

**MONASH UNIVERSITY – ACER
CENTRE FOR THE ECONOMICS OF EDUCATION AND
TRAINING
6th National Conference**

VET: CONNECTIONS, COSTS & CONTRADICTIONS

Monday 26 August 2002
Ascot House, Ascot Vale, Victoria

**CONNECTING VET TO THE LABOUR MARKET
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Introduction

- **Substantial demand for VET driven by the needs of the labour market**
- **The interaction between the labour market and VET is complex**
 - **VET needs vary across occupations**
 - **Individual skill needs vary**
- **Planning and allocation of resources in VET have to be in tune with the changes occurring in the labour market**

Reasons for modelling

- **Provide a basis for planning and policy formulation**
- **Provide part of the information set to underpin resource allocation decisions**
- **Help investigate scenarios**
- **Integrate data relating to demand for VET into a single model**

Desirable features of a model

- An economy-wide model
- Provide analyses by occupation, ITBs and region
- Can be updated easily with new data

Conceptual basis of the model

- **Source of training:**
 - **TAFE**
 - **Universities**
 - **Others**
- **Demand determined by occupations**
- **Separate estimates of demand for:**
 - **New entrants**
 - **Currently employed (without qualifications)**
 - **Currently employed (with qualifications)**

Model details

Total demand in student contact hours (SCH)

= New entrants (SCH)

+ Currently employed (without qualifications) (SCH)

+ Currently employed (with qualifications) (SCH)

New entrants (SCH)

New entrants (SCH)

= Average SCH for course completion / course length

× Participation rate in TAFE training

× Number of new entrants

Number of new entrants

= Growth in numbers

+ Net replacement needs

Currently employed (without qualifications) (SCH)

Currently employed (without qualifications) (SCH)

= Average SCH per person per year

- × Participation rate in TAFE training
- × Projected employment *less* new entrants
- × Expected proportion without post-school qualifications

Currently employed (with qualifications) (SCH)

Currently employed (with qualifications) (SCH)

= Average SCH per person per year

- × Participation rate in TAFE training
- × Projected employment *less* new entrants
- × Expected proportion with post-school qualifications

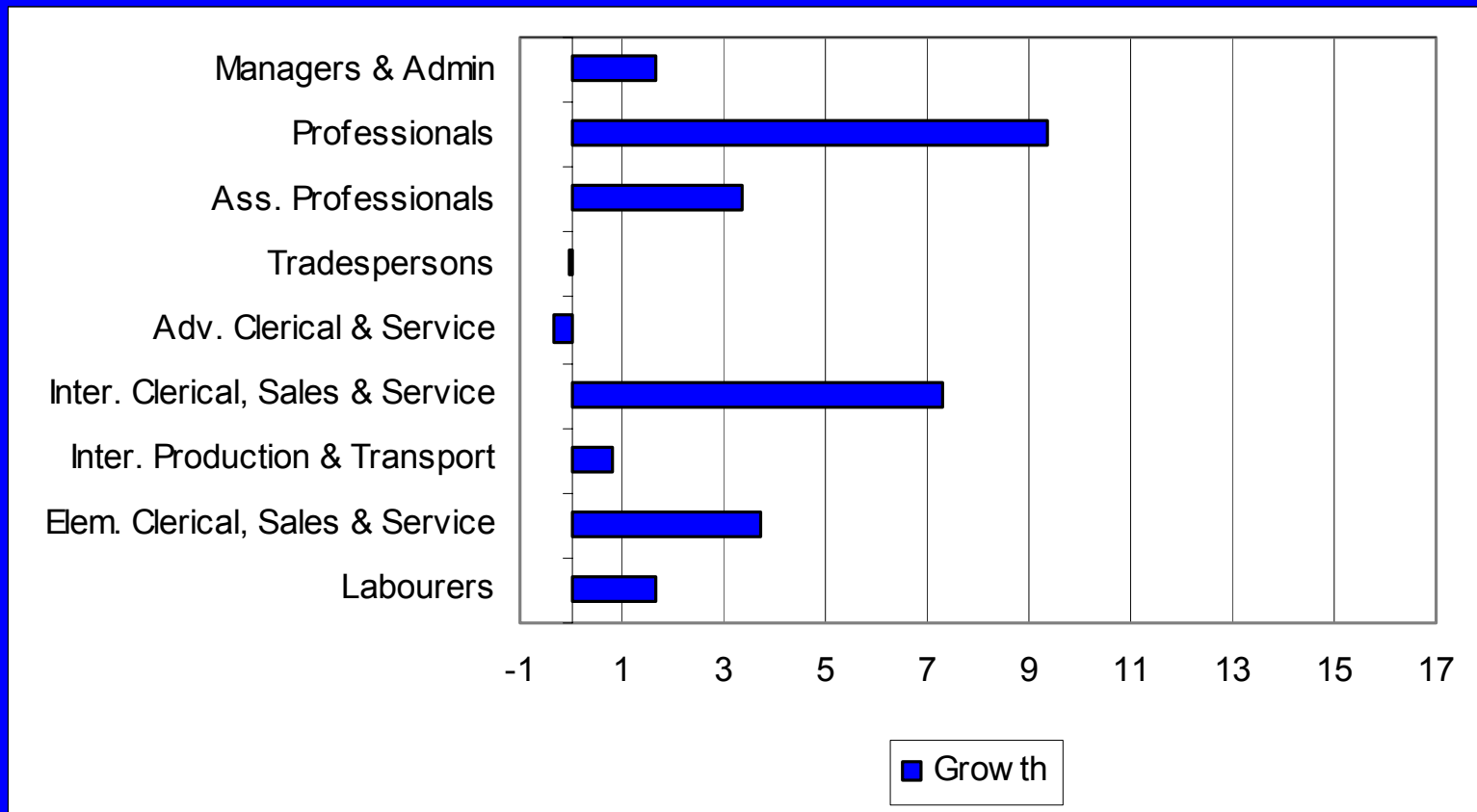
Data requirements to estimate the model

- **Projections of growth (Source: CoPS)**
- **Projections of net replacement needs (Source: CEET)**
- **Proportions with/without post-school qualifications (Source: ABS TEW survey)**
- **SCH for full course and length of course (new entrants) (Source: ITBs)**
- **Average SCH per person per year:**
 - **Currently employed (without qualifications) (ITBs)**
 - **Currently employed (with qualifications) (ITBs)**

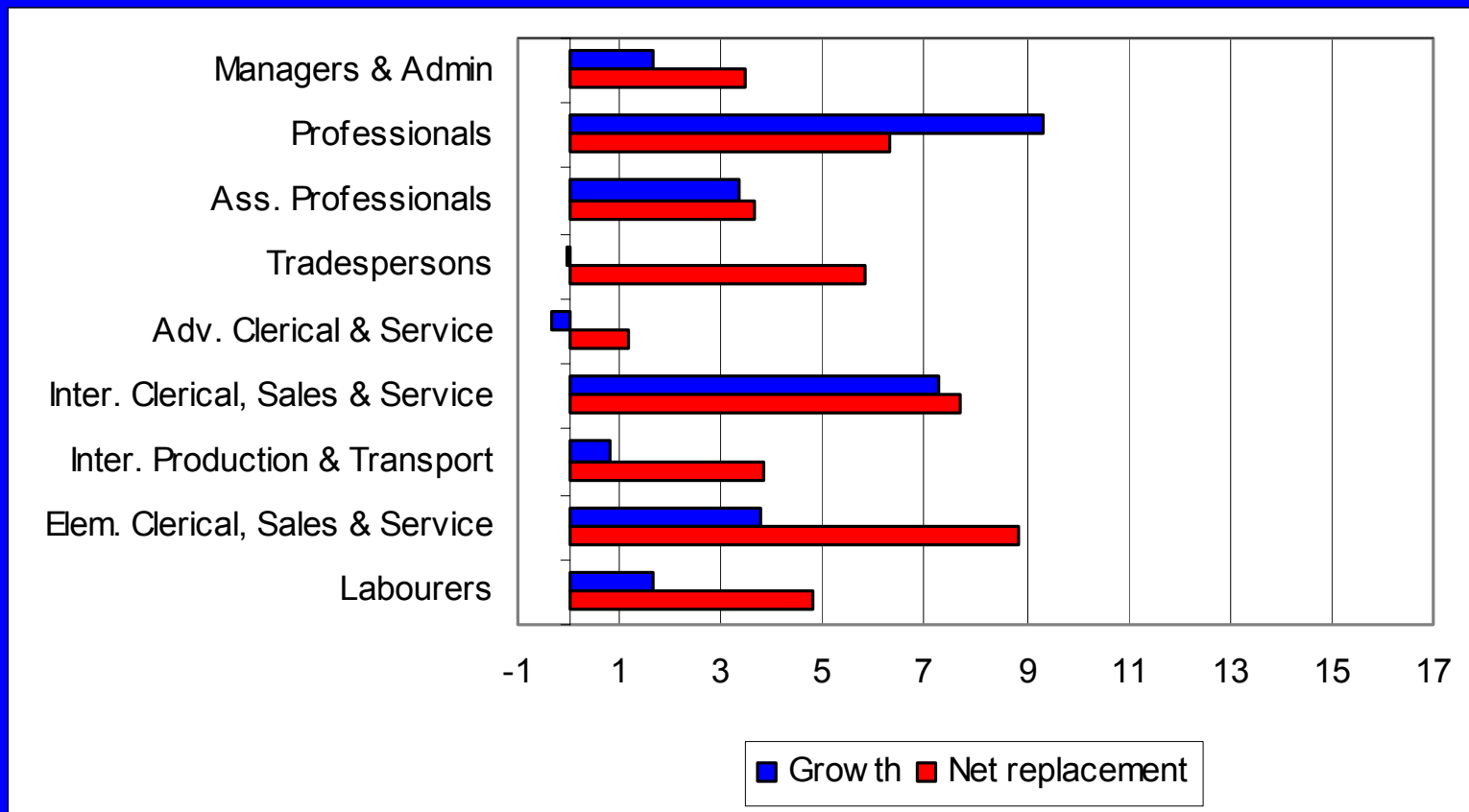
Data requirements (continued)

- **Participation rate in TAFE training of:**
 - **New entrants (ITBs)**
 - **Currently employed (without qualifications) (ITBs)**
 - **Currently employed (with qualifications) (ITBs)**

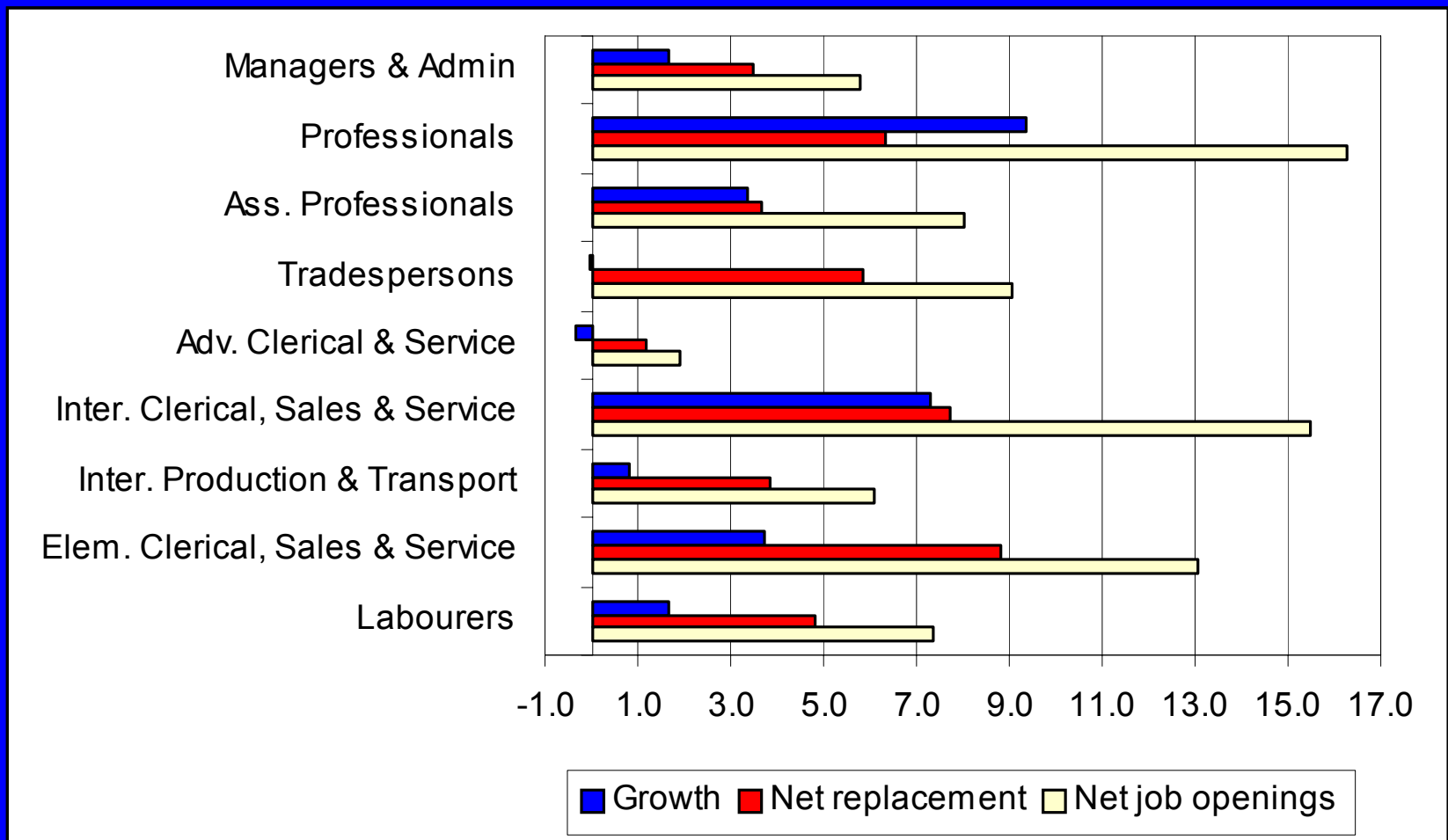
Average annual growth, by major occupation group, 2002-06, Victoria ('000)



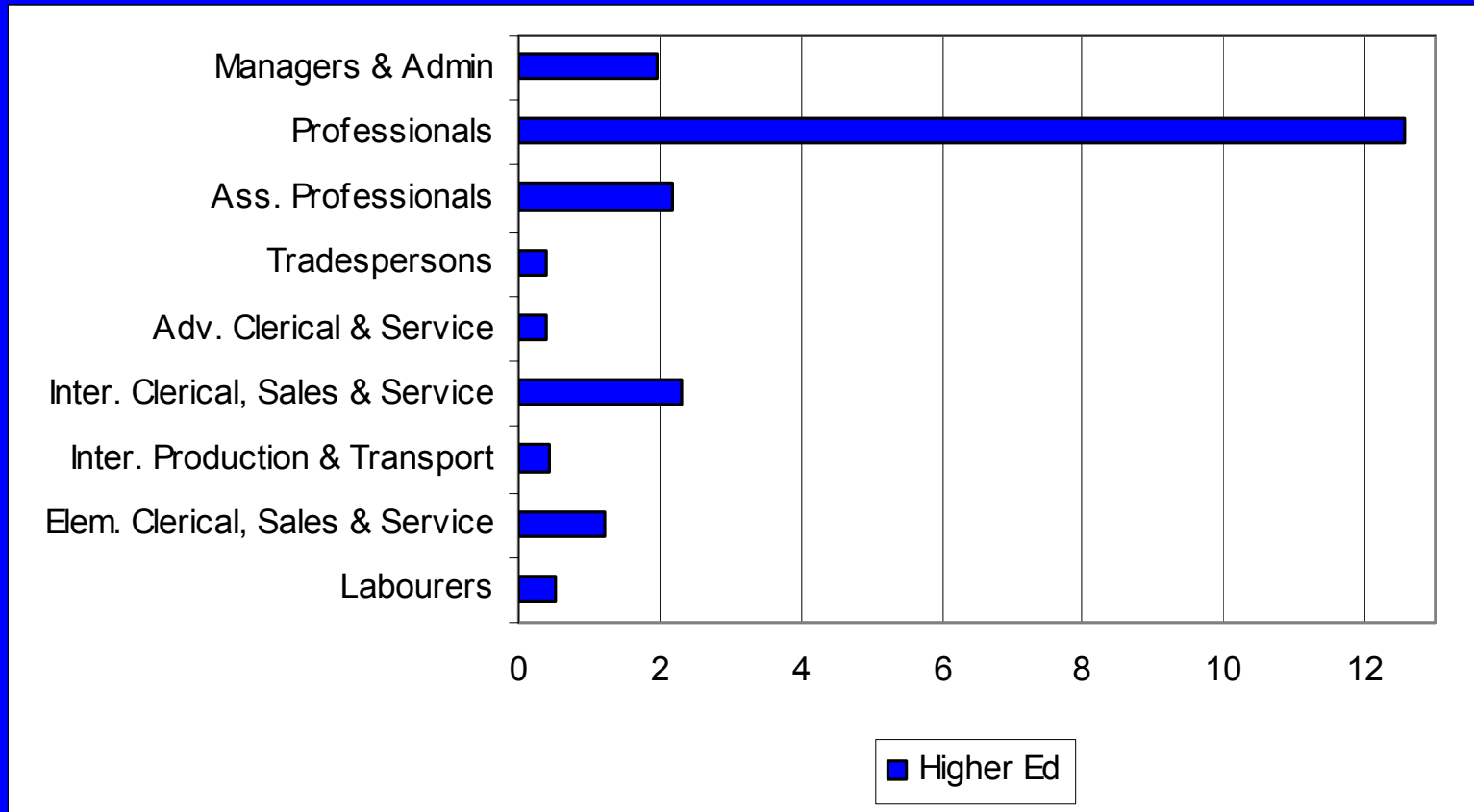
Average annual growth and net replacement needs, by major occupation group, 2002-06, Victoria ('000)



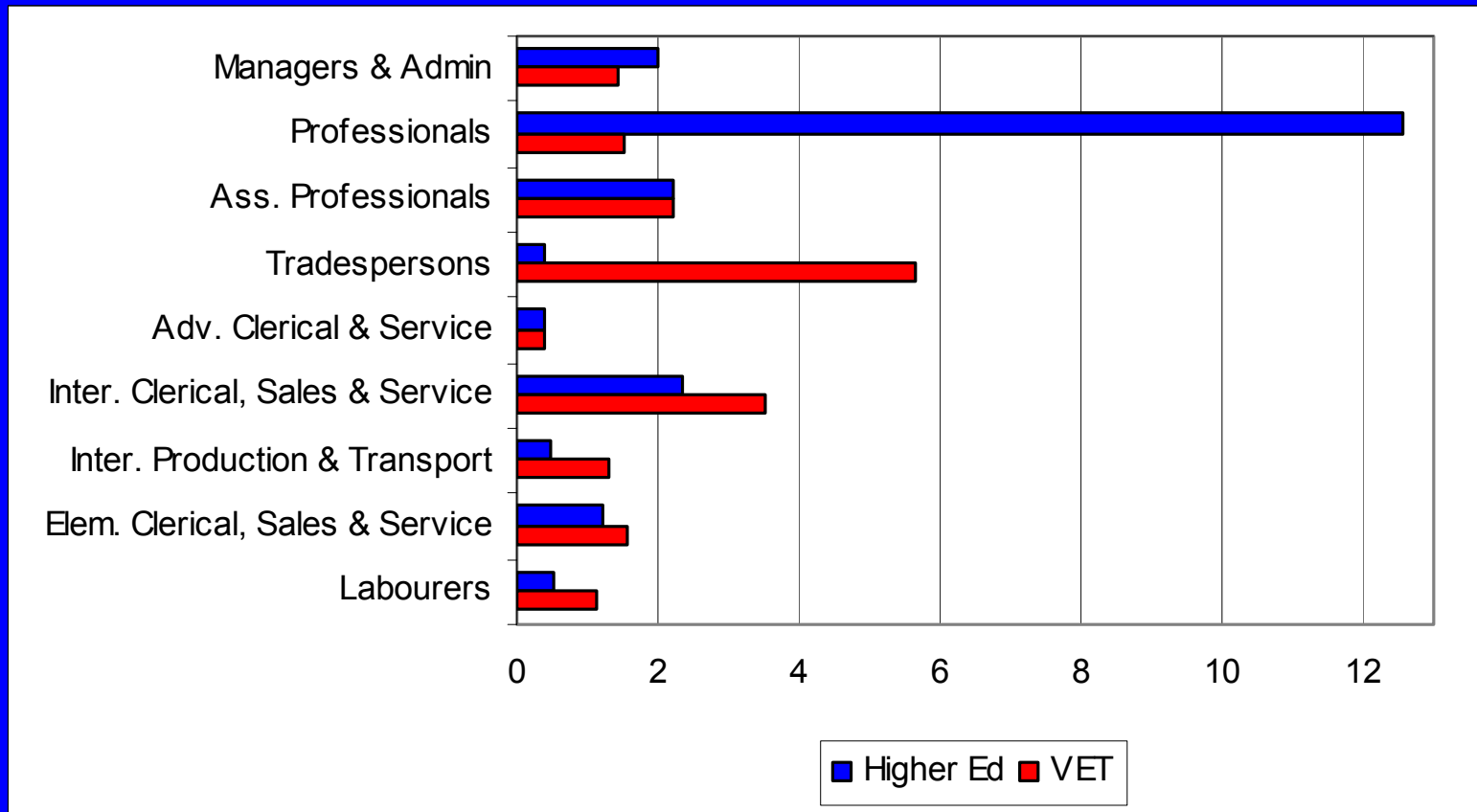
Average annual growth, net replacement needs and job openings for new entrants, by major occupation group, 2002-06, Victoria ('000)



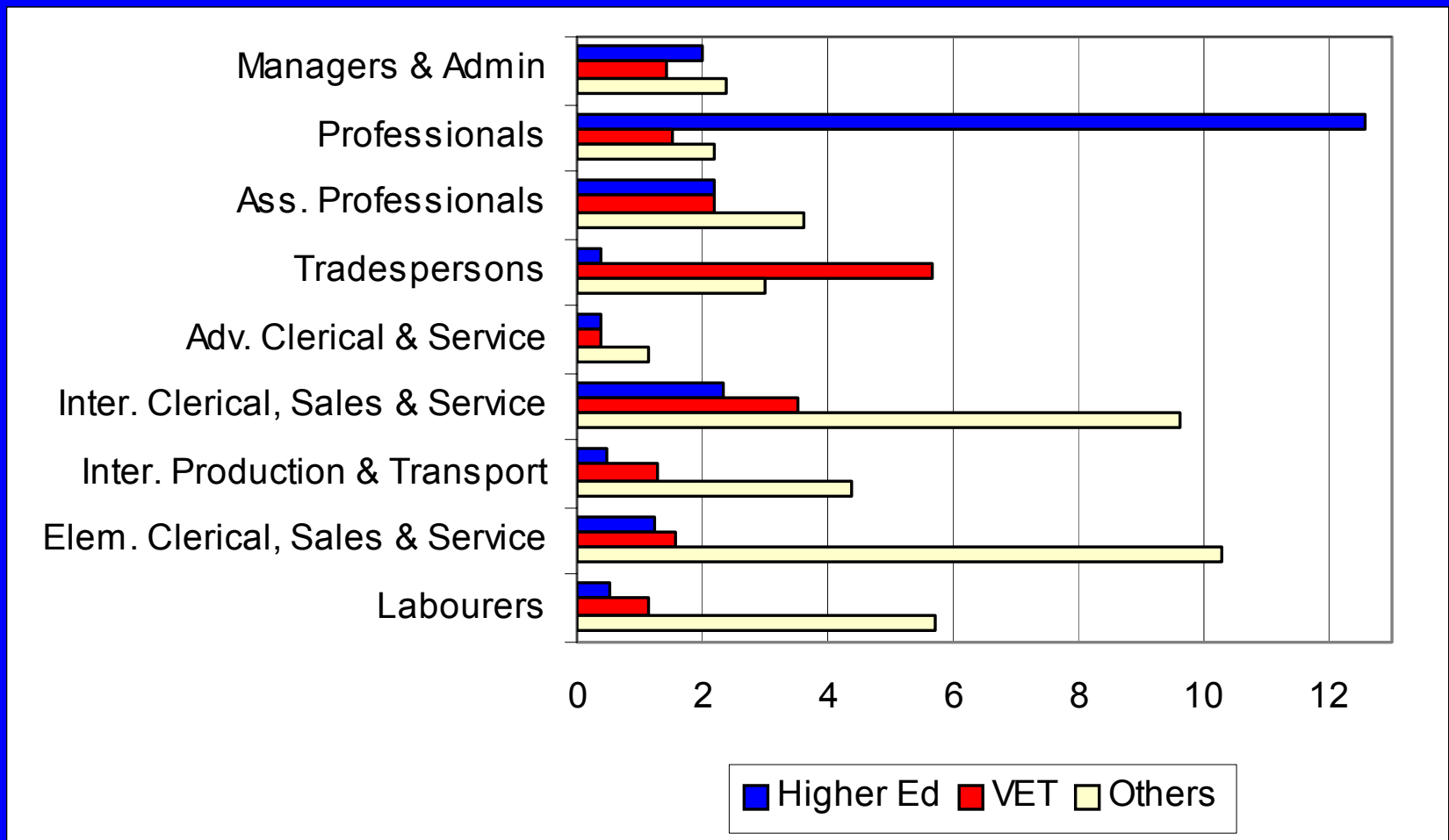
Average annual job openings for new entrants with higher education qualification, by major occupation group, 2002-06, Victoria ('000)



Average annual job openings for new entrants with higher education and VET qualification, by major occupation group, 2002-06, Victoria ('000)



Average annual job openings for new entrants by major occupation group and qualification, 2002-06, Victoria ('000)



Motor mechanics (ASCO 421111)

Employment 2001	18 873
Projected employment 2002	19 062
Proportion without post-school quals 2000	20%
Growth	289
Net replacement needs	500
New entrants	789
Participation rate in VET	
New entrants	90%
Currently employed (without quals)	0.3%
Currently employed (with quals)	4%
SCH per person per year	
New entrants (whole course)	981
Currently employed (without quals)	160
Currently employed (with quals)	160
Projected SCH 2002	
New entrants (whole course)	696 377
Currently employed (without quals)	1 780
Currently employed (with quals)	93 210
Total	791 367
Delivery 2001	636 095

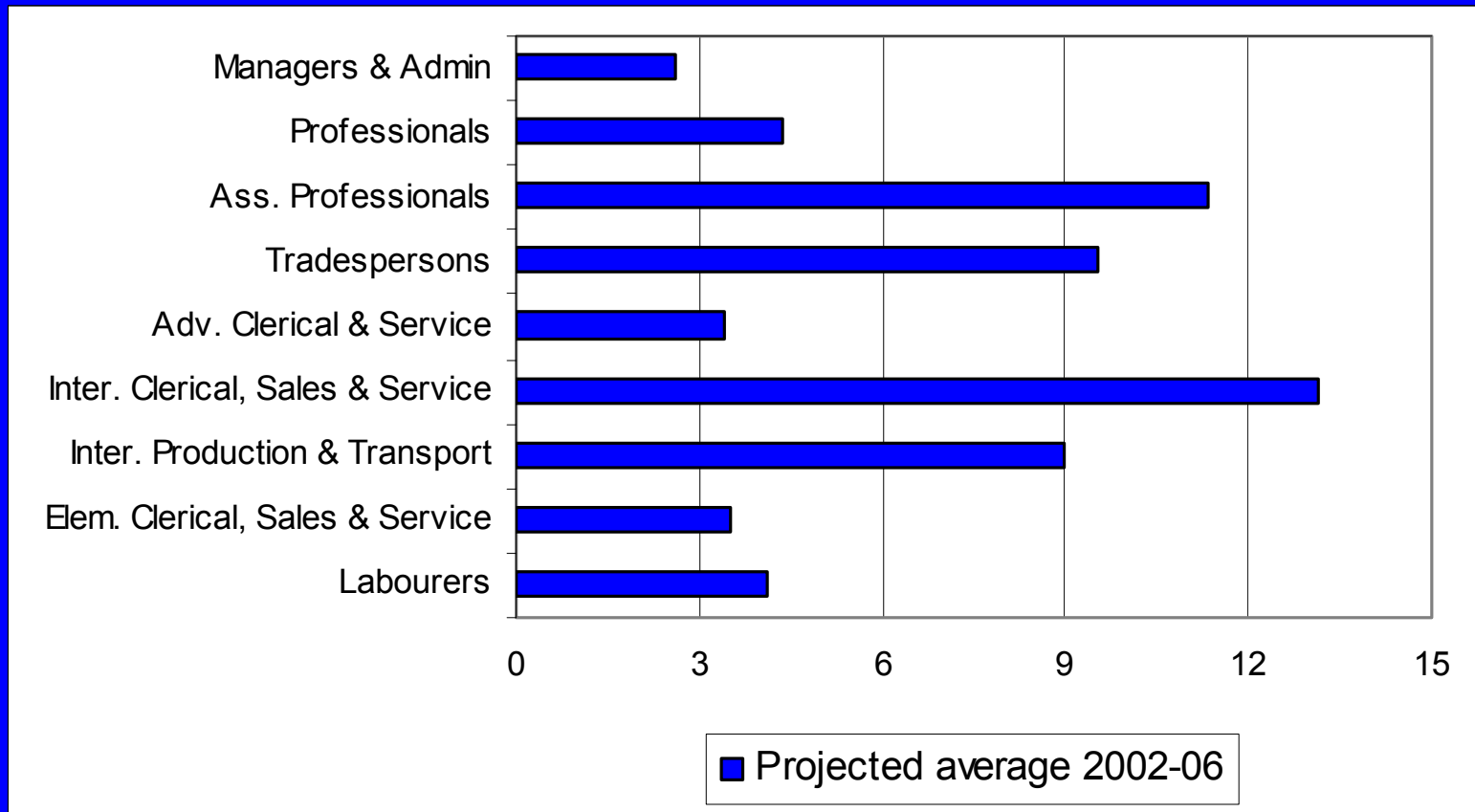
Average annual VET needs for the workforce, 2002-06, Victoria

	SCH (million)
New entrants	17.7
Employed (without qualifications)	31.8
Employed (with qualifications)	11.5
Total for workforce	61.0

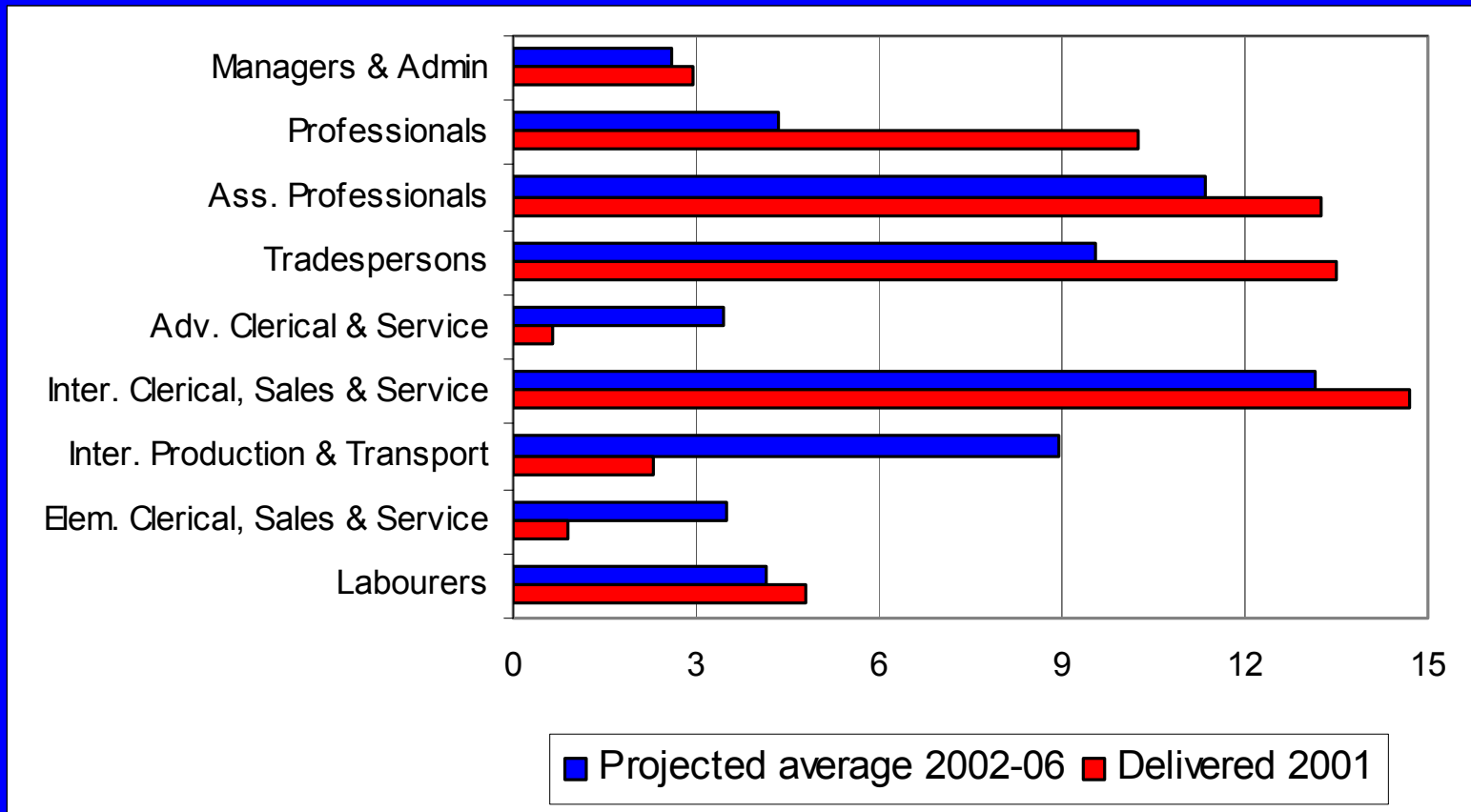
State funded training delivery, Victoria, 2001

	SCH (millions)
Industry specific	63.3
Non-industry specific	14.6
Module only or unknown	2.5
Total	80.4

Average annual VET needs for the workforce by major occupation group, 2002-06, Victoria



Training delivered in 2001 v/s average annual VET needs for the workforce by major occupation group, 2002-06, Victoria



Accountants (ASCO 221111)

Training delivered in 2001	1.8 m SCH
Projected annual needs, 2002-06	58 500 SCH

Fast food cooks (ASCO 993211)

Training delivered in 2001	0 SCH
Projected annual needs, 2002-06	1.1 m SCH

What the model does not include

- **Training needs for the unemployed**
- **Training needs of occupations not covered by ITBs**
- **Training needs due to technological change that are not picked up by ITBs**
- **Generic training**
- **ACE**
- **VET in school**

Concluding comments

- **Provides a framework to assess training needs**
- **Integrates a large amount of data into one model**
- **Agencies providing data need to have a common understanding of concepts**
- **Needs fine tuning**