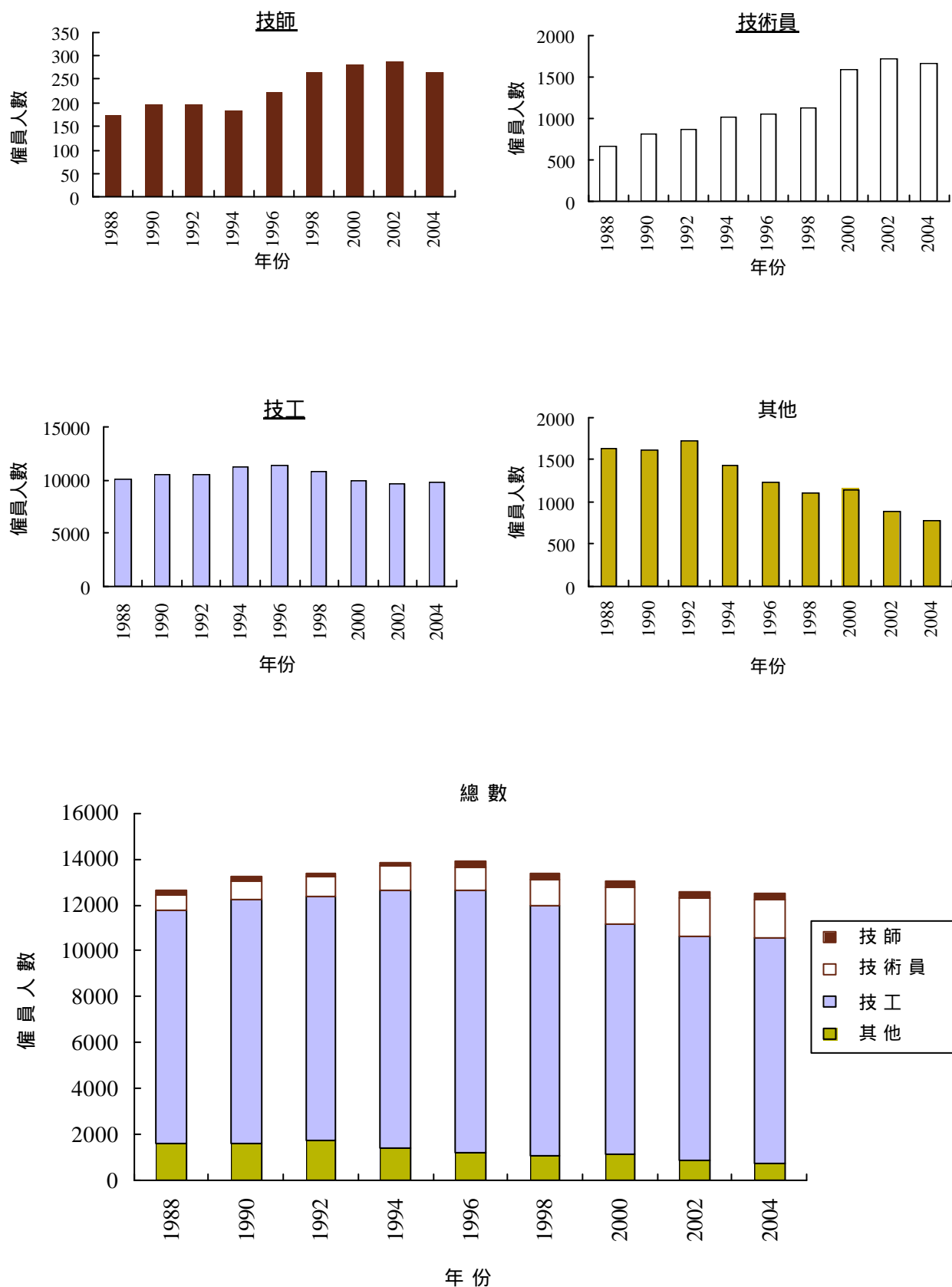
2.1 調查顯示，二〇一四年三月時，共有 12 508 名僱員從事汽車業內 18 個主要職務。各技能等級僱員分布情況如下：

<u>技能等級</u>	<u>僱員人數</u>	<u>佔總人力百分率</u>
技師	266	2.1%
技術員	1 672	13.4%
技工	9 798	78.3%
非技術工人	772	6.2%
	<hr/>	<hr/>
	12 508	100.0%

2.2 僱員最多職務為汽車機械工，共有 6 471 名；其次是車身修理工，有 1 249 名；兩個職務的人數分別佔總人力的 51.7% 及 10%。

2.3 圖 1 比較本會二〇一四年與之前八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 725 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	4	1.5%
技術員	87	5.2%
技工	634	6.5%

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 465 名。

## 空缺數目

2.6 調查期間業內共有 115 個空缺，佔本業僱員總數的 0.9%。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	0	0%	0%
技術員	1	0.9%	0.1%
技工	114	99.1%	1.2%
非技術工人	0	0%	0%
	——	——	
	115	100.0%	

## 預測至二〇二五年三月所需的僱員人數（受訓者除外）

2.7 僱主預測，到二〇二五年三月時，本業所需人力將由現有的12 623人（12 508名僱員加115個空缺），增至12 662人，增幅為0.3%。僱主預測至二〇二五年三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。

<u>技能等級</u>	<u>二〇二四年三月時 僱員人數</u>	<u>二〇二四年三月時 總人力需求*</u>	<u>預測至 二〇二五年三月時 所需僱員人數</u>	<u>僱員人數 增長淨額</u>
技師	266	266	266	0 (0%)
技術員	1 672	1 673	1 673	0 (0%)
技工	9 798	9 912	9 956	44 (0.4%)
非技術工人	772	772	767	-5 (-0.6%)
	<u>12 508</u>	<u>12 623</u>	<u>12 662</u>	<u>39 (0.3%)</u>

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

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 二〇〇四年三月時，汽車業共有 12 508 名僱員，與二〇〇二年調查時的 12 604 名比較，僱員總數減少了 96 人，平均每年減幅為 0.4%。同期，受訓者數目亦由 846 名減至 725 名。

3.3 各技能等級中，技師及技術員的人數均有減少。技師人數由 289 名減至 266 名，技術員人數由 1 710 名減至 1 672 名，平均每年減幅分別為 4% 及 1.1%。至於技工人數，則由 9 709 名增至 9 798 名，平均每年增幅為 0.5%。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。由於二〇〇二年、二〇〇二及本次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。

3.4 根據調查資料，機構總數有所增加。數據顯示聘用 19 名以上僱員的機構數目減少，而聘用 10 名以下僱員的機構卻大為增加；以上變化與調查結果中的技師及技術員級僱員減少，及技工級僱員增加的情況甚為吻合，詳細資料如下：

<u>僱員人數</u>	<u>機構數目</u>	
	<u>2004</u>	<u>2002</u>
1 - 9 人	2 171	1 870
10 - 19 人	96	78
20 人及以上	<u>64</u>	<u>73</u>
	2 331	2 021

3.5 車輛數目、平均車齡、客貨運數量均會影響汽車維修的需求。與二〇一〇、二〇一一年及二〇一二年比較，車輛數目大致維持不變，唯新登記車輛於二〇一二年及二〇一三年均有所減少，導至平均車齡略高。同時進出香港的客貨運均有增加。以上的有利因素，足令汽車維修業需求穩定。附錄 10 顯示近年車輛數目與人力需求的關係。

3.6 本會認為汽車維修的需求於未來數年將保持現狀，人力的需求亦根據市場而略為調整。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，對高質素的技術員會有穩定的需求。

3.7 僱主預測，調查後的十二個月內，所需的僱員會由 12 623 人（包括現有僱員人數及空缺數目）增至 12 662 人，增幅為 0.3%。這反映出業內的人力需求應會維持現有水平。

3.8 本會考慮過各種因素，並採用附錄 11 所載的調節過濾人力預測方法後，推算出二〇一五年至二〇一四年間本業每年所需的技師、技術員及技工級僱員數目。

3.9 考慮到過去兩年本業發展穩定，沒有大量員工退休或離職，故沿用最近四次人力調查的流失率，即本業須額外訓練 3% 的技師級、4% 的技術員級及 4% 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。



3.10 根據上述預測，未來十年汽車業每年平均須培訓的僱員人數如下：

表 1：二 五至二 一四年間  
每年平均須培訓的僱員人數

<u>技能等級</u>	<u>每年須培訓的人數</u>
技 師	8
技術員	72 - 88
技 工	363 - 443

各技能等級各主要職務須培訓的僱員人數見附錄 12。

3.11 就技師級而言，每年平均須培訓約 8 人；數字剛填補人力自然流失。

3.12 技術員級方面，預計本業每年須培訓約 80 人，平均每年增加 13 人。

3.13 至於技工級，預計業內每年須培訓約 403 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3.10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 3%、4.8% 及 4.1%。

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，否則業內的發展將會受到限制；僱主應繼續加強有關工作，吸引更多青年人投身汽車業。

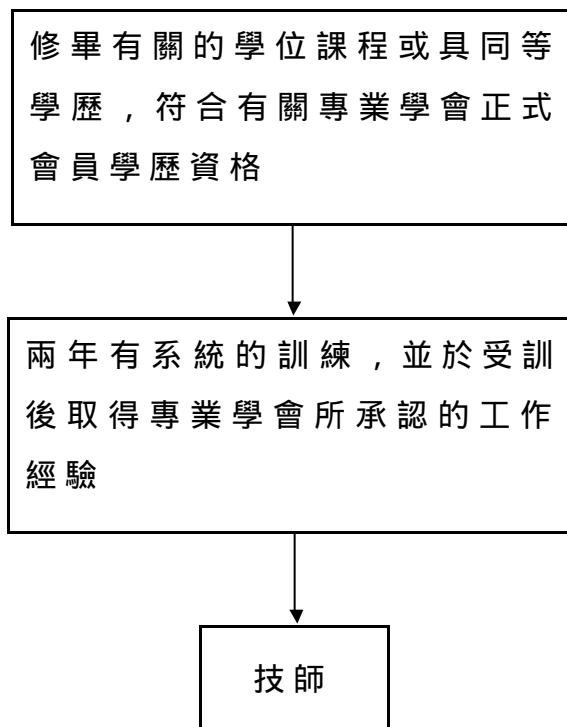
#### 技師級訓練

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

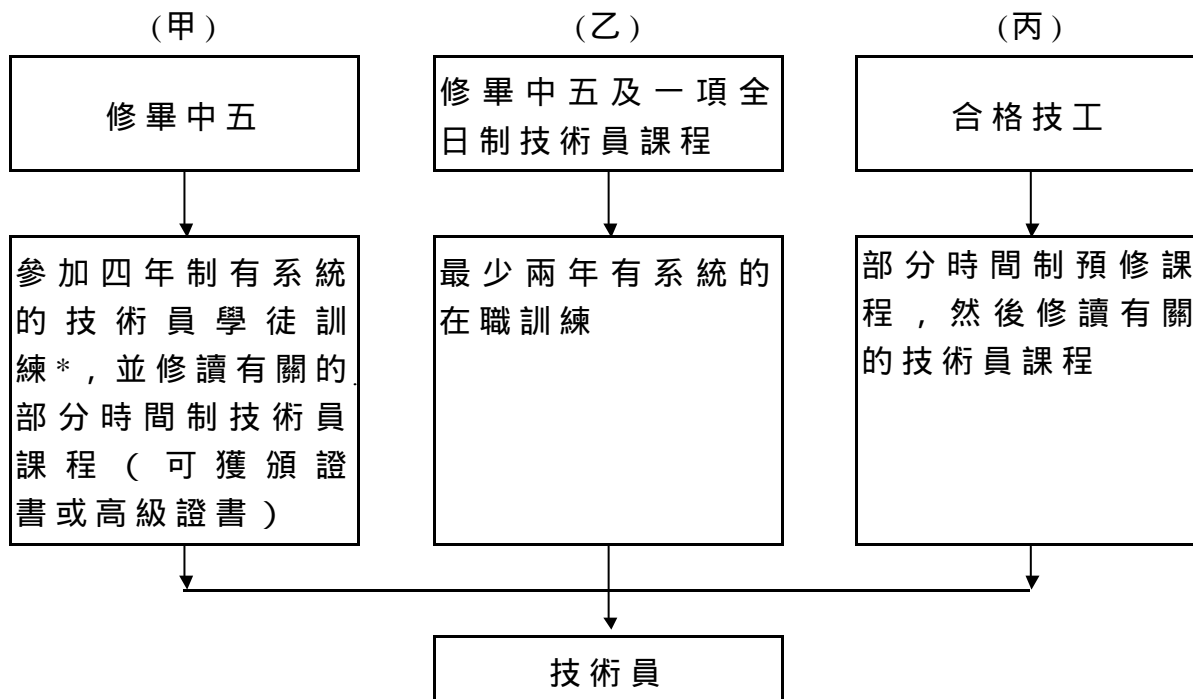


### 技術員級訓練

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



\* 於訓練中心修畢有關的一年全日制技術員基礎課程後，可獲豁免第一年技術員學徒訓練。

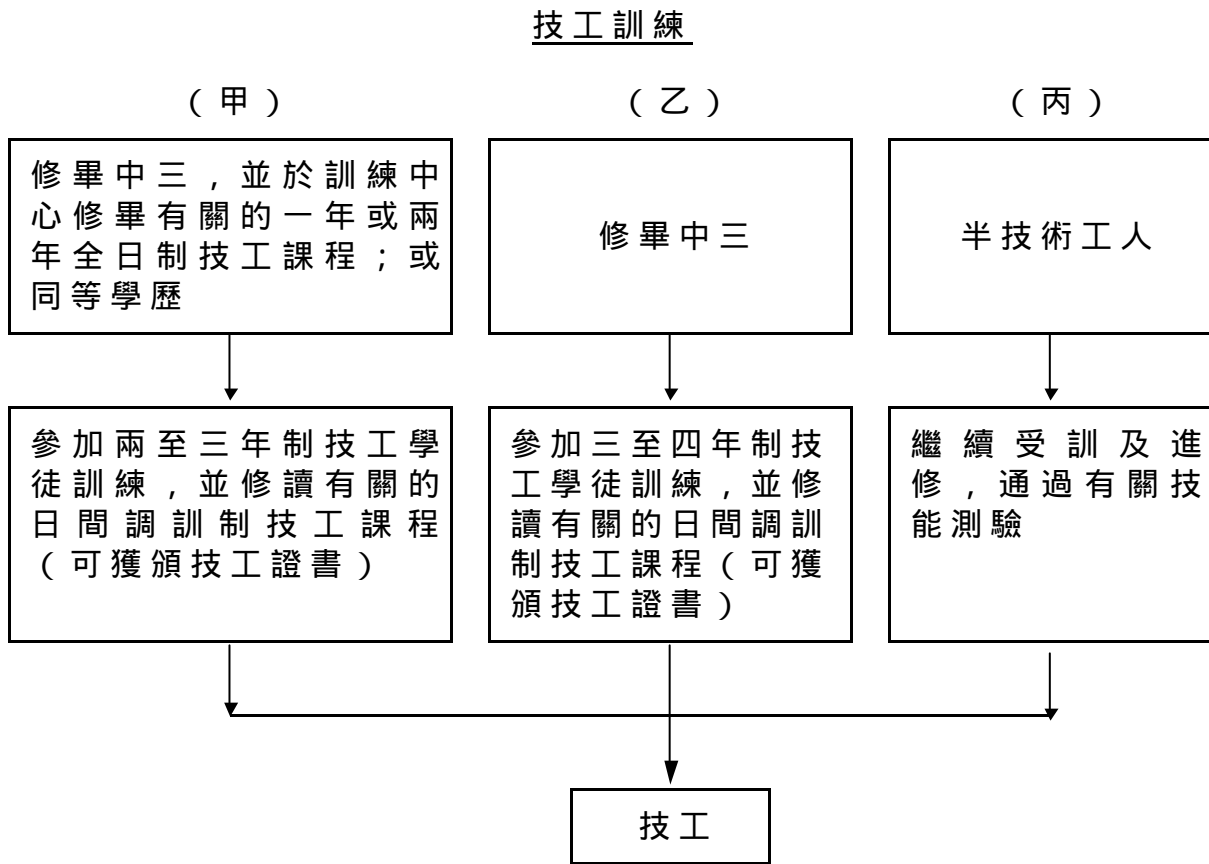
4.10 大部分僱主均會接受有證書學歷者擔任技術員工作，具高級證書則更佳。

4.11 途徑（丙）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。技工大致需具中三程度。

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。

Membership of the Automobile Training Board  
(as of 1.4.2004)

Chairman:

Mr YIP Moon-tong, Donald (nominated by a motor vehicle distributor)

Members:

Mr CHO Chi-hung, David (nominated by a motor vehicle servicing establishment other than vehicle distributors)

Dr FUNG Kin-keung (representative of the Executive Director of the Vocational Training Council)

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

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

Mr LEUNG Kin-wang (nominated by a bus company)

Mr LI Chi-fai, Michael (nominated by a motor vehicle distributor)

Mr LI Chi-leung (representative of the Commissioner for Labour)

Mr LO Ping-ki (representative of the Director of Electrical and Mechanical Services)

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

Mr WAN Kam-on (nominated by the Motor Transport Workers General Union)

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

Mr YAM Yat-shing (representative of the Director of Environmental Protection Department)

Mr YIP Sui-pong, Ponthey (nominated by the Service Managers Association)

Co-opted Member:

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

Secretary:

Mr LEUNG Chi-kan (Vocational Training Council)

汽車業訓練委員會  
委員名單  
(二 四年四月一日時)

主席

葉滿堂先生 (某汽車分銷商提名)

委員

曹智雄先生 (汽車分銷商以外的汽車維修機構提名)

馮建強博士 (職業訓練局執行幹事代表)

劉啟成先生 (某汽車分銷商提名)

李耀培先生 (香港汽車修理同業商會有限公司提名)

梁健宏先生 (某巴士公司提名)

李志輝先生 (某汽車分銷商提名)

李子亮先生 (勞工處處長代表)

盧炳岐先生 (機電工程署署長代表)

曾文璋先生 (運輸署署長代表)

尹錦安先生 (汽車交通運輸業總工會提名)

黃瑞雲先生 (某汽車分銷商提名)

任日成先生 (環境保護署署長代表)

葉穗邦先生 (汽車維修管理協會提名)

增補委員

施文彥先生 (香港專業教育學院)

秘書

梁志勤先生 (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。

**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
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**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**  
WHEN ENTERED WITH DATA

填入數據後即成  
**機密文件**

**VOCATIONAL TRAINING COUNCIL**  
職業訓練局

**THE 2004 MANPOWER SURVEY OF THE AUTOMOBILE INDUSTRY**  
汽車業二 四年人力調查

**QUESTIONNAIRE**  
調查表

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

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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 \_\_\_\_\_

Part I 第一部份

(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
<b>TECHNOLOGIST LEVEL 技師級</b>								
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
<b>TECHNICIAN LEVEL 技術員級</b>								
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						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 Superevisor 配件監督	2	2   0   6						8 Over \$25,000 以上
<b>CRAFTSMAN LEVEL 技工級</b>								
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						
<b>UNSKILLED LEVEL 非技術工人級</b>								
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 apprenticeship 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 2004 Manpower Survey of  
the Automobile Industry  
汽車業二 四年人力調查

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								1 Under \$5,001 以下
Mechanical Engineer (Automotive) 汽車機械工程師	2	1   0   1						2 \$5,001 - \$6,000
Service Manager 維修部經理	2	1   0   2						3 \$6,001 - \$8,000
TECHNICIAN LEVEL 技術員級								4 \$8,001 - \$10,000
Service Instructor 維修教導員	2	2   0   1						5 \$10,001 - \$15,000
Motor Vehicle Examiner/Tester 汽車檢查員 / 測試員	2	2   0   2						6 \$15,001 - \$20,000
Service Supervisor 維修監督	2	2   0   3	6					7 \$20,001 - \$25,000
Service Adviser/Receptionist 維修服務員 / 款待員	2	2   0   4						8 Over \$25,000 以上
Engineering Technician 工程技術員	2	2   0   5						Remarks 備注
Parts Superevisor 配件監督	2	2   0   6						
CRAFTSMAN LEVEL 技工級								
Vehicle Mechanic 汽車機械工	2	3   0   1	5					
Vehicle Electrician 汽車電工	2	3   0   2	5					
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					
	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 apprenticeship 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





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律的規定。
203	Service Supervisor	Performs supervisory duties contributory to: <ul style="list-style-type: none"> <li>(i) the planning and allocation of tasks to foremen and other employees,</li> <li>(ii) the inspection, servicing and repairs of motor vehicles, and</li> <li>(iii) the installation and maintenance of workshop equipment.</li> </ul>

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	<p>執行下列監督工作，以便協助：</p> <ul style="list-style-type: none"> <li>(i) 策劃及分配工作予管工及其他僱員；</li> <li>(ii) 檢查與維修汽車；</li> <li>(iii) 安裝與維修工場設備。</li> </ul>
204	Services Adviser/ Receptionist  維修服務員 / 款待員	<p>Records customers' requirements, recommends repairs and servicing, advises and liaises with customers regarding progress of work.</p> <p>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。</p>
205	Engineering Technician  工程技術員	<p>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.</p> <p>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。</p>
206	Parts Supervisor  配件監督	<p>Engages in identification and control of stock, promotion and effect of the sales of automotive parts and accessories.</p> <p>負責辨別與管理貨物，推銷、出售汽車零件及附件。</p>

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、加偈油與滑油，以及車房的清潔工作。

- The End -  
完

**MANPOWER STATISTICS - AUTOMOBILE INDUSTRY (March 2004)**  
汽車業內的僱員統計數字 (二 四年三月)

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 March 2005 估計二 五年 三月時的僱員總數
<b>TECHNOLOGIST LEVEL 技師級</b>				
Mechanical Engineer (Automotive) 汽車機械工程師	107	4	0	107
Service Manager 維修部經理	159	0	0	159
Sub-total 分類總數	266	4	0	266
<b>TECHNICIAN LEVEL 技術員級</b>				
Service Instructor 維修教導員	55	0	0	55
Motor Vehicle Examiner/ Tester 汽車檢查員 / 測試員	291	0	0	288
Service Supervisor 維修監督	600	1	1	599
Service Adviser/ Receptionist 維修服務員 / 款待員	306	6	0	307
Engineering Technician 工程技術員	324	80	0	327
Parts Supervisor 配件監督	96	0	0	97
Sub-total 分類總數	1 672	87	1	1 673
<b>CRAFTSMAN LEVEL 技工級</b>				
Vehicle Mechanic 汽車機械工	6 471	465	109	6 599
Vehicle Electrician 汽車電工	852	45	0	847
Vehicle Body Repairer 車身修理工	1 249	47	0	1 263

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 March 2005 估計二 五年 三月時的僱員總數
CRAFTSMAN LEVEL (Continued) 技工級 (續)				
Vehicle Body Builder 車身建造工	263	22	2	271
Vehicle Painter 汽車噴漆工	680	38	0	685
Vehicle Air-Conditioning Mechanic 汽車冷氣工	109	3	0	109
Vehicle Upholsterer 車內裝飾工	74	0	2	79
Machinist 機床工	42	0	0	42
Industrial Vehicle Mechanic 工業機車技工	58	14	1	61
Sub-total 分類總數	9 798	634	114	9 956
UNSKILLED LEVEL 非技術工人級				
General Worker/ Cleaner/Greaser 雜工 / 清潔工 / 加滑油工	772	0	0	767
Sub-total 分類總數	772	0	0	767
GRAND TOTAL 總數	12 508	725	115	12 662

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	149	88	19	7	-	-	-
Technician 技術員	15	214	286	843	225	71	-
Craftsman 技工	-	-	3	1	5 850	2 050	1 838
Grand Total 總數	164	302	308	851	6 075	2 121	1 838



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	97	166	-
Technician 技術員	66	903	685
Craftsman 技工	-	64	9 678
Grand Total 總數	163	1 133	10 363

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	50	1	153	57	2
Technician 技術員	935	535	133	22	29
Craftsman 技工	5 004	4 665	41	32	-
Grand Total 總數	5 989	5 201	327	111	31

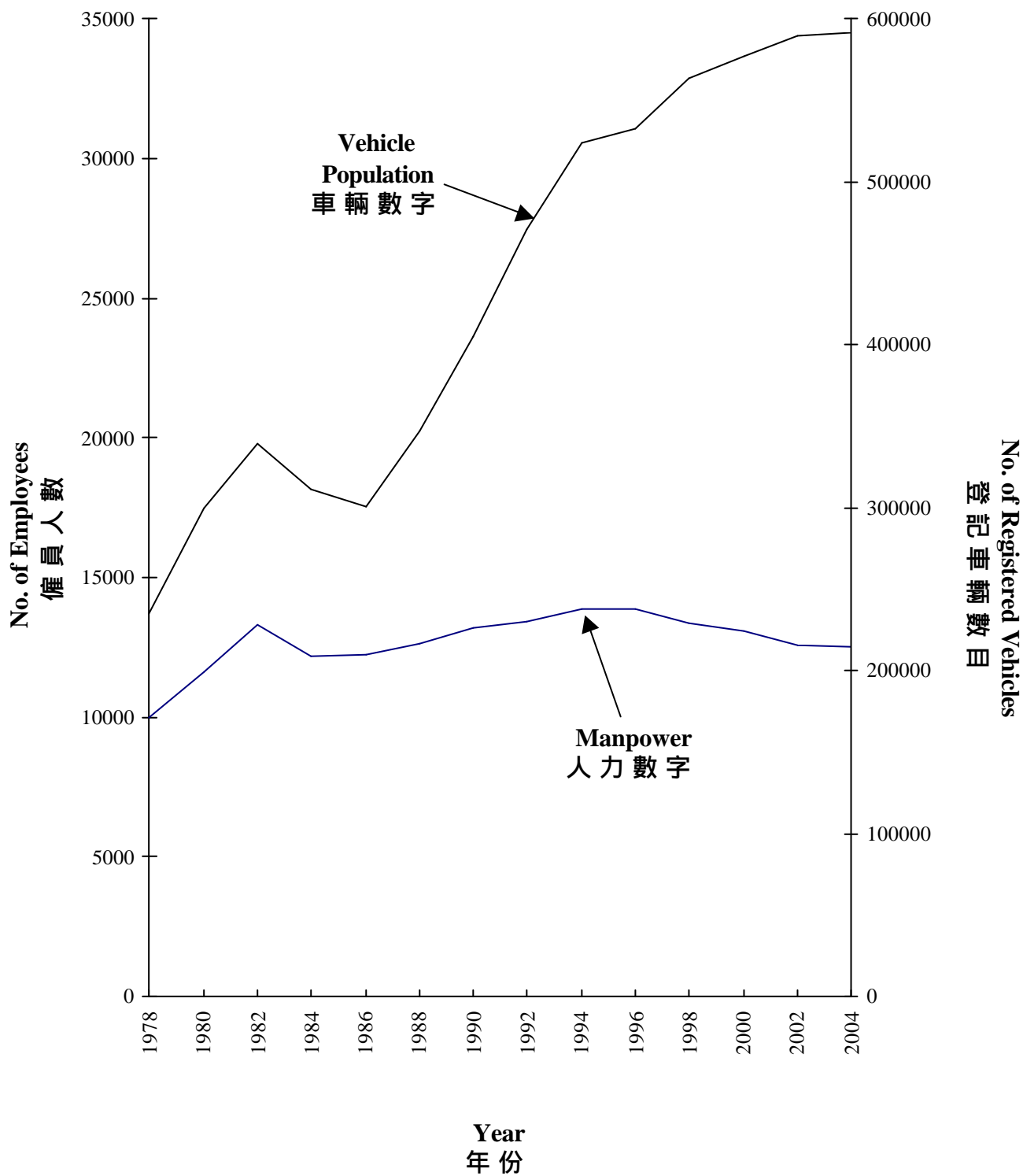
**DISTRIBUTION OF EMPLOYEES BY TOTAL MONTHLY INCOME RANGE\***  
根據每月總收入幅度劃分的僱員人數分布情況\*

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
<b>TECHNOLOGIST LEVEL 技師級</b>								
Mechanical Engineer (Automotive) 汽車機械工程師	-	-	-	-	5	7	44	51
Service Manager 維修部經理	-	-	-	-	-	24	19	115
Sub-total 分類總數	-	-	-	-	5	31	63	166
<b>TECHNICIAN LEVEL 技術員級</b>								
Service Instructor 維修教導員	-	-	-	-	13	6	23	13
Motor Vehicle Examiner/ Tester 汽車檢查員 測試員	-	-	-	1	139	56	6	89
Service Supervisor 維修監督	-	-	-	1	253	278	56	12
Service Adviser/ Receptionist 維修服務員 / 款待員	-	-	3	76	220	7	-	-
Engineering Technician 工程技術員	-	-	-	41	87	158	19	19
Parts Supervisor 配件監督	-	-	-	11	45	36	2	2
Sub-total 分類總數	-	-	3	130	757	541	106	135
<b>CRAFTSMAN LEVEL 技工級</b>								
Vehicle Mechanic 汽車機械工	-	42	145	2 286	3 842	142	-	-
Vehicle Electrician 汽車電工	-	-	14	134	662	42	-	-
Vehicle Body Repairer 車身修理工	-	14	16	314	808	82	-	-
Vehicle Body Builder 車身建造工	-	-	3	52	194	14	-	-
Vehicle Painter 汽車噴漆工	-	-	14	218	424	24	-	-
Vehicle Air-Conditioning Mechanic 汽車冷氣工	-	-	-	46	59	4	-	-
Vehicle Upholsterer 車內裝飾工	-	12	15	19	12	16	-	-
Machinist 機床工	-	-	-	1	38	3	-	-
Industrial Vehicle Mechanic 工業機車技工	-	-	-	16	34	8	-	-
Sub-total 分類總數	-	68	207	3 086	6 073	335	-	-

\*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。

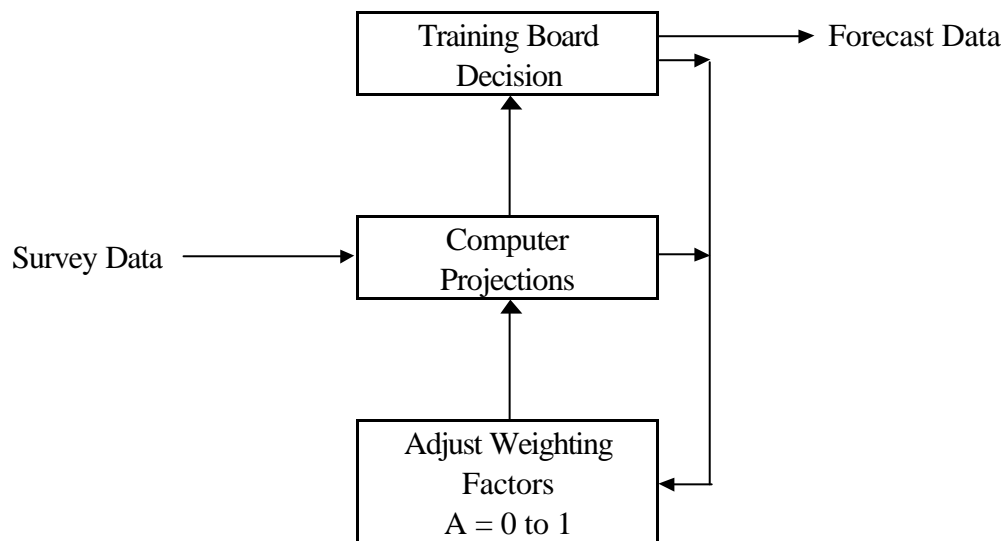
Job Title 職稱	Under \$5,001 以下	\$5,001 - \$6,000	\$6,001 - \$8,000	\$8,001 - \$10,000	\$10,001 - \$15,000	\$15,001 - \$20,000	\$20,001 - \$25,000	Over \$25,000 以上
UNSKILLED LEVEL 非技術工人級								
General Worker/ Cleaner/Greaser 雜工 / 清潔工 / 加滑油工	73	88	225	376	10	-	-	-
Sub-total 分類總數	73	88	225	376	10	-	-	-
GRAND TOTAL 總數	73	156	435	3 592	6 845	907	169	301

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



### Manpower Forecasting Method

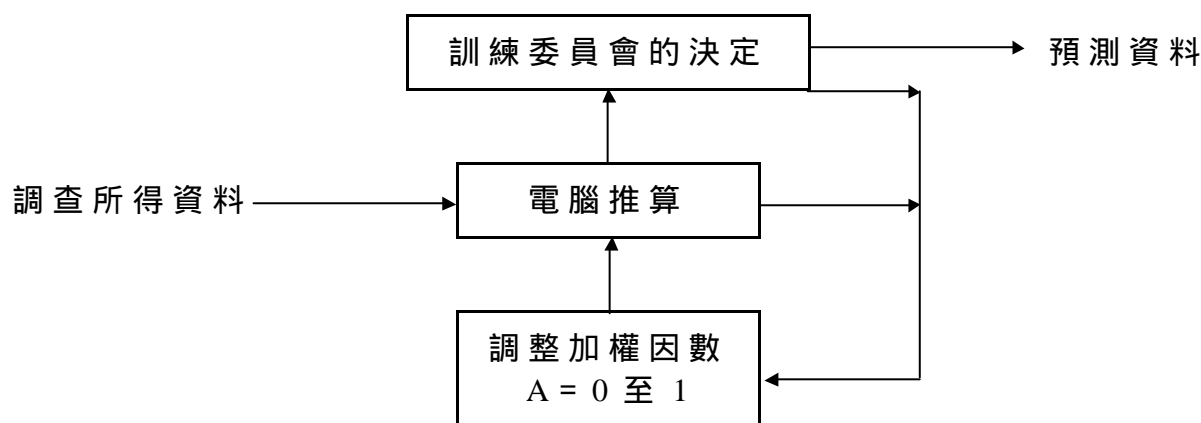
The Industrial Training Division of the Vocational Training Council has developed an “adaptive filtering” forecasting method for determining future manpower requirements of the industry. The method is illustrated diagrammatically below:



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 2005/2014

二 五年至二 一四年間  
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
<b>TECHNOLOGIST LEVEL 技師級</b>		
Mechanical Engineer (Automotive) 汽車機械工程師	107	3
Service Manager 維修部經理	159	5
Sub-total 分類總數	266	8
<b>TECHNICIAN LEVEL 技術員級</b>		
Service Instructor 維修教導員	55	3
Motor Vehicle Examiner/Tester 汽車檢查員 測試員	291	12 – 15
Service Supervisor 維修監督	600	26 – 32
Service Adviser/Receptionist 維修服務員 / 款待員	306	13 – 16
Engineering Technician 工程技術員	324	14 – 17
Parts Supervisor 配件監督	96	4 – 5
Sub-total 分類總數	1 672	72 – 88
<b>CRAFTSMAN LEVEL 技工級</b>		
Vehicle Mechanic 汽車機械工	6 471	239 – 293
Vehicle Electrician 汽車電工	852	32 – 39
Vehicle Body Repairer 車身修理工	1 249	46 – 56



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	263	10 – 12
Vehicle Painter 汽車噴漆工	680	25 – 31
Vehicle Air-conditioning Mechanic 汽車冷氣工	109	4 – 5
Vehicle Upholsterer 車內裝飾工	74	3
Machinist 機床工	42	2
Industrial Vehicle Mechanic 工業機車技工	58	2
Sub-total 分類總數	9 798	363 – 443