April 28, 2008

COMPULSORY CERTIFICATION PROJECT

T.E. Armstrong Consulting

April 28, 2008

The Honourable John Milloy  
Minister of Training, Colleges and Universities  
900 Bay Street  
3rd Floor Mowat Block  
Toronto ON M7A 1L2

Dear Minister:

I am pleased to submit my report on compulsory certification, commissioned by you and your predecessor pursuant to orders-in-council 1771/2007 and 86/2008.

The task has been interesting and challenging. Useful written submissions were received from approximately 111 stakeholders – labour and management – supplemented by oral representations made at six meetings across the province held during the month of February.

I have received invaluable assistance from Ministry staff who have provided essential factual information on the apprenticeship system, current and historical. Staff have also been helpful in arranging meetings with other government ministries and agencies involved in the system.

External advisors, labour market economists and others, including representatives of federal government agencies, have been generous in granting me interviews on key aspects of the various issues involved in the assignment. All with whom I met are named in appendix 2 to the report.

I owe a particular debt of gratitude to the Ministry’s policy and legislative analyst, Linda Jones, who has worked tirelessly and effectively throughout. Without her patience, knowledge and hard work, I could not have produced this report.

Yours very truly,

T.E. Armstrong, Q.C.
# TABLE OF CONTENTS

**CHAPTER 1 – EXECUTIVE SUMMARY** ................................................................. 1

**CHAPTER 2 - INTRODUCTION** ........................................................................ 9

**CHAPTER 3 – THE REVIEW PROCESS LEADING TO FINDINGS AND RECOMMENDATIONS** ........................................................................................................ 11

**CHAPTER 4 – SIGNIFICANT LANDMARKS IN THE DEVELOPMENT OF ONTARIO’S APPRENTICESHIP SYSTEM** ................................................................. 14

**CHAPTER 5 – A SYNOPSIS OF THE EXISTING APPRENTICESHIP LEGISLATION AND ITS ADMINISTRATION** ................................................................. 17

  - Introduction ............................................................................................................ 17
  - Principal Features of the TQAA ............................................................................. 17
  - Principal Features of the ACA .............................................................................. 19
  - Overview of Administration ................................................................................... 25
  - The Application Process for New Apprenticeship Programs ........................................ 25

**CHAPTER 6 – COMPARISONS WITH OTHER CANADIAN JURISDICTIONS** ................................................................................................................................. 28

**CHAPTER 7 – WHAT WAS HEARD AT MEETINGS WITH STAKEHOLDERS** ................................................................................................................................. 37

**CHAPTER 8 – STATUTORY/REGULATORY ISSUES REQUIRING SPECIAL CONSIDERATION (Overlaps, Exemptions, Trade Description-Setting, Enforcement)** ......................................................................................................................... 47

**CHAPTER 9 – EXISTING DATA AND RECORDS** .............................................. 57

**CHAPTER 10 – COMMENTS ON IMPACT FACTORS** ........................................ 65

  - Health and Safety ....................................................................................................... 65
  - Registrations and Completions .................................................................................... 68
  - Consumer Protection .................................................................................................. 71
  - Economic Impact ........................................................................................................ 78
  - Other Miscellaneous Considerations ........................................................................... 84
APPRENTICESHIP IN ONTARIO – AN ANALYSIS AND RECOMMENDATIONS ON COMPULSORY CERTIFICATION

CHAPTER 1 – EXECUTIVE SUMMARY

My mandate, set out in the terms of reference from the Minister of Training, Colleges and Universities, is to consider the impact of expanding compulsory/restricted certification under the Trades Qualification and Apprenticeship Act and the Apprenticeship and Certification Act, 1998, with particular reference to the ramifications for health and safety, the registration of new apprentices, the rates of completion, consumer protection, economic impact and any other factor(s) that I may consider to be relevant. I am also asked to recommend a framework for dealing with and advising upon applications for compulsory trade status.

FINDINGS

As has been said in other contexts, opaque and intractable factors cannot be measured scientifically – as can, say, atmospheric pressure or air quality. Nonetheless, I have considered all available comparative data, noting their imperfections, along with the written and oral representations of all stakeholders1 and the published articles and commentaries included in the bibliography, Appendix 16.

As to registrations and completions, some contend that it should be axiomatic that both will increase if the regulations require a particular trade to be compulsory, since failure to register and/or complete would contravene the law. This contention has obvious merit, but some say that, viewed in isolation, it is too simplistic. Other considerations come into play. Can the functions of the compulsory trade be defined with sufficient precision to permit them to be distinguished from those of other non-compulsory trades? Do the enforcing authorities have sufficient technical knowledge to identify those in non-compliance? Is the fact of compulsion, and the rigours and costs of apprenticeship training, likely to deter potential entrants from pursuing the trade? Will some attempt to avoid compulsory status by engaging in underground activities? And more generally, are existing enforcement mechanisms so deficient that adding

---

1 The term “stakeholders”, frequently used throughout the report, includes employers, sponsors and their various associations, employees, apprentices, unions and approved training delivery agents (TDAs). (Sponsor, under the ACA, is the employer of record for the purpose of the training agreement.)
more compulsory trades is an exercise in futility?

I have considered these contending arguments, as well as the behaviour and experience of those working in and with the trades, including the training authorities. In the result, I have concluded that there is a strong probability that registration and completion rates in compulsory trades are and will remain greater than those in the voluntary trades.

Accordingly, the resulting overall increase in health and safety training should result in better health and safety performance in compulsory than in voluntary trades. This assumes that health and safety training continues to be a component of the standards for the compulsory trades and that there are no material qualitative or quantitative distinctions between the compulsory and voluntary trades in the setting of health and safety standards.

There is a lack of hard evidence as to whether consumers have greater protection when trades are made compulsory. Instinct, supported by experiential evidence from a number of stakeholders, supports the inference that the tendency will be for enhanced consumer protection if work is performed by a compulsorily-certified tradesperson.

As to economic impact, compulsory certification is likely to lead to higher wages within the affected trade. However, the net cost to employers is almost certain to be lessened when certain offsetting items are factored in: productivity gains, retention benefits, reduced risk of skill shortages and improved health and safety performance, leading to lower WSIB premium costs. The costs for training deliverers and government will increase, but to the net benefit of stakeholders, consumers and the public at large.

The above are all positive attributes of compulsory certification. However, there are other counterbalancing factors that may be relevant in assessing applications for compulsory trade status. These include: the limitations on labour supply that could result if journeyperson/

---

2 “Behavioural economics”, as opposed to traditional neo-classical economics, is gaining increasing currency. In the 1970s, pioneering work begun by two psychologists, Amos Tversky and Daniel Kahneman, raised the question for economists as to whether people could necessarily be assumed to make rational economic decisions. One of their conclusions was that people tend to be “effort averse”. This is relevant in determining whether, absent compulsion, apprentices would persist with their courses, including writing their examinations. In 2002, Tversky was awarded a Nobel Prize for “having integrated insights from psychology into economics”. For further analysis, see Judgment Under Uncertainty: Heuristics and Biases ed. Kahneman, Tversky and Slovic, 1982 Cambridge University Press.
apprentice ratios are too stringent and inflexible; the lack of functional complexity and/or the low safety hazards associated with the performance of the trade for which compulsory status is sought; the unique features and/or conditions of a particular sector or some portion thereof in which the trade operates where, for example, other micro-labour market issues (e.g., urban vs. rural) may need to be assessed; the contours of parts of the particular trade’s functional components sought to be included in the compulsory description that may give rise to undesirable and avoidable “overlap” problems: e.g., the inclusion of non-hazardous, non-complex peripheral functions beyond the essential core components of the trade; and situations where the merits of compulsory status might have adverse consequences on worker mobility in the labour market: e.g., the movement of workers in currently declining industries to the construction sector.

**RECOMMENDATIONS**

There are, in my view, essentially two viable approaches with respect to the “decision framework” which I have been asked to consider.

(a) **THE FIRST** is to establish an all-trades governance institution – a College of Trades – one of whose functions would be to establish a trades advisory panel to deal with applications for compulsory certification status, in light of a comprehensive and relevant set of criteria.

(b) **A SECOND, alternative approach** is to establish the trades advisory panel first, in order that outstanding applications for compulsory status can be dealt with expeditiously, with a view to integrating the advisory panel into the permanent all-trades governance institution once the structure, membership and mandate of that institution is finally established.

**Specific Recommendations**

1. I **RECOMMEND** that the Ministry consult with stakeholders with the objective of establishing a new, all-trades governance institution – the College of Trades – whose
functions would include the establishment of expert panels to consider applications for compulsory certification and provide advice to the Minister; to engage in certification enforcement; to raise the profile and status of the trades; and provide for periodic review(s) of ratio provisions.

The two functions that I would regard as desirable to borrow from the traditional College model, are first a board of governors that includes prominent and accomplished members of the public at large; and second, an accreditation role that, together with the “College” name would enhance trade status and prestige.

Membership should include all apprentices and journeypersons covered by the TQAA and the ACA, as well as employer stakeholders. As to the board of governors, membership should be appropriately apportioned among the following: employees (apprentices and C of Q holders); employers; trainers; and public members (with solid credentials and profile the community at large), with government members (representatives from MTCU, and possibly from MOL, MGCS, ESA and TSSA) having *ex officio*, non-voting Board membership.

Since the trades represent four distinct sectors – construction, industrial, motive power and service – the Ministry and the stakeholders with whom it consults will presumably wish to discuss appropriate internal divisions within the college administration to handle the distinct requirements of the members of each sector.

If the parties are able to reach agreement to use an adaptation of the College structure, I would see it having four functions in addition to the traditional processes for handling complaints similar to those that arise in other professional self-regulating institutions:

1. It would establish a panel of experts to consider applications for the compulsory certification of individual trades, based upon a set of pre-established criteria.

2. It would establish and provide resources for a joint employer/employee “Enhanced Enforcement Unit” (EEU) to work in collaboration with the MOL and the MTCU in field investigations to identify and take remedial action against those contravening the TQAA and the ACA.
(3) It would establish a standing industry advisory panel to review the issue of ratios to advise the Minister, at regular intervals (say every 3 years), if and when ratios should be changed to meet the cyclical demands of the labour market in the various trades.

(4) It might, as well, assume responsibility for accrediting graduating apprentices and journeypersons and perform related College-like functions (e.g., research, providing for inter-sectoral trade communications, liaising with the TDAs, etc.).

If it is determined that there is an urgent need to deal with outstanding requests for compulsory certification, a system for doing so could be established prior to consultations on the creation of an all-trades governance institution. If so:

2. **I RECOMMEND** the establishment of an *ad hoc* roster of qualified advisors, to be appointed by the Minister, to serve on panels to consider applications for compulsory certification on the basis of a stipulated set of criteria.

I emphasize the term “advisors”. The power to restrict access to an occupation is an extremely important legal concept and one that should be reserved for ministerial discretion.

There are obviously a variety of options for establishing a roster of qualified advisors and determining a suitable process for them to follow in consideration of applications for compulsory certification. As I read my mandate, it requires me to set out a “decision framework” for considering compulsory certification applications. The process approach that I would favour for the panel would include the following components.

- The Ministry, following consultations with the stakeholder groups, would propose a list of candidate advisors for the Minister’s consideration and approval.
- A list of independent candidates would include persons with knowledge and expertise in the workings of the labour market and the apprenticeship system. Potential nominees would include industry members – both labour and
management – labour market economists, representatives of training delivery agents and perhaps persons representing consumer interests.

- There should be a sufficient number of persons on the roster with experience in chairing panel sessions.
- The roster of advisors would have an Executive Chairperson, supported by a small Secretariat, who would select panels of say 3-5 persons to hear individual applications.
- Time limits would be set for the panel to receive submissions, written/oral, and submit its advisory decision to the Minister, who would retain the right to make the final decision.

3. **I RECOMMEND** that in considering the submissions of the applicant and the other interested parties, the panel should take into account the public interest, assessed in light of the following criteria, and any other criteria determined by the Ministry to be relevant following consultations with stakeholders:

   (a) the likely effect of compulsory status on health and safety, registrations, completions and consumer protection;

   (b) the economic impact on employers, apprentices, training institutions and government;

   (c) the journeyperson/apprentice ratio impact;

   (d) the functional complexity of a trade for which compulsory status is sought;

   (e) the safety hazards associated with the performance of the trade’s functions;

   (f) the environmental enhancement ramifications, if any, of conversion to compulsory status;
the description of the elements of the trade and whether distinctions are warranted between core and peripheral elements in determining the appropriate contours of the trade’s description;

whether there are unique features of all or some of the sector(s) in which the trade operates which might affect the appropriateness of compulsory status for sector(s) or a portion(s) thereof;

whether compulsory status would have a detrimental effect on cross-sector, inter- or intra-provincial labour mobility; and

the nature of the grandparent provision for existing workers in the trade.

Other Recommendations

4. I RECOMMEND that the ministries and agencies involved – MTCU, MOL, the WSIB, the ESA, the TSSA and Tarion – form a working group, along with representatives of Statistics Canada responsible for the RAIS’ data, to explore viable and compatible revisions to their data collection and retrieval systems, so as to improve, so far as possible, the ability to make relevant statistically sound comparisons between compulsory and voluntary trades. This panel should be chaired by an independent appointee familiar with statistical methodologies.

5. I RECOMMEND that a joint review committee be established by MTCU, with representatives from key industries, industry associations, industrial unions, and unorganized industrial workers, to analyze the rationale for the current industrial plant exemption under the TQAA and report to the Minister. This panel should also be chaired by an independent qualified third party.

Acronyms: Ministry of Training, Colleges and Universities (MTCU); Ministry of Labour (MOL); Workplace Safety and Insurance Bureau (WSIB); Electrical Safety Authority (ESA); Technical Standards and Safety Authority (TSSA); Registered Apprenticeship Information System (RAIS). The Tarion Warranty Corporation administers the Ontario New Home Warranty Program.
6. *I RECOMMEND* that, following full and open consultations, one all-inclusive statute be developed and enacted to replace the ACA and the TQAA. This statutory integration should focus on a single administrative process for the way in which compulsory vs. voluntary trades are determined. Key substantive decisions will be required, including the scope and powers to be given to the Director of Apprenticeship; the powers that should be retained by the Minister and by Cabinet; the role and composition of the stakeholders advisory committees; and the way in which the stakeholders and the public are given meaningful access to and participation in a transparent process of decision-making. It should also be made clear, in any legislative redrafting, that nothing in the training legislation or in the Regulations under any Act (such as O. Reg. 572/99 under the *Occupational Health and Safety Act*) is to be construed as dealing with the jurisdictional rights of trade unions.

**Conclusion**

This inquiry has led me to the conviction that there is substantial potential to improve and enhance the standing and effectiveness of apprenticeable trades and their continued, strengthened contribution to the growth of the Ontario economy. I hope that the recommendations contained in this report will serve as a basis for informed consideration of practical ways in which this objective can be accomplished.
CHAPTER 2 - INTRODUCTION

1. Ontario was the first Canadian province to introduce, in 1928, a statutory-based apprenticeship system. Since then, the system has been developed and refined in a number of significant ways, the details of which are set out in Chapter 4. By 2007, the registration of apprentices had risen to approximately 26,000 annually, in over 150 designated trades, occupations or skill sets, covering four main sectors: construction, industrial, motive power and service.

2. Of the designated trades, 21 are compulsory or restricted, which means that those performing them can only do so if they are registered apprentices or hold valid Certificates of Qualification as certified journeypersons. There are important exceptions to these basic requirements, which will be discussed in detail in the body of the report.

3. Some stakeholders have, over the years, contended that more of the existing trades should be made compulsory (or restricted) rather than remaining voluntary (or unrestricted). If the government were to decide to make any such conversions, it could do so, under the existing statutes, i.e., the Trades Qualification and Apprenticeship Act (TQAA) or the Apprenticeship and Certification Act, 1998 (ACA), by regulatory amendment.

4. My task, as set out in the appointing order-in-council and reiterated in my letter of appointment is to review the impact of expanding compulsory certification, taking into consideration the implications for health and safety, the registration of new apprentices, the number of apprentices completing their apprenticeship training, consumer protection, economic impact and any other factor(s) that I may consider to be relevant. I am also instructed to provide advice about a “decision framework” for considering the submissions of those seeking to expand compulsory certification and to propose criteria that should be used to assess such requests. I am also to assess the benefits and risks associated with the implementation of any recommendations that I may make – but I am not authorized to make recommendations with respect to the disposition of “existing industry requests for compulsory certification”.

5. These issues are to be considered within the context of the government’s commitment to ensure that the province’s apprenticeship and certification system “continues to meet
proper safety standards, provides value to consumers and serves the needs of the province’s growing economy”. The implication from the instructions contained in my mandate appears to me to be that any change from the existing status of individual trades, to be supported, should result in net positive results for health and safety, registration and completion rates and consumer protection, without having significantly negative or other unjustifiable economic impacts for stakeholders or for the economy at large.

---

4 My use of “trades” throughout the report encompasses trades, other occupations or skill sets as these terms appear in either the TQAA or the ACA.
CHAPTER 3 – THE REVIEW PROCESS LEADING TO FINDINGS AND RECOMMENDATIONS

6. The intention to conduct a compulsory certification review was announced by the then Minister of Training, Colleges and Universities, The Honourable Christopher Bentley, in May, 2007. My appointment was made on August 1 and work began immediately thereafter. My first task was to obtain a comprehensive understanding of the applicable legislation, with particular reference to the apprenticeship certification system, and the distinction between the compulsory and restricted trades, on the one hand, and voluntary or unrestricted trades on the other. My work plan was submitted and approved by the Minister on or about August 15. Shortly thereafter, adjustments were necessary when the election writ was issued. However, during the suspension of formal stakeholder consultations in the election period, I was able to continue my analysis of the legislation, and the way in which it is administered, through briefings from several ministries and agencies and informal discussions with some of the stakeholders. I was also able to review the literature on apprenticeship and to consult with knowledgeable labour market economists.

7. Based on my analysis of the published material, the briefings received, and the initial conversations with stakeholders and professionals, it appeared that over the years, a number of concerns had arisen about the division between compulsory and voluntary trades under the existing system and about the ramifications of any changes that might be made to it. These concerns included issues relating to labour supply, i.e., the number of entrants into the apprenticeship system; the source of entrants, particularly the flow of students from the secondary school system into apprenticeable trades; the demographics of the skilled trades workforce and the possibility of future labour shortages; registration rate fluctuations; the relatively low completion rates; potential risks to consumers and the public from the work of apprentices and tradespersons with inadequate training; and the potential cost impacts of any increase in compulsory certification on employers, governments, apprentices, training institutions and on the overall economy from a more stringent regulatory regimen governing trades qualifications.
Following his appointment as Minister of Training, Colleges and Universities under the new government, The Honourable John Milloy renewed my mandate and I submitted a revised work plan. The new plan called for research and meetings to continue. Consultations, which had been suspended during the election process, were revived in early December and research and analysis continued until the completion of this Report.

Stakeholders, of whom over 600 were identified by the Ministry, were invited by letter dated December 10, 2007 to make written submissions on or before January 25, 2008. In response, some 111 submissions were received from the stakeholders (see Appendix 2). All have been carefully analyzed.

My letter of December 10, 2007 to stakeholders inviting submissions included materials to assist recipients in making their representations. The letter and the attached material (Appendix 3) includes my Statement of Work, summarizing the terms of my assignment; a background paper on compulsory certification, including the history of apprenticeship and trade certification in Ontario; an overview of the apprenticeship and certification system currently in operation, and a summary of the principal arguments advanced in the past for and against increasing the number of compulsory trades. I direct readers to the last document, which will give some flavour of the substantive arguments surrounding the topic. As will be recorded in detail in Chapter 7, much of what I heard, although helpful, was based on practical experience, instinct and anecdote. Accordingly, I have made recommendations concerning possible improvements to the existing data collection system so that there is more reliable, empirical evidence on which to base sound policy decisions.

My initial intention was to convene stakeholder focus group discussions, with facilitated breakout sessions. However, on further reflection, and based upon my previous dealings with many of the participants in the apprenticeship system, particularly those in the construction and industrial sectors and their tradition of pragmatic dialogue, I decided that a more productive approach would be to hold a series of meetings with the stakeholders which I would chair and at which there would be full and open opportunity, in a “round table” forum, for all interested parties to express their views, in each other’s presence, on all of the issues within my mandate. Accordingly, by letter dated January
14, 2008, stakeholders received invitations to attend such meetings. The dates, locations, and number of participants were as follows: February 11, Toronto [82]; February 15, Toronto [60]; February 19, Ottawa [121]; February 20, Sudbury [34]; February 21, Thunder Bay [19]; and February 22, London [56]. See Appendices 4 and 2 for the invitation to attend the meetings and a list of participants.

Stakeholder participants were open and candid in expressing their views and concerns at these six regional meetings. While there was clearly no consensus on which, if any, existing voluntary trades should be made compulsory, there was broad, indeed virtually unanimous, agreement that determinations should be made on a trade-by-trade basis in a process which would permit all parties with a legitimate interest to make their submissions. It was also accepted that submissions should be received by a competent, independent and knowledgeable body; that the body’s determination should be made within a reasonable time frame; and that its decision should be advisory to the Minister of Training, Colleges and Universities. I was encouraged to receive such a positive and comprehensively supportive response to this process proposal which I advanced, in general terms, at each meeting. Details elaborating on the proposed process are set out in Chapter 12, the recommendation section of this report.
CHAPTER 4 – SIGNIFICANT LANDMARKS IN THE DEVELOPMENT OF ONTARIO’S APPRENTICESHIP SYSTEM

12. Particulars of the key developments in the evolution of the apprenticeship system are set out in tabular form, in Appendix 5. The highlights are as follows. The first statute, The Apprenticeship Act, resulting from the recommendation of a coalition of employers and trade unions, was enacted in 1928. This Act remained in force until 1964 when it was replaced by The Apprenticeship and Tradesmen’s Qualification Act.

13. In 1962, a Select Committee of the Legislature (the “Simonett Committee”) was appointed to examine and make recommendations concerning The Apprenticeship Act. The Committee reported in 1963, recommending more incentives to encourage young workers to enter the system which, according to the Committee, could only be accomplished by affording those who successfully completed their programs “due and proper recognition” for their training achievements. Hence the Simonett Committee’s recommendation that there should be compulsory certification “for all trades which can be expected to benefit from it”. The Committee said that this would act as an inducement to those considering entering the trades and would also protect the public by assuring minimum standards of competence. In making this recommendation, the Committee cautioned against the dangers that compulsory certification might be used to restrict the supply of skilled tradespersons and urged that the Public Service adopt measures to guard against any such abuses.

14. In 1964, the government, following the recommendations of the Simonett Committee, introduced the Apprenticeship and Tradesmen’s Qualification Act to replace The Apprenticeship Act of 1928. Reference was made by the Minister on First Reading to the need for more skilled workers; to encourage the training of workers in the technological changes occurring in the economy; and to provide greater skilled trades training opportunities for more graduates from the secondary school system. On Second Reading, the Minister alluded to the need to provide qualified tradespersons with tangible evidence to verify their skills and training and to raise their status in the eyes of the public. To

---

5 Mr. Simonett, Chair of the Committee, was Ontario Minister of Energy 1963-1969 (with added responsibility for resource management beginning in 1964) and Minister of Public Works from 1969-1971.
achieve these goals, the government provided in the Act for the expansion of compulsory certification beyond the then existing compulsory trades, Motor Vehicle Repair and Hairdresser. In 1964-65, six construction trades were made compulsory.

15. In 1966, a General Advisory Committee on Industrial Training was established to assist the government “in adapting the apprenticeship system to the changing manpower requirements of general industry, as well as to study the merits and impacts of compulsory certification in the industrial trades”. The Committee issued an interim report in 1967 and its final report in 1968. Following the interim report, the Cabinet began exempting certain certified trades from the compulsory category and providing for voluntary certification of persons employed in general industry. The rationale given by the Committee in support of the recommended changes included perceived problems associated with “overlaps” (where aspects of compulsory certification were said to preclude non-certified workers from performing their regular functions); the creation of jurisdictional issues between and among trades as a result of compulsory certification; the difficulty of differentiating skill mixes between, for example, the mechanical and electrical trades; the situation in smaller industrial organizations with insufficient work to warrant full-time employees; and the alleged rigidities in compulsory certification that were thought by the Committee to limit flexibility in meeting the needs of emerging new technologies.

16. In 1970, the government established another Task Force on Industrial Training (the “Dymond Task Force”). Its report, issued in 1973, recommended the removal of compulsory certification from the statute, except for those in the motor vehicle repair trade “until such time as an adequate motor vehicle inspection system is developed”. The Dymond Task Force report’s rationale for its recommendation was based on alleged undesirable economic side effects of compulsory certification, including upward pressure on wages; artificial increases in the cost of services to consumers; limitations on the

---

6 The Dymond Report, submitted to the Minister of Colleges and Universities in 1973, was prepared by a 6-person Task Force following three years of deliberation. The Chair, W.R. Dymond, was at the time Chair of the University of Ottawa’s Department of Public Administration and previously had served as Assistant Deputy Minister in the Federal Department of Labour and the Federal Department of Manpower in the 1960s and 1970s.
assignment of tradespersons to specialized tasks; and a perceived tendency of compulsory certification to permit what the Task Force apparently regarded as unjustifiable expansion of trade union jurisdiction.

17. Other than the Crane Operator in 1982, no further compulsory trades have been certified since 1965. In 1990, the *Apprenticeship and Tradesmen’s Qualification Act, 1964* was renamed the *Trades Qualification and Apprenticeship Act* (“TQAA”). In 2002, the TQAA Plumber Regulation was amended to permit the establishment of the restricted skill set Water Meter Installer to be established by Regulation under the recently-enacted *Apprenticeship Certification Act, 1998* (ACA). In 2005, the refrigeration and air conditioning mechanic regulation was amended to establish a separate branch of the trade for residential air conditioning mechanics. At intervals over the last number of years, some trades under the TQAA and ACA have made representations to MTCU to have their status changed from voluntary to compulsory: under the TQAA, Sprinkler and Fire Protection Installer; Brick and Stone Mason; Construction Boilermaker; General Carpenter; Powerline Worker (Lineworker); Drywall, Acoustic and Lathing Applicator; and Architectural Glass and Metal Technician (Glazier and Metal Mechanic); and under the ACA, Auto Glass Installer; Powered Lift Truck Technician; and Industrial Electrician.

---

7 The Hoisting Engineer trades (crane operator) were transferred from the then Ministry of Consumer and Commercial Relations (MCCR). Since 1969 and while under the purview of MCCR and the *Operating Engineers Act*, crane operators were required to be licensed.

8 This is not an exhaustive list as several additional trades included requests for compulsory status in the written submission phase of the Review.
CHAPTER 5 – A SYNOPSIS OF THE EXISTING APPRENTICESHIP LEGISLATION AND ITS ADMINISTRATION

Introduction

18. To address the specific items in my mandate, and put them into context, a more detailed understanding of the statutory scheme for the designation of apprenticeable trades, occupations and/or skills sets is required. Until 2000, the designation of trades was dealt with exclusively under the *Trades Qualification and Apprenticeship Act*, R.S.O., 1990, c.17 (“TQAA”). The processes for designation were augmented with the enactment of the *Apprenticeship and Certification Act*, R.S.O., 1998, c. 22 (“ACA”), which came into force in 2000. When the ACA was introduced, it was assumed by the government of the day that it would replace the TQAA in its entirety. In the final version, section 3 provided that it did not apply to a trade to which the TQAA applies, effectively maintaining the apprenticeship provisions governing the construction industry. However, all non-construction compulsory trades were transferred to the ACA, and given comparable “restricted status”. Many contend that two statutes now govern apprenticeship and certification have made the system more complex and confusing to the stakeholders and to the public.

Principal Features of the TQAA

19. The TQAA governs the majority of trades in the construction industry. Section 1.1 of the Act (nos. 1 through 18) identify specific trades governed by the legislation. Section 1.1 para. 19 enables other trades to be added by way of Regulation. Regulation 1055 under the Act prescribes additional trades to which the Act applies.

20. Section 10(1) of the Act permits the “designation” of any trade as a *certified* trade. Section 9 of the Act deals with the requirements for apprenticeship registration and s.10(2) of the Act limits the persons who shall work or be employed in a certified trade: i.e., a registered apprentice or a person holding a subsisting Certificate of Qualification, subject to certain stipulated exceptions. Some 33 trades are covered by the TQAA with 20 trade-specific Regulations. All are *certified* in their individual regulation, but only 10 are *compulsory*. The ones which are *not* compulsory have provisions in their regulations in which it is stipulated that s.9 and s.10(2) of the Act do not apply to them, effectively
nullifying their compulsory status. The following are the compulsory trades, with the
dates of their compulsory certification by Regulation indicated in brackets: Electrician,
Construction and Maintenance (1964); Electrician, Domestic and Rural (1964);
Refrigeration and Air Conditioning Systems Mechanic (1964); Sheet Metal Worker
(1965); Steamfitter (1965); Plumber (1965); Mobile Crane Operator Branch 1 (1982);
Tower Crane Operator (1982); Mobile Crane Operator Branch 2 (1990) and Residential
Air Conditioning Systems Mechanic (a branch of the Refrigeration & Air Conditioning

21. Section 5(1) of Regulation 1055 provides exemptions for certain classes of persons from
the compulsory certification requirement of the TQAA, namely: those permanently
employed in industrial plants; persons holding valid equivalent Quebec Certificates of
Qualification and working as Electricians, Hoisting Engineers, Plumbers, Refrigeration
and Air Conditioning Mechanics, Sheet Metal Workers, and Steamfitters; persons in a
trade who are enrolled in the Ontario Youth Apprenticeship Program (OYAP) or a
similar, Director-approved program under the *Education Act*; and persons enrolled in pre-
apprenticeship programs approved by the Director of Apprenticeship. Section 5(2) of the
regulation also exempts persons engaged in a trade for which an apprenticeship training
program is established by an employer and approved by the Director of Apprenticeship.
Currently, there are no employer-established trades. Section 10(3) exempts OYAP and
Pre-Apprenticeship participants from wages rates and ratio requirements. Finally,
Regulation 31/02 deals with fees payable by apprentices and also provides for fee
exemptions for certain classes of trainees. This Regulation is referred to later under
“Cost Impacts”.

22. There are some 20 trade-specific Regulations under the TQAA dealing with the content
of the particular trade’s apprenticeship training programs, ratios, exemptions, wages,
reporting requirements, etc. The ratios for the various TQAA trades and comparison to
other Canadian jurisdictions are set out in Appendix 6. Section 10(2) of Regulation 1055 establishes “standard” ratios for journeyperson to apprentices: 1:1 initially and 3:1 thereafter, but permits these standard ratios to be altered, using the language “unless otherwise prescribed”. This has been done in particular trade regulations and, I am advised, has invariably occurred as a result of recommendations by the particular trade’s Provincial Advisory Committee (PAC). Some of the older Regulations contain schedules detailing the specific content of training programs. For example, Regulation 1048, covering the Construction Millwright, has over 9 single-spaced pages setting out, in tabular form, that trade’s training requirements. These detailed schedules are now discouraged by the Ministry and the training requirements are instead set out in documents referred to as “Standards”.

23. The Standards, describing in detail the content of each individual training program, are developed in conjunction with each trades’ PAC, and submitted to the Ministry for final approval. PAC members are appointed by the Minister under s.3 of the Act. The TQAA, s.4, also provides for the establishment of Local Apprenticeship Committees (LACs). LAC members are appointed by the Director of Apprenticeship and provide advice relating to apprenticeship or trades qualifications for particular geographic areas and trade(s). LACs may also be the employer for the purpose of the Contract of Apprenticeship.

**Principal Features of the ACA**

24. The ACA made some significant changes in the approval process for the establishment of apprenticeable trades, occupations and skill sets. Under the TQAA, approval of any new

---

There is much controversy over the question of ratios, apparent from both the written submissions and from the discussions at the focus group meetings. Those supporting ratios contend that they are needed to ensure that employers have a sufficient number of journeypersons on hand to train their apprentices. Those arguing against the ratios contend that in some trades at least, they tend to require an excessive number of journeypersons, limiting the flow of apprentices into the trades and jeopardizing future labour market requirements. It is also argued by some that both employers and their unions use the ratio system as a monopoly tool to dominate their sectors. In addition, some unions argue that since the ratios apply to an employer’s total workforce, rather than to individual construction sites, they cannot effectively serve to ensure that apprentices receive the proper on-site training – and that in some instances, apprentices are permitted to dominate, numerically, on some sites, to the detriment of their health and safety and the quality of work performed. Ratios are discussed further in Chapter 10 under the heading “Other Miscellaneous Considerations”.

apprenticed trade, compulsory or voluntary, requires ministerial consent and order-in-council (Cabinet) endorsement. Under the ACA, voluntary (referred to as “unrestricted”) trades, occupations or skill sets are approved by the Director of Apprenticeship, without the need for ministerial or Cabinet approval.

25. The Legislative Debates on the ACA reveal that the original intention of the sponsoring government was to replace the TQAA in its entirety, on the grounds that the TQAA was insufficiently flexible. In particular, there was a desire to relax the contours of the occupational tasks or skills that could qualify for designation. Hence the provision in the ACA which permits apprenticeship for skill sets, some of which had previously been included in whole trades. The rationale for this was that as industry activities become more specialized, there is less need for the acquisition of the comprehensive training embodied in the programs designed for the traditional crafts. In some quarters this initiative was applauded, as providing needed flexibility, streamlining, expediting and targeting specialized needs. Others expressed concerns that the breaking up of “whole trade” competencies risked dangerous de-skilling and in the long run would limit the mobility of tradespersons and their capacity to meet the shifting requirements of their employers. It was also contended by opponents of the legislation that the “skill set” approach jeopardized the ability of the various trades to work together collaboratively, and in proper sequence, especially on larger and more complex projects.

26. Section 4(2) of the ACA provides the Director (as opposed to the Minister and Cabinet) with authority to approve apprenticeship programs for “trades, other occupations and skills sets”, as well as other forms of training and to issue Guidelines. The “Guidelines” have taken the form of “Program Summaries”. There are Program Summaries for many of the ACA trades, occupations and skills sets. Some aspects of the Summaries are binding: for example, a requirement that Certificate of Qualification applicants must show proof of the requisite number of hours engaged in training. An example of a non-binding Guideline is the provision contained, in some Summaries, that there be a ratio of
apprentices to journeypersons.\textsuperscript{10}

27. Director-approved trades, occupations or skill sets are unrestricted (voluntary). Section 12 of the Act, however, provides for and governs restricted skill sets, which are comparable to compulsory trades under the TQAA. Section 19 of the Act permits the Cabinet, by Regulation, to designate “a skill set as a restricted skill set”; to define “a trade or other occupation to include a restricted skill set”; and to exempt a person or class of persons from a restricted skill set established under s.12 of the Act. There is also a general Regulation (573/99) expanding the duties of the Director in dealing with factors pertaining to the approval of apprenticeship programs and in stipulating academic standards for certain trades, occupations or skill sets established under s.6(3)(a) of the Act. The Regulation also deals with the expiration of certificates; the operation of the Red Seal program\textsuperscript{11}; the appointment and terms of the members of Industry Committees established by the Minister under s.5 of the Act\textsuperscript{12} (the equivalent of the PACs established under s.3 of the TQAA); and certain other transitional matters.

28. There are 11 restricted trades and 1 restricted skill set designated under the ACA, all set out in Regulation 565/99. The 11 restricted trades have been carried over from the TQAA. They are (with the date of their establishment as compulsory/restricted): Automotive Service Technician (1944); Hairstylist (1944); Fuel and Electrical Systems Technician (1953); Auto Body and Collision Damage Repairer Branch 1 (1953);

\textsuperscript{10} See, for example, s.2.3 of the Apprenticeship Program Summary for Alignment and Brakes Technician: “The Industry Committee has identified a journeyperson-to-apprentice ratio of 1 journeyperson to 2 apprentices as the ratio generally necessary for an apprentice to be properly trained on the job in this program. There may be individual circumstances where the ratio varies from this Guideline.”

\textsuperscript{11} A person holding a Certificate of Qualification under either the TQAA or the ACA, as well as persons holding Certificates of Qualification issued in another province or territory of Canada, is qualified to perform compulsory work in Ontario in the certified trade if the Certificate bears a Red Seal issued pursuant to standards established by the Canadian Council of Directors of Apprenticeship. To obtain the Red Seal designation, the person writing the requisite examination must pass it by obtaining a minimum grade of 70%. The Ontario Red Seal trades are listed in Appendix 7.

\textsuperscript{12} ACA section 5 empowers the Committees to advise the Minister with respect to apprenticeship programs and the qualifications required for trades, other occupations and skill sets; to develop and devise apprenticeship programs for recommendation to the Minister, including curricula, training standards, examinations and the persons and institutions that will provide training; to promote high standards in program delivery; to promote apprenticeship as a method of acquiring skills; and consider recommendations from employers, apprentices and others who work in the trade.
Alignment and Brakes Technician (1969); Motorcycle Technician (1969); Transmission Technician (1969); Truck Trailer Service Technician (1969); and three sub-trades: Auto Body Repairer Branch 2 (formerly part of the Auto Body and Collision Damage Repairer) (1990); Automotive Electronic Accessory Technician (previously part of the Automotive Service Technician) (1996); and Truck and Coach Technician (previously part of the Automotive Service Technician) (1996). The one restricted skill set program is Water Meter Installer (2002).

29. There are several other miscellaneous Regulations which should be noted: e.g., Regulation 566/99, dealing with exemptions from, for example, the age requirements and academic standards set out in sections 6(2) and (3) of the Act. These apply to persons enrolled in secondary school programs leading to an Ontario Secondary School Diploma while enrolled in OYAP; and some specific exemptions related to tasks performed by some individuals in the automotive area. Section 6.2 exempts OYAP and Pre-Apprenticeship participants from the restricted (compulsory) requirement. Regulation 32/02 deals with fees, exemption from fees, and circumstances under which the Director may approve increased fees.

30. The legislation is supported by substantial government funding (note that funding for compulsory and voluntary apprenticeship programs is provided in Appendix 8.) Government-funded programs include the following: 13

- The **Seat Purchase** Program provides funding to approved training delivery agents (TDAs) to deliver the in-school component of apprenticeship training.

- The **Apprenticeship Innovation Fund** supports the development of new training programs, and innovative, flexible delivery methods in response to industry and apprentice needs. It also supports the development of prior learning assessment tools and curriculum standards to support outcomes-based training.

---

13 The recent apprenticeship announcements made in the Ontario Budget 2008 are not included.
● The **Apprenticeship Scholarship and Employer Signing Bonus** supports training and employment for youth who have left school but require upgrading to meet the academic entry registration requirement for apprenticeship training: $1000 scholarship for a young person who returns to, and completes academic upgrading and is registered as an apprentice; $2000 per apprentice signing bonus for the employer who supports the candidate’s apprenticeship registration and provides apprenticeship training.

● The **Loans for Tools Program** helps first-year registered apprentices pay for their initial costs of tools and equipment. This program offers loans that are interest-free during and up to one year after the apprentice’s training.

● The **Ontario Youth Apprenticeship Program (OYAP)** is offered through Ontario’s secondary school system and provides cooperative education and workplace-based experiences in the skilled trades to grade 11 and 12 students.

● The **Pre-Apprenticeship Training Program** helps potential entrants to the apprenticeship system develop their job skills and trade readiness so that they will be prepared to find work as apprentices. Programs are up to 40 weeks in duration and include the Level 1 apprenticeship in-school training, relevant safety training and a minimum 8-week work placement. Programs may also include trade readiness, employment preparation and academic upgrading.

● The **Co-op Diploma Apprenticeship Program** combines a college diploma program and apprenticeship training leading to a Certificate of Qualification. The program enables participants to train as apprentices in a specific trade while obtaining an associated college diploma.

● The **Apprenticeship Training Tax Credit** encourages Ontario businesses to hire and train apprentices in skilled trades primarily in the construction, industrial and motive power sectors. The tax credit provides up to $15,000 towards eligible apprentices’ salaries and wages for the first 36 months of training by private sector employers of apprentices.
- The **Skills Training Infrastructure Program** provided capital funding (one-year investment) to support upgraded and new equipment in union-employer training centres.

- The **Apprenticeship Enhancement Fund** provided capital funding (five-year investment) to colleges delivering apprenticeship training programs to acquire up-to-date equipment and update facilities.

**Funding Allocation 2007-08**

**Selected Apprenticeship Programs**

<table>
<thead>
<tr>
<th>Operating</th>
<th>2007-08 Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provincial Apprenticeship In-School Seat Purchase</td>
<td>$ 44,878,800</td>
</tr>
<tr>
<td>Skills Development EI-eligible In-school Seat Purchase</td>
<td>$ 31,900,000</td>
</tr>
<tr>
<td>Apprenticeship Innovation Fund</td>
<td>$ 5,250,000</td>
</tr>
<tr>
<td>Apprenticeship Scholarship and Employer Signing Bonus</td>
<td>$ 1,968,000</td>
</tr>
<tr>
<td>Ontario Youth Apprenticeship Program</td>
<td>$ 8,250,000</td>
</tr>
<tr>
<td>Pre-Apprenticeship Program</td>
<td>$ 6,232,600</td>
</tr>
<tr>
<td>Co-op/Diploma Program</td>
<td>$ 9,906,500</td>
</tr>
</tbody>
</table>

**Capital Programs**

| Skills Training Infrastructure Program          | $ 25,000,000 |
| Apprenticeship Enhancement Fund                | $0 |

**Loans**

| Loans For Tools Program                         | $ 4,400,000 |

Source: Ministry of Training, Colleges and Universities

Apr-08
Overview of Administration

31. The Ministry of Training, Colleges and Universities is charged with administration of the two Acts. Through the various branches and units involved in this responsibility, the Ministry assumes a variety of roles, not the least of which is the funder, and engages in numerous activities including functions performed by a substantial field force, whose members work with clients (apprentices, employers/sponsors), monitor training\textsuperscript{14}, conduct assessments, administer examinations, counsel, mediate, oversee the administration of the in-school portion of training, and engage in marketing efforts. Head office staff have a role in overseeing the legislative framework, standards development, examination security, maintaining records, overseeing certificate issuance and renewal; acting as the secretariats to the PACs and ICs, representing Ontario at the Canadian Council of Directors of Apprenticeship and the Interprovincial Standards and Examination Committee and other related working groups for the Red Seal Interprovincial Program.

The Application Process for New Apprenticeship Programs

32. Typically, an industry group will approach MTCU requesting that a trade become apprenticeable under one or other of the two statutes and that it be categorized as either voluntary/unrestricted or compulsory/restricted. The Ministry then examines the applicant’s representations to determine whether the occupation, trade or skill set is capable of receiving workplace-based training and whether there is a basis for a viable trainer/trainee relationship. When MTCU officials are satisfied that these threshold criteria are met, they then assess the needs and demands for the establishment of an apprenticeship program, including whether the request is consistent with government priorities. Some government priorities are fixed and are set out in the Purpose Clause of

\textsuperscript{14} With respect to both compulsory/voluntary (TQAA) and restricted/unrestricted (ACA) programs, some question MTCU’s effectiveness in monitoring the apprenticeship contract between the employer (or sponsor) and the apprentice and in monitoring the application of the training standards – both on-the-job and in-class – to ensure that the requirements of the program are being carried out. Given the number of apprentices it may be unrealistic to expect that the Ministry would be able to do much more than rely on the reports submitted by the employer, the training institute and any comments or complaints from the trainee. In other words, under the present system, the Ministry relies on the good faith disclosure and reporting practices of the participants – although it does respond to complaints and conducts some spot checks for compliance.
the ACA, s. 1(c) which refers to expanding opportunities for Ontario workers, increasing the competitiveness of Ontario businesses and ensuring public and worker protection. The TQAA contains no similar purpose clause. The Ministry, I am advised, also considers whether the application for the establishment of an apprenticeship program will contribute to reaching the apprenticeship registration goals set by the government on an annual basis. Some question the desirability of purely numerical goals, which may or may not be related to carefully researched and prioritized labour market requirements. Some also question the desirability of expanding apprenticeships in non-traditional sectors, despite the benefits of the apprenticeship model of training that others assert is extended to those sectors.

33. In making a determination to proceed with development and approval of an application for a new apprenticeship program, the Ministry requires the applicant to complete an environmental scan in order to initiate formal discussions. The industry applicant is asked to identify the following: the estimated number of employees which the sponsoring group(s) represent, the estimated number of employees currently working in the trade/occupation, the estimated number of apprentices who would be entering training each year, those groups who are not prepared to support an apprenticeship at the time of application or who have are not been involved in the proposal, those groups who support and oppose the application, a detailed definition of the trade including a description of work, the major tasks of the proposed occupation as performed in Ontario, the average length of time required to ensure adequate exposure to the major tasks of the trade, and the related theoretical skills that an individual would require to be able to enter the program. I conclude from these items that the Ministry requires initial indication of broad support from employers and employees in the particular trade and also that the proposed apprenticeship program will be sustained through a sufficient number of registrations.

34. If the initial conditions are satisfied, and an assessment for suitability for development is positive, the Ministry works with industry experts - labour and management – to develop the training program. Development is guided by the sponsoring PAC or IC. If it is a trade for which a PAC or IC does not exist, an industry steering committee is established
(which does not involve member appointments by the Minister). Also, the assessment and development activities may involve consulting with other regulators, other PACs or ICs and training institutions (the latter to ensure that there are potential TDAs). During development, care is taken to identify and avoid, so far as possible, skill overlaps with compulsory trades. When the standards are finalized, the material is presented to the Director for approval. Upon approval, the program for the new trade is implemented.

35. Any trade, occupation or skill set that requires a Regulation – i.e., compulsory or voluntary, under the TQAA, or restricted under the ACA – requires the Minister’s approval prior to the regulatory process being initiated. Otherwise, under the ACA, the Director’s approval is sufficient. For ease of reference, a tabulation of all compulsory and voluntary trades under the TQAA and all restricted and unrestricted trades, occupations or skill sets under the ACA, including the dates upon which they were established, appears as Appendix 9 to this report.
CHAPTER 6 – COMPARISONS WITH OTHER CANADIAN JURISDICTIONS

36. Labour mobility in the construction industry in particular, tends to be Canada-wide. This is evident from the Red Seal program and is driven, at least in part, by special regional project needs: currently, for example, the extensive activity in the oil and gas projects (oil sands development, gas and oil pipelines, etc.) in Alberta, the petro-chemical developments in the Sarnia area of Ontario, etc. For that and other reasons, comparisons with the way in which other jurisdictions designate their trades is warranted. What follows is an overview, and does not purport to be exhaustive.

37. Certain features are common to some of the provinces. For example, most governances are handled by standing industry boards, supported by advisory committees. Except for Quebec where, effectively, all construction trades are compulsory, Ontario has the largest number of compulsory trades/occupations, followed by Alberta with 20, Manitoba and New Brunswick with 9 each and Newfoundland with 3 (designated as “occupations”). In terms of registrations and the numbers of active apprentices, the provincial figures are as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario</td>
<td>23,160</td>
<td>95,057</td>
</tr>
<tr>
<td>Alberta</td>
<td>23,954</td>
<td>59,666</td>
</tr>
<tr>
<td>British Columbia</td>
<td>12,896</td>
<td>32,436</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>2,214</td>
<td>6,359</td>
</tr>
<tr>
<td>Manitoba</td>
<td>1,844</td>
<td>5,757</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>1,156</td>
<td>3,414</td>
</tr>
<tr>
<td>Newfoundland</td>
<td>716</td>
<td>3,475</td>
</tr>
<tr>
<td>Quebec</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: CCDA, Provincial and Territorial Apprenticeship Information and Activity Report, 2006

38. While Ontario has the highest number of compulsory trades, some provinces have made trades compulsory which are voluntary in Ontario. The following are the examples.
I turn now to a brief description of how applications for compulsory certification are dealt with in the provinces and territories.\textsuperscript{15}

39. In Newfoundland and Labrador, jurisdiction for certification falls under the Department of Education. The legislation for Blaster is included under the \textit{Occupational Health and Safety Act, Workplace Health and Safety}. The legislation for Construction Electrician and Residential Electrician falls under the mandate of the Department of Government Services. However, certification is still issued by the Industrial Training Division, Department of Education. A proposal for compulsory certification is generally forwarded to the Provincial Apprenticeship and Certification Board with a rationale for the request and supporting documentation. The Board considers safety implications (workers and the general public), jurisdiction issues, trade population, scoping issues and certification requirements as key elements. The Board, based on information provided will make a decision to support or to not support the request. If the Board supports the request, a

\begin{tabular}{|l|l|}
\hline
\textbf{Province} & \textbf{Compulsory}  \\
 & \textbf{(Voluntary in Ontario)} \\
\hline
Alberta & Construction Boilermaker  \\
 & Elevator Constructor  \\
 & Gasfitter  \\
 & Heavy Equipment Technician  \\
 & Ironworker  \\
 & Recreation Vehicle Service Technician  \\
 & Rig Technician  \\
Manitoba & Electrician Industrial  \\
 & Electrologist  \\
 & Aesthetician (nail and skin care)  \\
 & Sprinkler System Installer  \\
New Brunswick & Bricklayer  \\
 & Sprinkler System Installer  \\
Newfoundland & Driller/Blaster  \\
\hline
\end{tabular}

\textsuperscript{15} Descriptions are based on information gathered in November 2005. Requests for updates were made to each jurisdiction and confirming responses were received from Alberta, Manitoba, Newfoundland and Labrador, Saskatchewan, Northwest Territories, Nunavut and the Yukon. When this report was submitted, no confirmation had been received from PEI, Nova Scotia or New Brunswick. As indicated, the systems in Quebec and B.C. are fundamentally different from other provincial and territorial models.
recommendation is forwarded to the Minister. Industry support is always a significant factor in the decision making process.

The following applications for compulsory certification were granted since 1994: Construction Electrician, Residential Electrician and Driller Blaster. Applications pending include Boom Truck Operator, Mobile Crane Operator, and Tower Crane Operator. If these pending hoisting occupations are approved for training and certification, regulations outside the mandate of the Department of Education may be enacted; however, it is anticipated that examination and certification will remain under the auspices of the Industrial Training Division.

In Nova Scotia, the application for certification falls under the Apprenticeship Training and Skill Development Department, which is responsible for the Apprenticeship and Trades Qualification Act. The applicant (industry group) must complete an “Application for Certification of a Designated Trades” form. The Administrator of the Provincial Apprenticeship Board (PAB) will review and forward it to the associated subcommittee. If application is complete the PAB subcommittee makes a recommendation to the PAB at the next scheduled meeting. If not complete – subcommittee works with applicant to meet information requirement(s).

In instances where the PAB determines it does not have sufficient ability to conduct a thorough review at the Administrator/ subcommittee or Board levels, the PAB may establish an Ad Hoc Industry Advisory Committee (AHAC) to assist the review. It may also validate the information in the Application and prepare research/ information for the Board. It must report the results of its review to the PAB within 90 days of receipt of application. If an AHAC is not established, the PAB shall engage in an industry validation within 60 days of the last regularly scheduled PAB meeting. The PAB within 90 days of receipt of AHAC report must engage in a formal industry validation process. This involves a notice of “public consultations” in local paper and groups/ persons deemed necessary. The PAB may hold up to 4 public consultations. The PAB may carry out a final review of the application.
Applicants must provide/describe: list of stakeholders; industry support; demonstrate need for certification based on potentially hazardous substances, equipment or techniques used in the trade; scope and degree to which materials and methodology of the trade, if improperly applied, may harm workers, members of the public, property or may have the resulting product/activity put the public at risk. Applicants must describe how certification would address these issues; impact on individuals, employers, or general public; whether the trade is currently regulated under any Federal/Provincial legislation; and how industry monitoring/enforcement of the trade could be accomplished. The PAB’s recommendation for approval or rejection is advisory to the Minister, who may determine whether a trade shall be certified.

The Sprinkler System Installer was granted compulsory certification in 2004 and as of November, 2005, there were outstanding applications by the Boilermaker and Steamfitter. Enforcement officers of the Apprenticeship and Skill Development Division conduct compliance audits and site inspections upon complaint. Only certification is enforced.

41. In New Brunswick, application for compulsory certification falls under the Ministry of Apprenticeship and Occupational Development pursuant to the *Apprenticeship and Occupational Certification Act*. The industry must demonstrate the impact on: public safety; consumer protection (minimum qualification to perform industry expected level of competencies); protection of the environment; workers’ protection; effects on the industry, and impact on employees and employers.

In 1995, the Refrigeration and Air Conditioning Mechanic was granted compulsory certification, followed by the Sprinkler System Installer in 1999. Pending applications as of November, 2005, included the Oil Burner Mechanic, the Sheet Metal Worker and the Steamfitter/Pipefitter. Certification enforcement is carried by Ministry field staff.

42. In Prince Edward Island, the application for certification falls under the Department of Education, Apprenticeship Section. In 2004, the Construction Electrician was granted compulsory certification and an application by the Steamfitter/Pipefitter was outstanding in November, 2005. Certification enforcement of the Construction Electrician is carried
out by electrical and plumbing inspectors from the Electrical and Boiler Inspection Branches.

43. In Manitoba, the application for compulsory certification falls under the Department of Competitiveness, Training and Trade. Under the Industry Workforce Development Division, the Apprenticeship Branch can designate a trade as compulsory pursuant to section 19 of the *Apprenticeship and Trades Qualification Act*. Pre-May 1998, industry made such requests to the Apprenticeship and Trades Qualification (ATQ) Board. The Board proposed draft regulations, which were reviewed and researched at the Regulation Review Committee of Cabinet. If approved, the regulation would be drafted by the Justice Department and directed through a standard Order-in-Council process. Post-May 1998, industry now must make a request through the Provincial Trade Advisory Committee (PTAC), and must demonstrate that compulsion will facilitate: public safety; worker safety; environmental protection; and consumer protection. The Apprenticeship Branch conducts a preliminary review and the Board reviews the results and may reject or approve. If approved, a consultant-led feasibility and impact study is undertaken. Following review, the Board may reject further activity or grant its approval. If approved, the Board may conduct public consultations or recommend compulsory certification for a specific trade regulation to the Minister of Competitiveness, Training and Trade. The Apprenticeship Branch and Justice Department jointly develop the trade regulation for Ministerial review. The Minister may reject or approve and register it.

In 1997, the Refrigeration and Air Conditioning Mechanic was the first trade to be granted compulsory certification. Manitoba currently has nine compulsory trades. Outstanding compulsory certification applications include Sheet Metal Worker and Plumber. The Apprenticeship Branch, in particular, Apprenticeship Training Coordinators, are responsible for employer and journeyman/apprentice education to aid in regulatory compliance.

44. In Saskatchewan, applications for designation of trades fall under the Apprenticeship and Trade Certification Commission pursuant to the *Apprenticeship and Trade Certification Act, 1999*. Designation of a trade as “compulsory” is the responsibility of the provincial
government, with the advice of the Commission. Before the minister recommends that the Lieutenant Governor in Council prescribe or remove the designation of a designated trade or sector as a compulsory apprenticeship trade or a compulsory apprenticeship sector, the Minister must receive a recommendation from the Commission respecting the designation of the designated trade or designated sector as a compulsory apprentice trade or a compulsory apprenticeship sector. The Commission requires the trade to conduct its own survey to identify support, opposition and concerns of the trade becoming a compulsory apprenticeship trade.

Before making a recommendation to the Minister, the Commission shall: determine that a majority of employers and a majority of employees working in the designated trade or designated sector support the recommendation to make the designated trade or designated sector a compulsory apprenticeship trade or a compulsory apprenticeship sector; be satisfied that the work of the designated trade or designated sector to be prescribed is clearly defined; be satisfied that no overlap or duplication with the work of an existing designated trade or designated sector will occur except as prescribed in the regulations; be satisfied that implementation of the recommendation will result in improved occupational health and safety and public safety; be satisfied that the implementation of the recommendation will benefit Saskatchewan residents; inform, in any manner that the Commission considers appropriate, employers and employees and the general public of the Commission's intention to request a new compulsory apprenticeship trade or a new compulsory apprenticeship sector; consult, in any manner that the Commission considers appropriate, with employers and persons working in the designated trade or designated sector; hold any public meetings that it considers necessary; and meet any other requirements the minister may require. It has been the Commission’s practice to hold public hearings on any request for compulsory designation.

The Refrigeration Mechanic was granted compulsory certification in 1988 and a number of construction trades are said to be planning requests for compulsory certification. Certification enforcement is carried out by field consultants, who have the power to commence prosecutions for non-compliance. The Sprinkler Systems Installer trade has
been forwarded to government with the recommendation that it be made a compulsory trade, following due process by the Commission.

45. In Alberta, applicants must prepare a letter applying for designation and the supporting documentation using the criteria and guidelines set out in the *Alberta Apprenticeship and Industry Training Act* Designation of Trades and Occupations Information Package. Applications and supporting documentation are first reviewed by the Department of Advanced Education and Technology; other government departments may be involved as required. The department will provide background information to the Alberta Apprenticeship and Industry Training Board to assist it in its review of the application. The Board will make its recommendations to the Minister of Advanced Education and Technology based on its review of the application and supporting documentation against the criteria for designation. Any changes to existing designations are subject to a government review process required for all new and amended legislation and regulations, through the Government of Alberta’s commitment to regulatory reform. The designation of a compulsory or optional certification trade requires the approval of the Minister and provincial Cabinet.

When granting compulsory certification the Alberta Apprenticeship and Industry Training Board considers: extent of industry support; need for apprenticeship training; range of skills, extent of technical knowledge, and industry’s desire to train for or recognize these, provide for a viable career; overlap with other trades; further authorization by other government bodies; impact in Alberta and other Provinces/Territories; a sufficient supply of new apprentices; the degree of risk of harm to workers and public, and demonstrated need for proven competency.

In 1989, the Crane and Hoisting Equipment Operator was granted compulsory certification, followed by the Boilermaker in 1991 and the Ironworker in the same year. Pending applications include the Structural Steel and Placefitter, the Sprinkler System Installer and the Millwright (Industrial Mechanic). The Alberta Advanced Education and Technology, Apprenticeship and Training Division administers the Act. Its activities include enforcement promotion, counselling and on-the-job training.
In British Columbia, applications for compulsory certification are no longer provided for. All compulsory trades were removed in B.C. on January 2, 2004. Guidelines for establishing a new training program have been developed to assist industry groups. Industry identifies need for new training program and consults with Industry Training Authority (ITA) on objectives and intentions. Industry develops a preliminary proposal. ITA Standards Committee provides approval in principle of proposals. Industry groups complete occupational analyses and standards and develop full proposals for new training programs.

Industry steering committees are established to guide and manage the processes. Applicants must show: industry support; labour market demand/mobility impacts; competency/skill profile; training requirements; relationship to other occupations; other approvals/requirements; impact/benefits on BC industry training system, labour market, general public; sustainability; and a viable financial model.

ITA validates occupational analyses and proposed standards through independent technical review. ITA Standards Committee reviews proposal and ITA staff reports and makes recommendations to the Authority for a decision.

In Nunavut, the application for certification falls under Adult Learning & Post Secondary Services. Nunavut adopted The Northwest Territories Act and Regulations. Changes and/or additions have not been made to date. There is no formal process for applying for compulsory certification. Nunavut currently has two trades, the Construction Electrician and Gasfitter trades, which requires compulsory certification in the Territory. If an industry/interest group were to request compulsory status it would make a formal request to the Apprenticeship and Occupational Certification Board. The Board would review the request and documentation and send its findings to the Minister for approval or rejection.

In the Yukon, the application for certification falls under the jurisdiction of the Department of Education pursuant to the Yukon Apprenticeship Training Act. There are no trades that have been granted compulsory certification under the Apprenticeship legislation. Gasfitters and Electrical contractors are required to be licensed through
Building Safety Branch legislation. Enforcement and licensing to permit practicing as Gasfitters and Electrical contractors are done by the electrical gas inspectors. The same situation applies in the Northwest Territories.

49. In Quebec, the process of certification falls under the Emploi Québec and the Commission de la Construction du Québec (CCQ). The criteria for certification establish that where all trades are compulsory they are designed around issues that enhance worker protection, consumer protection, environmental protection, and regulation of the trade. In Quebec most construction trades have mandatory training and certification.
CHAPTER 7 – WHAT WAS HEARD AT MEETINGS WITH STAKEHOLDERS

50. Following receipt of written submissions, I met with interested parties during the period of February 11 to 25, 2008. Close to 400 individuals attended and I benefited greatly from the instructive dialogue on the many contentious features of my assignment. There were common threads across the sessions, but there were also clear differences on the principal issues. While the sessions were not transcribed, full notes were taken at each of the six meetings. Predictably, there was a substantial amount of unavoidable repetition. As a result, little purpose is served in attributing the following comments to specific meetings – except where regional concerns were expressed. What follows is a sample of the commentary, focusing on the items which received the greatest emphasis.

51. Early in the dialogue, an industry representative from a compulsory trade suggested that current compulsory certified trades tend to be in the lower half of WSIB rate groups, indicating superior health and safety performance by the compulsory trades. Other representatives of the compulsory trades emphasized the health, safety and training advantages to compulsion, although a consistent theme was the lack of effective enforcement. A representative of the International Union of Operating Engineers expressed dissatisfaction with the existence of two pieces of legislation, pointing out that Crane Operators were compulsory under the TQAA, but that heavy equipment operators were voluntary under the ACA and therefore were not subject to any enforcement. At all of the meetings, there was a call for mandatory health and safety training. Workers would be required to complete this training prior to working on the job. The program was described as a 30 hour training program.

52. Representatives of the Ontario Homebuilders Association made detailed arguments at most of the meetings in opposition to more compulsory certification for construction workers in the residential sector, contending that the WSIB evidence on fatalities during 1999-2005 indicated that the homebuilding rate group had a substantially better record, at least in fatalities, than employers in the electrical, mechanical and sheet metal groups. They also questioned the desirability of interfering with the option of homebuyers and

16 See Appendices 2 and 4 for focus group material.
homeowners to select their trades rather than having compulsory trades forced upon them, with resulting increases in costs. It was also pointed out that there exists a number of checks and balances against inadequate homebuilding through municipal permits and inspections, as well as the Tarion New Home Warranty Program. Others questioned the scope and effectiveness of the warranty, pointing out that many contractors evade participation.

53. Other issues raised included the desirability of enhancing the high school curriculum to better introduce trades as a desirable occupation; the difficult problems encountered by employers committed to training, only to have their trainees “poached” by employers with no training commitment or capacity; comments on the Apprenticeship Training Tax Credit, which some asserted was insufficient to relieve against the high cost of training. It was also suggested that the tax credit should be available only when the applicant employer’s apprentice has completed the full apprenticeship training course. Others raised the alleged anomaly of the industrial plant exclusion, excluding tradespersons who are compulsory when performing their functions in the construction sector, but are voluntary when performing identical work in industrial plants.

54. Many spoke of the low rates of completions, in both the voluntary and compulsory trades. Others spoke of the perceived need for more incentives for employers to hire apprentices. Those in favour of compulsory certification argued that the “culture of apprenticeship” can only be strengthened by expanding compulsory certification. Those advocates contended that unless trainees see a “carrot” in the form of a compulsory C of Q at the end of the training period, there is no (or insufficient) incentive to either register or complete apprenticeship. Others disagreed, referring to their experience with the voluntary trades and contended that there is sufficient inducement in the content of voluntary training programs to attract registrants and have them proceed to completion.

55. There was much discussion, but no consensus, on the effect, or lack thereof, of compulsory certification on the underground economy. Many contended that having compulsorily certified tradespersons would discourage “underground” employers, since government inspectors would detect their illegal activities more easily if those
performing the work of compulsory trades did not have the appropriate certificates. Others argued that the costs associated with compulsory certification would drive an even greater number of contractors and their employees into underground activity, especially since enforcement is not widespread and that even when contraventions are detected, the penalties are not sufficiently onerous to discourage the illegal activities.

56. The advocates of compulsory certification spoke about the need to create a “sense of professionalism” amongst the members of the various trades. Many used the analogy with the legal, medical, engineering and architectural professions as indicators that compulsory training produced higher levels of competency, with attendant benefits to the public at large. Moreover, according to the advocates, compulsory training would result in substantial increases in registrations, given the prospect of improved earnings and greater job security. Apprentices, they argued, are not content with obtaining ad hoc assignments, but are looking for careers with some measure of continuity in employment. On the other hand, advocates in favour of the status quo contended that many of the areas in which the existing trades operate, especially in the construction sector, are inherently cyclical, and that under any system, compulsory or voluntary, there can be no guarantee of employment continuity.

57. There was also much discussion of the effect of voluntary vs. compulsory requirements on trade shortages. These discussions involved differing perspectives on the role of ratios. Many employers took the position that restrictive ratio requirements are artificially limiting the availability of tradespersons, to the detriment of particular sectors and the economy at large. More specifically, employers with smaller workforces said that ratios in excess of 1:1 effectively prevent them from having apprenticeship programs. Union representatives argued that some employers wished lower ratios to enable them to reduce their labour costs by employing large numbers of apprentices. Proponents of the existing ratio regimen emphasized the need to ensure that apprentices received appropriate on-the-job training from experienced journeypersons. Further, they contended that in many cases, existing ratio provisions were being ignored to the detriment of training requirements and also exposing untrained apprentices to dangerous working conditions.
58. Despite these differing perspectives, most agreed that enforcement is a major issue. It was generally recognized that even with a substantially increased cadre of MOL inspectors, the extent and geographic scope of project activity involving tradespersons make enforcement an enormous problem. There was some discussion about how enforcement activities might be augmented. One participant suggested that PACs and ICs should be given a greater role and this in turn led to a broader discussion about self-enforcement, although no specific proposals were advanced about how industry and labour representatives might collaborate with the MOL inspectorate in monitoring activities and detecting contraventions.

59. At almost every meeting, Homebuilders representatives repeated their opposition to compulsory certification (see para. 52). Association representatives from Ottawa referred to the size of the industry (2 billion dollars generated in 2007); the relatively positive record in health and safety performance in the residential sector, as indicated by WSIB statistics; the lack of any clear, evidence-based correlation between compulsory certification and health and safety performance; the frequently restrictive effect of ratios in the compulsory system on the supply of labour in the residential sector; the alleged superior record of completions in the voluntary vs. the compulsory trades; and the assertion that Ontario, with the greatest number of compulsory trades, has the highest registration rate, but the lowest completion rate, of all of the Canadian provinces. It was stated that residential construction is, in Ontario, subject to a 7-step inspection process by governmental authorities and that Tarion’s warranty coverage for consumers is one of the best in North America. As to the suggestion that compulsory certification would increase labour supply and mobility, the Homebuilders contended that the opposite would occur by making the process longer and more complicated, resulting in fewer entrants and reduced completions. It was also said that the inevitable result would be to drive labour costs higher, to the detriment of home buyers and home renovators.

60. The Road Builders also opposed increased compulsory certification. Their representatives argued that many of their employees are transient workers, engaged locally for a finite period, and that the structure of the industry did not lend itself to the retention of fully-trained tradespersons. Many of their employers are labourers, requiring
minimal skills. With respect to their heavy equipment operators, the Road Builders claimed that they were vigilant in ensuring their operators were properly trained and contended that their health and safety and competency records supported the fact that their workforces were adequate, in all respects, under the current system.

61. A representative of the Labourers union, commenting on ratios, contended that while reasonable ratios were necessary to ensure adequate training, they should not be used as an artificial marketplace barrier to the needed supply of labour. The issue of trade descriptions and overlaps was also raised and it was stated that it was unrealistic and inefficient to describe trades in an overly-comprehensive manner, ignoring valid distinctions between the more complex core functions of some of the long-established trades and the lower skill requirements of the peripheral functions. Any move to compulsory certification, it was contended, should take these factors into account.

62. Most agreed that consumer protection was a central issue in considering the characterization of trades as voluntary or compulsory. However, proponents of the status quo argued that there was a lack of persuasive evidence of a greater incidence of consumer complaints with respect to work performed by voluntary trades. On the other hand, it was agreed that insurers provide lower premiums and/or premium discounts to contractors who engage fully-certified tradespersons – a persuasive indication, according to the compulsory trade proponents, that there is a general recognition that compulsory tradespersons perform superior work. No concrete evidence was provided to shed further light on the issue of consumer protection.

63. As to the TQAA industrial plant exemption, submissions were made by some well-known large employers (e.g., Vale Inco and Hydro One) who contended that even without the industrial plant exemption, their operations were sufficiently specialized and sophisticated to require trades training programs which exceeded, in content requirements and sophistication, those offered under statutorily-designed apprenticeship programs. They claimed that because of the pre-apprenticeship assessment programs conducted internally, they were able to determine competencies at an early stage and make informed decisions as to those with the necessary basic qualifications to pursue and complete their
trades’ requirements. It was also said that the statutory standards for compulsory trade certification would not necessarily cover the specific functions required to be performed in specialized industrial undertakings.

64. Representatives of some of the larger industrial unions disagreed, contending that there was little, if any, distinction to be made between the content of the statutory apprenticeship programs and those designed and implemented in industrial plants. They reiterated the frustration experienced by their skilled tradespersons when the tradespersons employed by external contractors entered these larger plants and, as compulsorily-trained workers, performed identical work to their own. The union representatives also expressed their concerns about the diminishing opportunity for skilled trades work in the province’s manufacturing sector and pointed out that those tradespersons faced with layoffs, given their voluntary status, would be disadvantaged in seeking alternative employment in existing sectors where compulsory certification is required.

65. Those favouring compulsory certification pointed to some of the prominent, catastrophic results of ill-trained tradespersons, mentioning the deficiencies uncovered in the B.C. condos affair and the Walkerton drinking water tragedy. Those representing non-construction trades, marine operators, for example, emphasized their unique concerns, including the important functions of the Boat Mechanic, who unlike the Automotive Service Technician, is not included as a compulsory trade. The marine industry is also concerned that the system recognizes its unique characteristics and that decisions regarding its industry not be dictated by those representing other sectors. One participant raised the issue of priorities and observed that it seemed that priorities were questionable when a Hairstylist is a compulsory trade, but a Power Line Worker is not.

66. A number of spokespersons referred to the need to educate the consumer. It is contended that many consumers lack not only knowledge of the standards that should be observed in the work of trades, but also have limited avenues for bringing complaints leading to appropriate remedies. While court action is an option, the costs of judicial proceedings are, in most cases, prohibitive. Of particular significance were comments made by
several apprentices. All were in voluntary trades and favoured compulsory certification. One referred to the frustration of working alongside a co-worker who was not an apprentice, but was doing identical work for the higher journeyperson rate. Another spoke about reacting to this situation by temporarily abandoning his apprenticeship, only to find that he lacked the training necessary to properly carry out his functions, causing him to return to his apprenticeship program. These problems, the apprentices contended, would not exist if their trades were made compulsory.

In homebuilding and other industries, it was contended that careful consideration should be given, in determining the compulsory/voluntary categorization of trades, to the significance of economic and other labour market variations between urban (especially large municipal areas like the GTA) and rural regions. It was said that if changes are to be made in the compulsory/voluntary mix, the geographical and regional circumstances should be carefully assessed. A number of participants spoke about the need to work out fair and effective grandparenting provisions for those working in voluntary trades that were being converted to compulsory status. There was also limited discussion on the required length of apprenticeship programs, whether voluntary or compulsory. It appeared to be generally agreed that the durations of existing programs, as recommended by the various PACs and ICs, were generally appropriate. Those expressing this view referred to the need for lengthy exposure to the on-the-job training portion of apprenticeship programs and the “logistical complications” associated with the mix of trades involved in many of them.

There were references to the importance – not yet fully recognized, some argued – of ensuring adequate and competent repair to critical equipment where faulty operation involves risks to workers and/or to the public. This discussion arose primarily in the context of the hazards of limiting training to “skill sets”, and in particular separating the repair function from the whole trade of automotive mechanic. Concerns were also expressed about the career implications involved in confining training to skill sets, as opposed to the traditional comprehensive full-trades training which, it was urged by some, led to much broader, less restrictive employment prospects for those choosing the trades career path. Also emphasized was the fact that “whole trade” training leads to the
acquisition of essential knowledge about the interaction between, and sequencing of, the work of the various trades in multi-trade projects.

69. A representative from the food industry referred to some of the unique training requirements for chefs and cooks and in particular, the need to be conscious of the evolving health aspects of the industry, dealt with, for example, in the Canada Food Guide. Representatives from the TV and film industry referred to the evolving requirements for the training of their industry’s technicians. Both industry management and representatives of one of the principal TV and film industry unions, NABET, expressed their current preference for the voluntary certification of their industry’s trade’s technicians. But the impression was left that the technicians’ requirements are becoming more complex and sophisticated and that this is an area that will require careful monitoring as it develops. In another area, a municipal official raised the critical role of instrumentation technicians employed by municipalities to perform a variety of tasks related to public safety, including potable drinking water systems. The apprenticeship program for these technicians is now voluntary under the ACA and it was proposed that it should be considered for compulsory status.

70. There was considerable discussion, mainly positive, about the role of the secondary schools in acquainting students with the positive features of employment prospects in the trades. There was virtually unanimous praise for the OYAP initiative and encouragement for its expansion. A minority were somewhat more sceptical, decrying the fact that there are now fewer technical training secondary schools than in the past and that insufficient efforts are being made to persuade parents that college and university education is not necessarily a preferred route, especially for students with technical aptitudes. As for the post-secondary school setting, there was generally positive reference to developments in co-op training programs in the community colleges, leading to formal apprenticeship training.

71. Some expressed confusion over the roles and inter-relationship between the Ministry of Labour and the Ministry of Training, Colleges and Universities and their respective responsibilities for training and enforcement. Some contended that implicit in the OHSA
is the responsibility of the MOL to conduct training. And others, while acknowledging that enforcement of certification now rests with MOL, were critical of MTCU’s failure to take action to enforce ratio requirements. Most agreed that for compulsory certification, improved enforcement is essential. The health sector professions were suggested as a model to consider: i.e., industry-based self-regulation that set standards and ethical requirements, with effective enforcement procedures. Some of those opposed to any expansion of compulsory certification were categorical in their support for what one participant called “the adequacy of the existing system”, going on to express concern about “the negative effects of imposing more bureaucratic control over an already highly-regulated system”.

72. I have already alluded to the generally positive reaction to the guidance function in the secondary school system in promoting the trades, but there was general agreement that a broader marketing effort should be undertaken by both government and industry to publicize the favourable career opportunities in the trades, reinforcing the promotional work already being done in the school system and expanding it to the wider community – especially in the current environment with diminishing manufacturing job opportunities, while shortages in many of the construction trades are projected by most labour market analysts.

73. Those participants representing trades seeking compulsory status expressed their sense of frustration with their inability to receive responses from the government to their applications. However, there was an almost universally positive response to the suggestion that a process should be developed for having these applications heard, on a case-by-case basis, by a panel or roster of qualified independent advisors, so long as the applications were considered on the basis of a carefully developed, pre-determined set of criteria. Some expressed a desire to be consulted about the criteria if the government decides to follow a process of this sort. On a related topic, there were mixed reviews about the role of the PACs. There was some criticism about the infrequency of PAC meetings and the overly-frequent changeover in membership which, according to some, resulted in a lack of continuity and effectiveness in pursuing useful initiatives. Concerns were also expressed about the alleged unwillingness or inability of some PACs to press
for timely and positive responses from the Ministry to industry-approved proposals. On the other hand, it was generally agreed that the PACs and ICs perform an invaluable function in bringing the essential knowledge and experience of individual industry sectors to the table when apprenticeship programs are being formulated and implemented. There was also an expression of the need for greater coordination and collaboration across industry sectors, especially between construction and other sectors of the economy, particularly manufacturing.

**Conclusions**

74. As stated at the outset of this Chapter, these random observations about the content of the six open meetings with stakeholders are not exhaustive. They are, however, representative of some of the more prominent issues raised by participants. Most were developed in much greater detail than has been possible to do in this brief summary. And all and more were referred to in the useful written submissions filed, both by the participants in the open meetings and by others who were unable to attend. All of the submissions, written and oral, have been fully considered in coming to the findings and recommendations contained in this report.
CHAPTER 8 – STATUTORY/REGULATORY ISSUES REQUIRING SPECIAL CONSIDERATION (Overlaps, Exemptions, Trade Description-Setting, Enforcement)

75. In considering the possible expansion of compulsory trades under the TQAA – or the expansion of restricted trades, other occupations or skill sets under the ACA – an important issue is the extent to which it is possible – and desirable - to set exclusive boundaries in the descriptions of the particular job content under consideration, especially those in the construction industry. Over the past 40-some years under the TQAA, it has become apparent that overlaps between and amongst trades are inevitable, not only on the periphery of the functions performed, but in some cases with regard to the various trades’ core functions. This has given rise to controversy, not only with respect to the enforcement of the TQAA, but also in relation to jurisdictional disputes before the Ontario Labour Relations Board (OLRB). I deal more specifically with this topic – and in particular, the distinction between training legislation and labour legislation – in Chapter 10 under “Other Miscellaneous Considerations”.

76. Although the TQAA is silent on “overlaps”, the Ministry applies certain tests to determine whether persons may perform the work of a compulsory trade under the TQAA. When the work is contained in only one compulsory trade, then it may only be performed by a compulsorily certified journeyperson or an apprentice in that trade. When the work is contained in two or more compulsory trades, then journeypersons or apprentices in either trade may perform the work. Finally, when the work is contained in a compulsory trade and a voluntary trade, there are no limitations on who can perform the work.

77. Under the ACA, the Legislature dealt specifically with the “overlap” problem. Section 12(2) of the Act states: “An individual who is authorized to perform a skill that is part of a restricted skill set may perform that skill even if the skill is also part of another restricted skill set or of a trade or other occupation that includes the restricted skill set.” While there has been some controversy over what is meant by the term “authorized”, MTCU’s position has been that this entitles overlaps between both restricted skill sets and between restricted and non-restricted skill sets, so long as their work descriptions are specifically set out in their respective defining documents. Thus, section 12(2) of the
ACA is, in effect, a permissive overlapping provision mirroring the position taken by MTCU officials on overlapping under the TQAA.

78. As will be seen from the above, the compulsory (TQAA) and restricted (ACA) trades, occupations or skill sets involve technical work descriptions and, in some cases, numerous exemptions. See paras. 21 and 29 for descriptions of exemptions under the TQAA and ACA. Of note is the TQAA industrial plant exemption. Over the years, there has been controversy over this exemption. Industrial unions like the CAW, the International Association of Machinists (IAM) and the Steelworkers contend that this exemption should be eliminated, since it results in the frequently anomalous situation where contractors with compulsorily certified tradespersons come into the plant and perform identical work to those skilled tradespersons permanently employed in the industrial plant. A separate issue relates to the assertion by some employers that they should be included in the industrial plant exemption. For example, it has been suggested that an entire municipality should be considered an “industrial plant” for the purpose of the exempting section 5(1) of Regulation 1055 under the TQAA. However, MTCU’s position is that the intent of the exemption is that it applies to a specific building or facility. The Regulation specifically refers to work performed within a plant and premise or on the land appertaining thereto. There are also industrial plant exemptions in the trade-specific regulations for Electrician and Plumber. I deal with the industrial plant exemption in my Recommendations.

79. The actual and potential overlaps and specific exemptions are numerous. It has been said that the entire mix is a confusing pot pourri of frequently incomprehensible technical classifications and distinctions. To illustrate the complexities, summaries of the definitions and contents of the compulsory trades under the TQAA and the restricted trades under the ACA are set out in Appendix 10, which are seen by some as barriers to rational and effective enforcement. Although the issue was not fully explored, none of the stakeholders proposed that any of the existing compulsory or restricted trades, occupations or skill sets should be re-defined. At no point during my deliberations did any of the stakeholders in any of the existing compulsory or restricted trades express dissatisfaction with their status, with one exception. There were consistent concerns
about ratios. Some employers said that excessively high ratios (i.e., too many journeypersons to permit the retention of a sufficient number of apprentices) were, or could, limit the needed supply of fully-trained journeypersons, depending on cyclical demands. On the other hand, some unions complained about the lack of enforcement of existing ratios, resulting in an overabundance of untrained and unsupervised apprentices. Despite these complaints, I was advised that in a number of cases, mutually satisfactory ratio adjustments were occurring consensually as a result of recommendations by the PACs of some trades (see paras. 179-193 for further elaboration on ratios).

80. The trade, occupation and skill set descriptions in the regulations have been worked out by knowledgeable individuals – those within MTCU with considerable experience, as well as stakeholders and practitioners in the various provincial advisory committees (under the TQAA) and industry committees (under the ACA). Disputes that have arisen over the contours of the trades have, for the most part, been resolved, sometimes with lingering dissatisfaction, but usually pursuant to pragmatic workable arrangements. Some disputes have found their way to the Ontario Labour Relations Board and, as previously indicated, these situations are dealt with in greater detail under the heading “Other Miscellaneous Considerations” in Chapter 10.

81. Arguably, the complexity of the description of at least some of the trades, occupations and skill sets might act as a deterrent to potential applicants considering trade careers. On the other hand, most trades involve unavoidable technical terminology. This fact may well support the utility of pre-apprenticeship training and the expansion, in secondary school courses, of studies that deal with and elucidate the complex, technologically-driven environment in a developed economy like Ontario’s, whose various sectors – construction, manufacturing, mining, forestry, automotive trades and the service sector generally – are becoming increasingly sophisticated, with the use of computerized technologies and equipment. The knowledge and expertise necessary to master these new developments is one of the hallmarks of modern trades training.

82. My mandate does not specifically invite me to advise on the current method by which decisions are made under the legislation on the classifications of trades, occupations and
skill sets. On a strict reading, I am only to consider various stipulated impacts flowing from any decisions that may be made to increase compulsory certification, namely, health and safety, the registration of new apprentices, completion rates, consumer protection, economic impact and any other factor that I may consider relevant in achieving the objectives of the government, expressed in my appointment “to ensure that Ontario’s apprenticeship and certification system continues to meet proper safety standards, to provide value to consumers and serve the needs of the province’s growing economy.” However, it is difficult to consider the impacts referred to in my mandate without commenting on the processes by which decisions are made in defining trades, occupations and skill sets and the criteria that are applied in determining whether they should be voluntary or compulsory.

83. I do not suggest that the decisions on the appropriate trade descriptions, on the various overlaps, on exemptions, or on categorization (i.e., compulsory or voluntary) have been made arbitrarily, or have been motivated by consciously biased considerations. The basis on which they have been made, however, may sometimes reflect varying theories as to the most efficient ways in which labour markets operate.¹⁷ Also reflected in the advice received from the PACs and the ICs may sometimes be the institutional interests of competing trade unions and competing employers. Different views may be expressed by those in the organized and unorganized sectors. To believe otherwise would be naïve. I have not been authorized to make recommendations on the manner in which trades are described. However, I will have recommendations to make on the relevance of trade descriptions in considering applications for compulsory certification.

84. It is to be noted that neither statute requires the decision-makers and advisors – be they the Minister, the Cabinet, the Director of Apprenticeship, the Provincial Advisory Committees or the Industry Committees – to consider the impact factors on which I have been asked to comment. This, in my view, is a significant deficiency. Whatever ultimate

¹⁷ By this I mean the philosophical differences between those who believe that “too much” regulation (i.e., the “compulsory” requirement) tends to distort the natural and self-adjusting operation of the labour market, as opposed to those who believe that unregulated market forces are incapable of ensuring that training will be introduced to ensure competent work and safe practices.
decision may be made as to the best process, decision-makers, as well as their principal advisors, should be required to consider the implications of each of the factors set out in my mandate, namely, health and safety, the effect of designation on the rates of registration and completion, consumer protection, economic impacts on governments, stakeholders and the economy at large – and other factors, including, notably, the broader public interest, all of which I will set out as criteria in my Recommendations.

85. During the course of my inquiries, it has become apparent that a statutory or regulatory requirement for compulsory certification will not be fully effective unless there are enforcement mechanisms – accompanied by meaningful sanctions – that are sufficiently comprehensive to deter widespread contravention. One of the two principal areas requiring enforcement is ensuring that the persons performing the work governed by the TQAA and the ACA are properly qualified. This means that adequate monitoring and enforcement mechanisms should exist to cover the compulsory trades under the TQAA and restricted occupations, trades or skill sets under the ACA.

86. Ministry of Labour inspectors have the authority to determine whether the provisions of the TQAA and the ACA relating, respectively, to those entitled to perform compulsory and restricted trades are being complied with, pursuant to their powers under O. Reg. 572/99 under the OHSA.\textsuperscript{18} Section 2(1) of the Regulation is quite specific in prohibiting workers from performing a skill that is part of a scheduled skill set unless he/she is authorized to perform the skill set under the ACA. Similarly, s. 3(1) prohibits workers other than qualified apprentices and holders of Certificates of Qualification performing work in a scheduled compulsory trade under the TQAA. The trades and skill sets in question, compulsory and restricted, are named in schedules to the Regulation. Thus the MOL inspectors, in performing their training enforcement functions, are now doing so pursuant to a regulation enacted under a Ministry of Labour statute – the OHSA – not through a delegation arrangement with MTCU, as was previously the case.

\textsuperscript{18} MTCU enforces the restricted trade requirement for the trade of hairstylist. The Ministry of Transportation enforces certification requirements for drivers of heavy trucks performing specific work on wheel, rim and air brakes (O. Reg. 566/99 sections 5 and 6.).
87. There is an agreement between the two Ministries, MOL and MTCU, which provides for an exchange of information aimed at assisting in enforcement activities and enabling the results of enforcement to be exchanged and evaluated. One consequence of this relatively new enforcement arrangement is that a violation of a Regulation under OHSA carries maximum penalties much greater than those under either the TQAA or the ACA\textsuperscript{19}. Under the OHSA, an offending individual is liable to a fine of not more than $25,000 or imprisonment for up to a year. If the convicted party is a corporation, the maximum fine is $500,000. This should have a significant effect on deterring contraventions.

88. In 2006, amendments were made to Regulation 950 under the \textit{Provincial Offences Act}, empowering MOL inspectors to issue contravention tickets to employees, supervisors or employers for violations of the TQAA. Employees unlawfully carrying out work in a scheduled trade are liable to be fined $195, and employers authorizing such work are subject to fines of $295. This enforcement tool was introduced to enhance worker safety, to encourage compliance with Reg. 572/99 and to help combat the underground economy in construction by levelling the playing field with respect to workers’ trade qualifications. I was advised that 165 tickets were issued in 2006, 184 tickets in 2007 and 13 tickets to the end of January, 2008. The MOL is unable to break down the issued tickets by trade. The vast majority of tickets were issued in the Ottawa area by inspectors working in the MOL’s Jobs Protection Office.

89. MTCU is responsible for the enforcement of the ratio provisions of the TQAA. (There are no mandatory ratios under the ACA trades, occupations or skill sets.) In the most detailed submission made to me – by the IBEW, Local 586, Ottawa – it is contended that ratio requirements are routinely violated by employers and are “entirely unenforced by provincial regulators”. The submission goes on to say that MTCU training consultants, in dealing with registration of new apprentices or with the transfer of apprenticeship contracts, rely entirely on the employer’s advice, on its application form, concerning the numbers of journeypersons and apprentices in its employ to determine whether the ratio requirements are being met. This information is said to be frequently incorrect and is

\textsuperscript{19} TQAA maximum fine is $2000 (section 24); ACA maximum fine is $25,000 (section 17).
also based upon the employer’s entire work complement and not a single job site – a factor which, it is argued, needs to be addressed in order to ensure that proper supervised training is carried out on each site.

90. It is further contended that this method of determining ratio compliance, which is not accompanied by any systematic monitoring during the course of the period of apprenticeship, amounts to a failure on the part of the Director of Apprenticeship to exercise his/her powers under s.7 of the TQAA to inspect premises, examine books, payroll and other records of employers that would enable the numbers and identity of apprentices and journeypersons to be determined in order that accurate assessments could be made as to whether ratio requirements were being complied with. Moreover, it is said that MTCU is not enforcing these provisions, by inspection, prosecution or otherwise. This conclusion, it is argued, is supported by a 2004 study for the Ontario Construction Secretariat\(^2\), where it was concluded that non-enforcement of the TQAA was a major problem in the context of the underground economy. Similar conclusions\(^3\) were reached about the lack of enforcement by the Provincial Auditor in its 2002 Annual Report and by the Ombudsman in a report in 1989. In addition, the Ontario Labour Relations Board\(^2\), in its certification jurisprudence, has observed that “government agents with direct responsibility for enforcing the TQAA appear…reluctant to do so.”

91. It is argued that non-enforcement of the ratio requirements of the TQAA raise serious health and safety issues, exposing employees – especially younger workers – to exploitation, resulting in what is characterized as a “proliferation of young, untrained, poorly-supervised, unregistered apprentices”. It is recommended that steps should be taken to independently verify information concerning the number of journeypersons and apprentices employed by contractors bound by the compulsory trade requirements; that targeted and random field inspections should be routinely conducted; that ticketing

\(^2\) This study was co-authored by John O’Grady of Prism Economics and myself: *Attacking the Underground Economy in the ICI Sector of Ontario’s Construction Industry*, 2004.

\(^3\) Information provided by the IBEW Local 586, Ottawa, through their written submission to the Review.

throughout the province, not just in the Ottawa area, should be substantially increased; that targeted and random audits of employers’ payroll and tax records should occur; that MTCU should receive and act upon information from MOL inspectors who uncover certification violations so as to check those employers for compliance with TQAA’s ratio provisions. Proponents of increased MTCU enforcement argue that, like the MOL inspectors, MTCU Employment and Training Consultants should be given the power under the *Provincial Offences Act* to issue tickets to offenders and that the consultants should initiate prosecutions for violations of the TQAA. Longer term, it is submitted that s.9(2) of the TQAA should be amended to substantially abridge the existing three-month admissible compliance limit for workers by which time their contracts of apprenticeship must be registered; that the TQAA should be amended to substantially increase penalties for violations; and that ratios should be calculated on the basis of individual job sites, rather than an employer’s total provincial workforce.

92. Those critical of the effectiveness of current enforcement practices make no mention of the steps that have been taken across ministries and agencies to address not only TQAA enforcement issues, but the broader issues of the underground economy, one important aspect of which relates to statutory training requirements. In February, 2005, MOL and MTCU entered into a Memorandum of Understanding under which MOL provides information to MTCU about workers who are found by MOL inspectors to lack proper qualification to conduct work covered under the TQAA and ACA. As of early January, 2007, there had been approximately 350 referrals to MTCU for follow-up action. This aspect of collaborative inter-ministerial and inter-agency attack on the underground economy represents a promising start. It includes an expansion of the MOL inspectorate

---

23 Part of this expanded network involves an agreement between the Ministry of Labour and Tarion Warranty Corporation to share certain information gathered by each of them in relation to unregistered home builders who may be working in the underground economy. The agreement should help ensure that the contractors in that sector comply with all provincial legislation dealing with health and safety, workers compensation, provincial taxes and trades qualification. Tarion, a non-profit corporation that administers the *Ontario New Home Warranties Plan Act*, verifies that contractors are properly registered and homes constructed in Ontario are quality-built with proper materials by workers who are qualified tradespersons. The information exchange initiative under this agreement is being piloted by the Jobs Protection Office (JPO) of the Ministry of Labour in the eastern region of the province, where inspectors are dispatched to investigate potential contraventions, not only of health and safety, retail sales tax and WSIB legislative requirements, but also those associated with violations of trades qualification laws. The expectation is that this targeted investigatory initiative will soon be expanded from eastern Ontario across the entire province.
by some 200 new hires, nearly doubling their ranks. The Ministry’s current strategy targets over 6,000 high risk workplaces – 1,000 of which are in the construction industry – with planned visits at least 4 times a year. Memoranda of Understanding have also been signed between WSIB and Canada Revenue Agency (CRA) for information exchange to reduce the prevalence of economic underground activity. As a result, the WSIB has recovered over $37 million over the past 4 years from employers in default. MOL, for its part, is targeting underground activities in the electrical, residential and renovation sectors. Apart from their authority to collect and share information with the WSIB and the Ministry of Revenue, this also enables the MOL to further fulfil its information gathering role on behalf of MTCU, as does the cross-appointment of MOL inspectors to collect specific information under the Retail Sales Act, the Corporations Tax Act, and the Employer Health Tax Act to determine if firms are properly registered and paying their appropriate taxes. This expansion of duties, functions and obligations of the MOL inspectorate should make a significant contribution to the uncovering of violations of the province’s training statutes. But critics contend that evidence of effective enforcement activity is still lacking. The Ministry of Labour, however, contends that there has been significant improvement in enforcement. In its response to my inquiry, the Ministry states:

MOL inspectors have issued 2,847 orders under O. Reg. 572/99 since 2004. Of these, 945 orders related to electrical contractors. The number of orders issued under O. Reg. 572/99 has also been steadily increased each year. In addition, MOL inspectors have issued 362 tickets related to violations of TQAA trade certification requirements since they were given authority to issue tickets in April, 2006. Although the majority of these tickets have been issued in the Ottawa area…the number of tickets issued in the rest of the province has been steadily increasing. MOL has initiated 3 prosecutions in the past under Part III of the Provincial Offences Act related to violations of TQAA trade qualifications under O. Reg. 572/99 and was successful in obtaining a conviction in one, with an associated fine of $1,000.

While, as the Ministry of Labour contends, improvements may be occurring, enforcement of training standards, by any measure, constitutes an enormous task given the variety and scope of the trades and the vast number of projects in which they are engaged across the
province. For this reason, I will be including recommendations as to how enforcement resources can be augmented.\footnote{MOL enforces the compulsory/restricted certification requirements for ACA motive power trades and issues compliance orders, not tickets.}
CHAPTER 9 – EXISTING DATA AND RECORDS

Introductory Comments

93. Except for material relating to economic impact – and despite the volume of writing on apprenticeship – the data in the possession of government ministries and agencies on the other impact issues covered by my mandate are largely incomplete, of uncertain accuracy, or non-existent. This is not surprising, nor does it support a wholesale condemnation of those ministries and agencies having various roles related to the trades labour market.

94. Each of the involved ministries and agencies collects data for its own specific administrative purposes in order to carry out its statutory mandate as efficiently and effectively as possible. Unfortunately, the type of data, and the methodologies used to collect them, were not designed to answer the questions before me: namely, the effect of compulsory vs. voluntary certification on the broad policy issues of health and safety performance, consumer protection, registration and completion rates and economic impact – nor, for that matter, on related relevant issues such as productivity, public safety and unionization.

95. This threshold difficulty becomes apparent from the information gathered, and the roles of the various bodies, from whom I have sought assistance. The MOL, under the OHSA, does not maintain systematically collected data, identifying trade qualification status, with the exception of those trades singled out for special treatment under the OHSA regulations: i.e., Electricians, Crane Operators and those subject to modular training (asbestos workers on construction projects, those working on logging operations, and certain mining workers). Data for those limited categories, while available, are insufficient in scope and detail to materially assist in the comparisons that I am required to make.

96. The WSIB data pertains to “covered payroll”, not to categories of tradespersons or other workers. The actual numbers of workers covered by employer remittances is only a rough estimate. Moreover, there is no one-to-one correspondence between a WSIB rate group and particular occupations – although, as will be seen, some rate groups are
defined so as to permit some degree of accuracy in relating their lost time injury rates to a particular trade. But even in those limited cases, inferences that can be drawn are only rough approximations, since other trades will inevitably have some peripheral involvement in the rate group.

97. TSSA licensing and certification data are limited to a narrow range of occupations: persons handling dangerous fuels (including several compulsory and restricted trades), boilers and pressure vessels and Elevating and Amusement Device Mechanics. This narrow range of occupations severely restricts the utility of TSSA data in making the required comparisons to voluntary trades.

98. MTCU data on registrations and completions are available and the manner of its collection, as well as its utility, is dealt with in greater detail elsewhere in this report (see paras. 125-133 and appendices 11 and 12). Suffice it to say that there are methodological differences among labour market statisticians concerning the best way to collect and analyze this data, but all appear to agree that there are certain factors that will prevent precise conclusions to be drawn from the material, including the inability to trace apprentices who, without notification, leave their employment before completing their apprenticeships, for unknown destinations, sometimes continuing to work in the trade, frequently at the journeyperson rates of wages. Other immeasurable variables exist: for example, with the industrial plant exemption, it is impossible to determine what proportion of industrially-employed compulsory tradespersons are actually certified.

99. Even if the data from the above sources were to become available, there are several reasons why they could, at best, support only suggestive conclusions or indicative inferences. A valid comparison of compulsion vs. voluntarism would require the data to be compared over a fixed period of time; that is, time series data in a single jurisdiction, or concurrent data from two jurisdictions, one having compulsion and the other voluntarism with respect to trade certification. In the latter inter-jurisdictional comparison, there would inevitably be additional complicating variables. For example, a comparison between Alberta’s construction industry and Ontario’s would, under current conditions, be quite misleading, given the heightened activities in Alberta’s large-scale
oil and gas projects and the resulting heavy demand for tradespersons from across North America.

100. There are also various ways to interpret labour supply/demand factors and trends. For example, what does low demand for skilled labour indicate? Does it represent the employers’ way of coping with low supply; or is it a sign of resistance to increased wage levels; or is it reflective of cyclically-reduced sectoral economic activities; or a combination of all of those factors?

101. All of these variables lead to the conclusion that although available data may assist in validating (or contradicting) instinctive inferences, there is no empirically accurate, formulaic way in which to come to irrefutable conclusions about the relative merits of compulsion vs. voluntarism in the designations of apprenticeable trades. Nonetheless, with these reservations in mind, I conducted a review of the Ontario public sector sources under each of the impact headings, with the results set out below.

**Health and Safety**

102. As previously indicated, the two governmental sources most involved in this critical issue are the WSIB and the MOL, and neither collect data on trades, occupations or skill sets in a manner which enables me to make the comparison between voluntary and compulsory trades, as required in my letter of appointment.

103. In the case of the WSIB, I was provided with figures for lost time injuries by employer rate group for the six years 2002-2007. Also provided were the figures covering traumatic fatalities by rate group for the same six-year period. The difficulty encountered in analyzing this information is the lack of any precise correlation between WSIB employer rate groups and individual trades. For example, none of the rate groups is confined to a single trade. The closest appears to be Group 704, “Electrical and Incidental Construction Services” (the latter designation is non-specific as to the trades involved); Group 728, “Roofing” and Group 741, “Masonry”. But even these latter two groups routinely involve more than one trade. I am told that all groups include some Labourers. And even if rough estimates can be made, there is, in the WSIB data, no collection of information with respect to the certification or not of the worker(s) involved.
in the accident – hence no reliable capacity to compare the accident experience in compulsory and voluntary trades.

104. The MOL, like the WSIB, does not track OHSA infractions by trade. Aggregated information is available from the MOL on contraventions of the Act and Regulations by sector, but not by trade. There are separate and detailed provisions of the omnibus Construction Projects Regulation O. Reg. 213/91 dealing with the work requirements of Electricians and Crane Operators, both compulsory trades. But there are no special or separate similar regulatory requirements for other compulsory trades or for any of the voluntary trades. Accordingly, there is no basis for comparisons of the sort I am to make from the records routinely compiled by the MOL.25

105. The Ontario Construction Secretariat (OCS)26, over the past year, has been working with data supplied by the WSIB in an effort to track and compare the health and safety records of union vs. non-union workplaces in three compulsory trades (electrician, plumber, sheet metal worker) with three voluntary trades (brick and stone mason, painter and decorator, insulator). The OCS advises that the study is still in progress.27

106. The Workers Safety and Insurance Act (WSIA) provides for 14 Safe Workplace Associations, funded from the premiums paid by insured employers. For the purposes of this report, the most relevant of the Safe Workplace Associations is the Construction Safety Association of Ontario (CSAO). Initially, I was hopeful that the CSAO’s Injury Atlas would provide helpful insight into the relative safety performance of the various trades, compulsory as well as voluntary. However, upon examination, detailed information was only available for two surveyed periods, the first from 1987-1989 and

25 In the absence of this data, I requested the MOL to review its records of contraventions of the OHSA – i.e., remedial orders issued, ticketing and prosecutions – for the last 5-10 years, to determine whether any trade-specific patterns could be established. I was told that this analysis, if undertaken, would not be available until well beyond the date on which my report is due.

26 The OCS is a tripartite body (government, labour and management representatives) established pursuant to the Ontario Labour Relations Act to deal with issues pertinent to the ICI sector of the construction industry.

27 In any event, OCS advises that no direct comparison will be made between compulsory and voluntary trades, but rather between union vs. non-union workplaces.
the second from 1997-1999. This limited material, when examined, did not permit a meaningful comparison to be made between the health and safety records of the voluntary and compulsory trades surveyed.28

Registrations/Completions

107. I have already dealt in considerable detail with the methodological difficulties associated with the assembly and analysis of data relating to registrations and completions and need not go over that technical ground again. Suffice it to reiterate that the aggregated data, whatever the source (MTCU, StatsCan (RAIS), etc.) do not assist in making comparisons relevant to my assignment, which is to comment on the relative effect of compulsory vs. voluntary certification on registration and completion rates.

108. The difficulty is not that MTCU has failed to record the relevant data. Rather, it is that the data do not now exist. The last “whole trade” that was made compulsory under the TQAA was the Crane Operator in 1982. But prior to 1982, workers in the Crane Operator trades were regulated under the Operating Engineers Act by the then Ministry of Consumer and Corporate Relations (MCCR) so that it cannot be said that in 1982 the conversion was from a voluntary to a compulsory trade.

109. The other compulsory trades that now exist were all established as compulsory under the TQAA in the 1960s. I was advised by MTCU that records do not exist for this period, so that pre- and post-1960’s registrations for these trades – which would have been the most relevant comparisons – cannot be made. Even if these data were available, their reliability would be suspect. Registration flows depend on other factors as well, including the supply and demand for particular trades, which fluctuate in response to cyclical industry/economic demand.

110. The problems related to registrations are, for different reasons, equally challenging when attempts are made to determine completion rates. There is considerable controversy amongst labour market economists and others dealing with this important measure of

28 There is some additional CSAO information, referred to in two stakeholder submissions, but there is no basis for comparisons of the sort I am to make. All of the CSAO data is derived from WSIB records.
apprenticeship success, as to the accuracy and utility of the various methodologies used in assessing completions. These issues are dealt with in paras. 125-133.

111. Mention should be made of the Ministry’s existing system for monitoring apprentices as they move through their programs. The system now in place calls for MTCU’s Employment and Training Consultants (ETCs) to maintain, so far as possible, regular, periodic contact with registered apprentices. It calls for the ETCs to guide apprentices through the system from the moment of registration to completion. This includes: ensuring that the terms and conditions of the contract for training are adhered to (including the required ratios and wages); visiting of apprentices to monitor progress at least annually or upon request, and advising apprentices with respect to the Certificate of Qualification examination process. There are also administrative requirements for the apprentice to report an address change, a change in employer, a failure to attend scheduled classes, a departure from the system, etc. Monitoring also occurs when an employer requests to register another apprentice or to transfer an existing apprentice to another employer.

112. Ideally, this monitoring would enable the ETC to be aware of dropouts. However, not surprisingly, there are many apprentices who, for a variety of reasons, change their career paths without advising their ETCs. Thus, even with the most sophisticated cohort tracking system, completion rate studies have so far fallen well short of providing reliable completion data. Nonetheless, existing studies, whatever their methodologies, appear to agree that completion rates are higher in compulsory trades than in voluntary trades.

**Economic Impact**

113. Assessing economic impact is a complicated calculus, involving many variables. As I later observe (paras. 155-172), the most useful study, for my purposes, is a report prepared for the Canadian Apprenticeship forum (CAF) by Prism Economics entitled “*Estimating the Return on Investing in Apprenticeship: Phase 1, Methodology Final Report*,” August, 2005. This study deals with cost to employers, apprentices, training deliverers and governments. It is the only study that came to my attention that, with respect to employer costs, dealt with both direct, computable payroll costs, together with
less easily quantifiable non-payroll costs and offset benefits. These are all set out in the paragraphs cited and I need not repeat them here, except to say that while convincing justification is given for the inclusion of the factors cited, the precise calculations will depend upon a number of variables (e.g., specific trade, economic sector, extent of cyclical activity, etc.) and therefore, at best, can only result in best estimates.

114. The complexity of cost assessment is further illustrated in an earlier Prism study, “Scope Assessment and Impact Study of Compulsory Certification of Sheet Metal Workers in Manitoba” October, 2004, prepared for the Government of Manitoba. This study deals with a number of impacts, including costs to employers, apprentices and to the government. In this work, some reliance was placed on Census data to track the income levels of Sheet Metal Workers based on qualifications and experience. The complexity of assessing costs is indicated by the necessity to break down the trade into its various components, e.g., air handling systems, testing and air balancing, specialty sheet metal products for various sectors (e.g., ICI, agricultural) and so on. In each of these individual categories, the consultants reached separate conclusions. For example, for sheet metal workers doing air handling systems, the cost of certified labour in the ICI sector was said to be unchanged, while a “moderate” cost increase was expected in low-rise residential construction. Without in any way denigrating the value of the report, the results fall short of scientific exactitude and are based on best estimate surveys or similar informed assessments. The same comments may be made about MTCU’s own estimates about the potential costs associated with government fees and programs based on the assumption that 1,000 new apprentices would enter the system (see Appendix 13).

115. To arrive at cost estimates with precision, my sense from the studies available is that a detailed survey would be required, on a trade-by-trade (and probably intra-trade) basis, as well as taking into consideration geographic (rural v. urban) considerations, among other variables. Nonetheless, the first Prism study cited above is persuasive in its calculation of both costs and benefits of certification. As I later observe, economists tend to agree, and survey evidence supports, that as a general proposition, credentials (e.g. Certificate of Qualification, C of Q) lead to increased wages. However, in a mixed, free market economy, supply and demand factors still operate, whether in the field of collective
bargaining or in the unorganized sector. The most persuasive evidence supporting the conclusion that compulsory certification will not result in excessive cost impacts – and will, in all probability, yield net cost benefits – is to be found in the Prism study done for the CAF.

**Consumer Protection**

116. Efforts were made to obtain data to measure this impact factor: namely, requests from the Ministry of Government and Consumer Services, the various designated agencies under the *Safety and Consumer Statutes Administration Act*, i.e., the Electrical Safety Authority, the Technical Standards and Safety Authority and the Tarion Corporation. I also examined the *Consumer Protection Act* and made enquiries from the Insurance Bureau of Canada. I was unable to unearth any data to indicate, one way or another, whether there was a greater incidence of consumer complaints, depending upon whether work complained of had been performed by voluntary rather than compulsory trades. However, those with whom I conferred generally expressed the view, unsupported by data, that there is a strong probability that the work of those tradespersons required to complete full training programs is less likely to give rise to consumer dissatisfaction and is more likely to provide increased consumer protection – and, where the work involves public infrastructure, greater protection for the public at large.
CHAPTER 10 – COMMENTS ON IMPACT FACTORS

Health and Safety

117. In dealing with health and safety, it is necessary first to determine whether, and to what extent, apprenticeship programs of all kinds – i.e., both compulsory/restricted and voluntary/unrestricted – contain health and safety training requirements. The documentation on this issue varies, and in some instances, is opaque. In every training “Standard” under the TQAA and ACA there is a health and safety training module, “protect self and others”, and the extent to which this requirement is expanded in the training curricula varies from occupation-to-occupation. Some are quite detailed, and others less so.

118. In the Standards for Electrician under the TQAA, for example, there are 24 components for in-school training, one of which, no. 6, deals with “safety” and refers to the Occupational Health and Safety Act, the Workers Compensation Act (now the Workplace Health and Safety Act), the Electrical Safety Code, the handling and storage of flammable liquids, the safe use of hand tools, lifting, hoisting and rigging equipment, etc. There is no stipulation as to the length or intensity of this component, so it is a matter of conjecture how extensive this training is, in practice. In the “work experience training” (on-the-job) section of the Electrician’s Standard, under the item “trade practices”, reference is again made to the health and safety statutes referred to above and to the care and use of hand and power tools and equipment, wire and cable pulling, rigging, etc. This is only one of 18 items in “work experience training”.

119. The Electrician Standards, as indicated, are detailed as are other standards for both compulsory and voluntary trades. But how extensive is this health and safety training in practice? Does MTCU have any accurate way of checking its extent, in terms of hours, quality, etc. Are the training institutions – the colleges or the union training centres – required to file, in their reports, records from which both quantitative and qualitative determinations can be made about the adequacy of the training program? From my inquiries and the random inspection of reports, I conclude that the Ministry is totally dependent on “sign-offs” from employers and training institutions, and that there is no
process or methodology for the objective validation of the extent or quality of the training, whether for compulsory or voluntary classifications.

120. It is noted that Electricians are one of two compulsory trades dealt with, extensively, in the Regulation 213/91 dealing with construction projects under the *Occupational Health and Safety Act*. The Crane Operator is the other. Presumably those two trades were singled out, correctly in my view, because of the perceived inherent dangers which their performance entails. Sections 181 through 195 of the Regulation deal with the manner in which stipulated *functions* are to be carried out – but these are not *training* requirements. It is arguable that the specificity with which they are dealt, and the fact that any contravention is a statutory offence, should positively impact health and safety results. But do the facts bear this out? And if the results are better than in other non-compulsory trades, are those results because of better training? Again, there are no reliable data to answer this question.

121. During my inquiries, differing perspectives were expressed by MTCU and MOL with respect to worker health and safety training. MTCU takes the position that the primary responsibility for worker health and safety performance lies with MOL. In doing so, it relies on the detailed provisions of the *Occupational Health and Safety Act* and Regulations. But, as I read the law, all *training* requirements appear in either the TQAA or ACA. OHSA and other regulations, although requiring certain trades qualifications, do not themselves stipulate training requirements. The *Electricity Act* and the *Technical Standards and Safety Act* refer to training requirements, but in no case that I could identify, are those requirements ones which do not involve reference to or approval by
the Ministry of Training, Colleges and Universities.  

122. The key issue on the health and safety impact question turns, then, on whatever empirical evidence exists to support – or refute – the proposition that those trained under a compulsory/restricted regimen have superior health and safety records to those trained under voluntary/unrestricted systems. I have searched in vain for data that would enable me to provide a reliable, supportable response to this key question. None of the records of either MOL or MTCU break down or distinguish between the safety records of compulsory versus voluntary trades, in construction or any other sector. I have canvassed potential sources of this information from independent bodies: e.g., the WSIB, the various safety associations, Statistics Canada, the Construction Sector Council, the Canada Apprenticeship Forum and other research organizations. There is a dearth of reliable data to answer this central question, and there does not appear to be agreement on the appropriate methodologies for gathering the data and making required determinations. Some unions compile their own data, some of which has been included in their written submissions.

123. To add to the difficulties, the data that is available is not easily aligned with the trades (compulsory/restricted or voluntary/unrestricted). More often than not, inferences are not possible, as injuries may cross several trades. It appears that lost-time injury and/or fatality data are not readily shared with MTCU or the PACs and ICs. Improved linkages

29 Under OHSA, the Electricity Act and the Technical Standards and Safety Act, the following regulations refer to certification under one or other of the TQAA or ACA or approval by the MTCU for the stipulated training requirements: see, for example, OHSA Reg. 572/99 (training requirements for certain skill sets); OHSA Reg. 278/05 (designated substance-asbestos construction projects in buildings and repair operations); s. 20 (asbestos abatement training programs); OHSA Reg. 851 (industrial establishment); s. 105 (mechanical harvesting programs); OHSA Reg. 854 (mines and mining plants); s. 11 (hard rock, soft rock, mill processing); s. 11.1 (diamond driller); s. 11.2 (surface mining); Electricity Act, Reg. 570/05 (licensing of electrical contractors and master electricians); Technical Standards and Safety Act (TSSA), Reg. 215/01 (fuel industry certificates); s. 20, overlaps with TQAA; TSSA, Reg. 209/01 (Elevating Devices); TSSA Reg. 222/01 (Certification and Training of Elevating Device Mechanics); TSSA, Reg. 187/03 (Certification and Training of Amusement Device Mechanics). For elaboration, see paras. 141-154.

30 For example, the Hoisting Engineers reported as follows: “During the 10 years preceding the compulsory certification, crane related fatalities accounted for 19.8% of all construction fatalities. When credible training for crane operators was put in place in the early 80s, there was an immediate decline in the number of crane related accidents and fatalities. The latest statistics compiled by the CSAO from 1991 to 2004 indicate that crane related fatalities now account for 0.033% of the total.”
can only assist in ensuring that health and safety training remains a critical component of apprenticeship training. There is also opportunity for safety associations to participate in the development of the health and safety modules for trades.

124. However, even in the absence of conclusive data, it would appear axiomatic, as some submissions point out, that more health and safety training is bound to reduce lost time injuries and fatalities. Thus, *incidence of registration* is critical. If compulsory certification in a particular trade raises the level of registration above the pre-existing voluntary levels, then a reasonable assumption would be that health and safety training would increase, leading overall to better health and safety performance within the trade. This observation reinforces the interlocking nature of the impact issues before me.

**Registrations and Completions**

125. There is general agreement that registration and completion data, both national and provincial, are of limited accuracy and use due to a variety of factors (see Appendices 11 and 12). Labour market economists wrestle with a host of statistical problems and develop complex formulae, most of which are incomprehensible to the layperson. However, wading through the technical literature, two principal analytical methods seem to dominate, both of which rely on what is referred to as the “cohort” approach.

126. One has been developed by Andrew Sharpe and James Gibson of the Ottawa-based Centre for Study of Living Standards (CSLS). The other has been designed by Statistics Canada. Both identify a cohort of apprentices and track them over a given period of time. For example, in their respective completion studies, both published in 2005, Sharpe used a 4-year period and StatsCan an 11-year period. The fundamental difficulty with both methods is that there are no longitudinal databases available to track apprentices in given years.

127. A pilot study by StatsCan, published in 2005, took the RAIS data for 3 provinces, including Ontario, and followed this aggregated data, by province, over 11 years, to arrive at conclusions as to what happened to the total number of apprentices registered, by province, in 1992, after this 11-year period had expired. The findings for Ontario were as follows: Of the 8,342 people registered as apprentices in 1992, 3,905 (46.8%)
completed a trade during the course of the 11 years. An additional 138 individuals did not complete their programs, but obtained a certificate afterwards. As a result, 4,043 individuals (or 48.5%) got certificates within the 11-year period. About 56% of the certifications occurred during the 4th to 6th year. A total of 998 (or 12%) were still continuing after the 11th year. However, a total of 4,298 (or 51.9%) dropped out, but many (12.2%) came back and obtained certification. While these figures may be of interest for other purposes, I cite them to show that the aggregated data does not assist in casting light on the issues which I am called upon to determine.

128. There are other technical difficulties with using the RAIS database to analyze registrations and completions. These difficulties are summarized in two papers prepared by MTCU economists, set out in Appendix 12. As will be apparent, the RAIS data for Ontario is based on MTCU reports, covering registrations, completions and certifications recorded on an annual basis. However, the occupational titles used in RAIS are different from the MTCU administrative data in many cases. The Ministry hopes to build on its existing database that would yield accurate data for assessing cohort-based registrations and completions.

129. Aside from these methodological difficulties, none of the data collected so far have distinguished between compulsory and voluntary trades. Thus, even with improvements in the existing StatsCan and MTCU systems, no conclusions relevant to my mandate will be possible unless and until distinctions are made between the compulsory and voluntary trades. It has been brought to my attention that further detailed information on apprenticeship certification will be capable of being derived from the release of the 2006 Census: for example, it will for the first time allow for an accurate measurement of the number of individuals within the labour force, and within a specific trade, who are certified. This information was scheduled for release in early March, 2008, but, as with the existing data, it will be of no use to the issue which I am called upon to deal with, namely, the effect of compulsory vs. voluntary certification on the rates of registration and completion.

130. In November 2007, the Ontario government received a report entitled The Agency Review

In this report, the panel also noted concerns regarding apprenticeship completion rates and the lack of data. The panel made a recommendation in this regard: Recommendation 8(g)

That the government of Ontario establish an Ontario Electricity Sector Council that would jointly report to the Minister of Energy and the Minister of Training, Colleges and Universities. Members of the Council should include representatives from employers, labour and the education and training bodies. The Ontario Electricity Sector Council could undertake several important activities, including (g) Developing better information on the retention rates at universities and colleges and the success of apprenticeship programs in Ontario and, together with the results from annual performance reports, addressing specific concerns that these data may reveal.

There is uncertainty about the accuracy and comparability of data on Ontario’s retention rates for apprentices, a problem that a Statistics Canada report on apprenticeship, expected early in 2008, may help to resolve. There are large gaps between the number of apprenticeships begun and those completed, which are unexplained. It is therefore difficult to determine the true rate of apprenticeship completions based on the data currently collected.

131. In light of these difficulties, it is not possible to rely on empirical evidence to draw any firm conclusions on registrations or completions. I therefore must assess the various contentions advanced by stakeholders, most of which are based principally on undocumented material, including experience, anecdote and instincts. Those opposed to compulsory certification raise concerns about restrictions to entry and the creation of unwarranted monopolies. Those in favour refer to the removal of the stigma which is said to attach to trades training, making trades careers more appealing to both parents and students when career choices are being made. These are only two examples of the variety of contentions, pro and con, most of which are set out in the material submitted to stakeholders in my request for their submissions (Appendix 3). Other relevant questions are also raised: for example, will compulsory certification operate as a deterrent for some workers, presumably older ones, who would have family and other expenses to cover and who would be unable to afford reduced apprenticeship salaries, the tuition fees, tool costs, etc.?
132. There are as well conflicting arguments about the effect of compulsory certification on the underground economy. If more workers were required to hold Certificates of Qualification, would employers be more or less likely to operate underground? If compulsory certification were to be expanded in the interests of deterring underground activity, the initiative might be coupled with substantial increases in fines for non-compliance – for both contractors and for workers in violation of the statutory requirements. Some ask what effect would an increase in compulsory certification have on trade union organizing. Unions would no doubt utilize their training facilities and capacities to encourage/induce trainees to become union members. And would increased compulsory certification have a disparate impact, depending on employer size, location (urban/rural), or any other related labour market ramifications?

133. Overall, whether dealing with voluntary or compulsory trades, it is generally agreed that a relatively small percentage of the workforce have opted to obtain certification. Taking two unrestricted trades under the ACA, Cook and Baker, only 18.9% and 6.3% respectively, I am told, have certification31. What are the reasons for these low rates? Are there rational explanations, as neo-classical economists would presumably expect? Do ratios have a limiting effect on registrations? Or are we into the murky realm of behavioural economics, with all its unpredictable and sometimes irrational causal factors?

**Consumer Protection**

134. It is difficult to see how a single factor – such as compulsory vs. voluntary status for a trade – can be isolated from a variety of other factors that bear on the issue of consumer protection. A list of such factors, not necessarily exhaustive, includes the following.

- The mechanisms for enforcement of violations of consumer rights (statutory, regulatory or common law);

- Insurance requirements, including bonding;

---

31 With the assistance of Ministry of Finance, we attempted to identify the impact of extending compulsory certification on the workforce. Our first challenge was to identify a voluntary trade that aligned with Labour Force Survey data – thus the trades of Cook and Baker were selected. The calculation was derived by the number of certificate holders as a percentage of the occupation workforce population as per Labour Force Survey data.
Licensing requirements over and above trade qualification (e.g., TSSA requirements, Canada Welding Board requirements, etc);

- Consumer awareness (e.g., the sophistication of the user);

- The role of consumer advocates/associations (e.g., the Better Business Bureau, etc.);

- The extent and effectiveness of employer supervision and employer warranties;

- The competence of the professionals in charge of design and planning (e.g., architects, engineers, employer supervisors, etc.); and

- The role and effectiveness of non-statutory standards (e.g., ISO, etc.).

135. Subject to the above considerations, an analysis of the consumer protection legislation in Ontario, and its administration, is appropriate in order to determine whether any ministries or agencies with responsibility for dealing with the consequences of activities by tradespersons governed by the TQAA or ACA have data or other evidence to shed light on the distinction, if any, between the performance of voluntary and compulsory tradespersons. Such evidence, presumably, would be based upon consumer complaints, or Ministry or agency inspections, of the work in question.

*Consumer Protection Act, S.O., 2002, Chapter 30*

136. This statute, on its face, appears to have limited relevance to consumer protection from inadequate or incompetent work by trades, occupation or skill sets covered by either the TQAA or the ACA. It covers “consumer agreement”, defined to mean agreements between a supplier of goods or services. “Services” is broadly defined to mean anything other than goods. Provisions are made for remedial action by agreed consumers – individuals, not businesses – through the courts, or, if agreed, through arbitration. The Act does not apply to claims related to real property, thus severely limiting its relevance to the construction trades.

137. Suppliers’ practices are controlled in the statute in a variety of ways. For example, there
are general prohibitions against false, misleading, deceptive, or unconscionable representations. A number of specific consumer agreements are covered: e.g., those involving “future performance”; time-share agreements; agreements for the provision of “personal services”; internet agreements; credit agreements; leasing arrangements (non-realty) and others.

138. There are specific provisions in Part VI of the Act dealing with repairs to motor vehicles and other goods covering, among other aspects, estimates, authorization, invoicing and warranties.

139. Provision is made in the Act permitting consumers to file complaints with the Ministry of Government and Consumer Services (MGCS). Ministry inspectors are given broad investigatory powers, including search and seizure in defined circumstances, the right to issue compliance and restraining orders against suppliers, etc. There are stipulated fines for persons contravening consumer agreements and for violating provisions of the Act. Consumers who file complaints under the Act do not forgo their rights to pursue civil actions in the court.

140. In my discussions with MGCS officials, I was given no information on how, or in what circumstances, the Consumer Protection Act (CPA) might apply to faulty workmanship by a tradesperson covered by the TQAA or the ACA. Accordingly, I can only assume that the data in MGCS’s possession relating to complaints under the CPA does not include trade-specific information on contraventions of the Act. If so, this is a deficiency that should be rectified. Such information might well assist in the administration of training statutes – both the design and administration of the training standards and determinations as to whether trades should be voluntary or compulsory.

The Safety and Consumer Statutes Administration Act, S.O. 1996, Chapter 19

141. This Act permits the Minister of Government and Consumer Services to facilitate the administration of certain named Acts by delegating to Delegated Administrative Authorities (DAAs) responsibility to administer portions of those Acts. The DAAs are constituted as not-for-profit corporations without share capital. Under the Act, administrative agreements are entered into between the Minister and the various DAAs,
specifying, among other things, which parts of the legislation governing the particular operations are delegated to the DAAs.

142. The Act covered by the *Safety and Consumer Statutes Administration Act* are as follows: the *Technical Standards and Safety Act*; the *Motor Vehicle Dealers Act*; the *Real Estate and Business Brokers Act*; the *Travel Industry Act*; and the *Electricity Act*. The DAAs under each of these Acts are, respectively, the Technical Standards and Safety Authority (TSSA); the Motor Vehicle Industry Council; the Real Estate Council of Ontario; the Travel Industry Council of Ontario; and the Electrical Safety Authority (ESA).

143. For the purposes of this report, the performance of work by tradespersons governed by either the TQAA or the ACA is involved only with operations or activities subject to oversight or review by the TSSA or by the ESA.

144. Dealing first with the *Electricity Act*, Regulation 570/05 deals with the licensing of Electrical Contractors and Master Electricians. Briefly, the Regulation stipulates the electrical contractor’s work cannot be carried out unless the electrical contractor is, or employs, a master electrician. A master electrician, in turn, cannot be issued a master electrician’s license unless he/she meets the criteria including certain experience as a “Construction and Maintenance Electrician, a Domestic and Rural Electrician or an Industrial Electrician carrying out electrical work under a valid Certificate of Qualification”. Under the definition section of the Regulation, a “Certificate of Qualification” means a certificate issued under either the TQAA or the ACA. This, so far as I can determine, is the only nexus between the *Electricity Act* and the ESA, on the one hand, and the results of any work inspections or work infractions that may occur with respect to the electrical tradesperson’s work performance. I have not been provided with any data from the ESA on the incidence of electricians’ work infractions. In any event, since the Electrician is a compulsory trade, such information or data would be of no use in making comparisons with respect to consumer protection as between voluntary and compulsory trades.

145. The remaining potential consumer protection data, if it exists, would be in the possession of the TSSA with respect to persons involved in the handling of dangerous fuels, those
operating elevating devices or persons engaged in the installation or operation of amusement devices.

146. There are a number of persons subject to O. Reg. 215/01, Fuel Industry Certificates. These persons handle gaseous fuels, propane storage and handling, oil and gas pipeline systems, fuel oil and compressed gas. O. Reg. 215/01 requires each of the persons in these categories (numbering over 30 in total) to be certified under that Regulation. In one instance, one particular operation, i.e. one related to the disconnection or reconnection of water piping associated with an appliance, may only be performed by a person holding a valid Certificate of Qualification as a Plumber or Steamfitter issued under the TQAA. In all other respects, O. Reg. 215/01 is independent of any “training” certification. I have been provided with no information by the TSSA concerning the performance of this isolated operation by certified plumbers. In any event, as with the Electrician, Plumbers are a compulsory trade and such information would have no relevance to my mandate.

147. O. Reg. 209/01 under the Technical Standards and Safety Act deals with elevating devices. So far as I can determine, there are no provisions in this Regulation dealing with training requirements, and in particular, there are no references to tradespersons covered by either the TQAA or the ACA. There are provisions requiring the safe operation of elevating devices by freight handlers and attendants and operators, as well as provisions for inspection, but, as I have said, no licensing requirements of the sort that are involved in my assignment.

148. There is, however, a separate Regulation, O. Reg. 222/01, entitled Certification and Training of Elevating Device Mechanics. This Regulation does provide for mechanics’ training, but this training is separate and distinct from either the TQAA or the ACA. While it is compulsory that elevating device mechanics undergo this training to be certified under this Regulation no conclusions can be drawn from this concerning the distinction between the voluntary and compulsory certification under the authority of MTCU.

149. Finally, under the Technical Standards and Safety Act, Reg. 187/03 provides for the certification and training of Amusement Device Mechanics. Section 3(1) of the
Regulation stipulates the categories of persons, and their functions, that require certificates in order to perform their work. However, s. 3(2)(b) provides that persons performing work on an amusement device, under the supervision of a mechanic licensed under s.3(1), may do so, so long as they are licensed and qualified under either the ACA or the TQAA. Again, I have been provided with no information from the TSSA on any records they have with respect to the performance of persons in the latter category. Such information, if it does exist, might provide some limited assistance in assessing the relative consumer protection feature of voluntary versus compulsory trades. But, as I have said, this information, if it exists, was not provided to me.

150. During the course of my enquiries, I made enquiries to three public/consumer protection associations (Electrical Safety Authority (ESA), Technical Standards Safety Authority (TSSA) and Tarion Corporation to determine if their data could assist in assessing impact on consumer protection as performed by trades, in particular voluntary trades. These associations do not possess data that correspond to specific trades or the certification, or not, of these workers.

151. Regulation 278/05, Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations deals, as the title implies, with the installation and removal of asbestos on construction and repair projects. Section 20 of the Regulation deals with asbestos abatement training programs and provides, in s.20(1)(a) that “Every worker involved in a Type 3 operation [shall have] successfully completed the Asbestos Abatement Worker Training Program approved by the Ministry of Training, Colleges and Universities.” This requirement and its enforcement clearly has implications for public/consumer protection.

152. Regulation 851, Industrial Establishment, deals with a number of areas, including safety regulations on premises, fire protection, machine guarding, material handling, protective equipment, confined spaces, industrial hygiene and other matters. It has detailed provisions with respect to logging operations and in s. 105 requires that every employer establish and maintain certain training programs for a variety of named operators, all such programs to be approved by the Ministry of Training, Colleges and Universities. All of
these training programs would appear to be directed to worker safety and not to consumer protection.

153. Regulation 854, Mines and Mining Plants, has, in s.11, provisions requiring employers engaged in surface mine operations, to establish and maintain certain modular training programs, all of which require a certificate of achievement upon completion to be issued by MTCU. Similarly, the same section requires modular training programs on basic underground hard rock mining, with the same certificate of achievement upon completion to be issued by MTCU. These programs, like those described in the preceding paragraph, appear to relate solely to worker safety and if so, would have no impact on consumer protection.

154. Tarion is responsible for administering the *Ontario New Home Warranties Plan Act*, which provides for warranty protection that new home and condominium builders must provide to their customers. Tarion ensures that builders abide by the legislation, and will step in to protect consumers when builders fail to fulfill their warranty obligations. The program is financed entirely by builder registration, renewal and home enrolment fees. Tarion receives no government funding and has guaranteed warranty protection for well over 1.3 million new homes. As the regulator of Ontario’s new home building industry, Tarion registers new home builders and vendors, enrolls new homes for warranty coverage, investigates illegal building practices, resolves warranty disputes between builders/vendors and homeowners, and promotes high standards of construction among Ontario’s new home builders. ([http://www.tarion.com/HOME/About+Tarion/](http://www.tarion.com/HOME/About+Tarion/)). A Tarion official confirmed that

Tarion provides warranty coverage for correcting construction defects regardless of the trade involved. We do not record what trade was involved, it is irrelevant to us. Our goal is to correct whatever deficiency the homeowners comes to us with. We are not in the business of policing trades, we only inspect homes after the homeowner takes possession and the house is occupied. At that point we only inspect the house at the request of the homeowner and we only do that when the homeowner is unhappy with the repair that their builder has made. Our inspections only look at items reported to us, i.e. if a homeowner claims the wainscoting on their walls is uneven we will inspect that, and only that. We only look at the things the homeowner directs us to look at. The majority of inspections are done during construction by local building officials to ensure the home being constructed meets Ontario Building Code standards.
Economic Impact

155. Any analysis of economic impacts must distinguish among major participants in the apprenticeship system: i.e., employers, apprentices, training deliverers, governments and unions, including training trust funds.

156. If wholesale conversion from voluntary to compulsory trades were to be contemplated, it would presumably be necessary to gather comprehensive data, including the number of active journeypersons and apprentices in Ontario by trade, distinguishing between compulsory and voluntary. In addition, an accurate estimate would be needed of the total size of the workforce for all trades-related occupations, including journeypersons and non-certified workers. This might be established by comparing the occupational groups identified in the Census data to those participating in apprenticeship programs, by trade. One could then proceed to a more detailed examination of average hourly wage rates for journeypersons and apprentices, by trade and year; estimates of the number of years required to complete an apprenticeship program, by trade; the difference in completion rates between compulsory and voluntary trades; and other relevant across-the-board comparators.

157. With this threshold data, more detailed – and hopefully quantifiable – estimates could then be assessed: i.e., the productivity gains from a more skilled workforce; the costs associated with training an apprentice by trade; the unemployment and participation rates by trade-related occupations; the share of full-time versus part-time workers, again by trade-related occupations; the mobility of the labour force, by trade; the degree of unionization, by trade; injury data, by trade; the costs associated with enforcing new compulsory regulations, etc.

158. An exercise of this sort would require the creation of comprehensive data bases that do not presently exist in Ontario and that would be extremely difficult, costly and time-consuming to produce. Moreover, an all-encompassing approach of this sort would only be required if all or most of the existing voluntary trades were to be converted to compulsory trades. To my knowledge, no one is envisaging a comprehensive conversion of that sort. There are now several voluntary trades that are seeking compulsory status,
namely: under the TQAA, Sprinkler and Fire Protection Installer; Brick & Stone Mason; Construction Boilermaker; General Carpenter; Powerline Worker (Lineworker); Drywall, Acoustic and Lathing Applicator; and Architectural Glass & Metal Technician (Glazier and Metal Mechanic). And under the ACA, Auto Glass Installer; Powered Lift Truck Technician; and Industrial Electrician. While I am precluded, by my terms of reference, from making recommendations concerning the merits of those applications, one or more of these three trades could be used for estimating the cost impacts that I have been asked to consider.

159. In the published Canadian material, the most useful guide to costs of which I am aware is contained in a publication by the Canadian Apprenticeship Forum (CAF) entitled “Apprenticeship – Building A Skilled Workforce for a Strong Bottom Line: Return on Apprenticeship Training Investment for Employers – A Study of 15 Trades”, June, 2006. The CAF commissioned the Conference Board of Canada and two economic consulting firms to assist with this research. The overall objectives were to determine the costs to employers within the apprenticeship community in hiring and training apprentices; to determine which factors influence cost and the return on training investments; and to identify monetary and non-monetary benefits of apprenticeship training.

160. While the study was not focussed on the costs of compulsory versus voluntary apprenticeship, the work of the economic research firms identified the cost factors that come into play once an apprenticeship program is undertaken. In other words, the authors assume that the apprenticeship program is in place (whether voluntary or compulsory) and go on to deal with the cost (and cost offset) implications. Therefore, their economic analyses and comments are, in my view, relevant in identifying the cost/benefit factors that would be present in any apprenticeship program.

161. As earlier indicated, Prism Economics prepared a background cost study for the CAF report, entitled “Estimating the Return on Investing in Apprenticeship: Phase 1 – Methodology, Final Report”, August, 2005. This report deals separately with the cost and benefits to employers, apprentices, training deliverers, governments and unions. It also contains ancillary comments on societal benefits.
162. Dealing first with **Employers**, it identifies the following relevant cost factors: *Payroll Costs* (wages, benefits and statutory contributions); *Training Costs* (lost productive contribution of journeypersons engaged in training apprentices); *Quit Risks* (quits before employer has recovered investment cost); *Poaching Risk* (losing trained workers to other employers, principally those who do not engage in training themselves); *Wastage* (re-work of deficient product not otherwise chargeable to customers); *Machinery and Equipment* (taken out of production for training purposes); *In-School Wages* (payment of apprenticeship wages during in-school training and/or topping up of EI benefits); *Other In-School Costs* (tuition and fees, text books, etc.); *Administrative Fees* (apprenticeship registration costs); *Managerial Costs* (payroll costs of an apprenticeship coordinator); *Tools* (those purchased by the employer that become the apprentice’s property); and *General Contributions* (e.g., loans or donation of equipment to training centres, career fairs, skills competitions, etc.).

163. The Prism Report notes offsetting benefits for **Employers**. These include: *Productive Contribution by Apprentices* (less than a full journeyperson’s, but paid for at a reduced apprenticeship rate); *Retention Benefits* (the acquisition of company-specific skills, with consequent lower screening/hiring costs, and familiarity with workplace culture); *Reduced Risk of Skill Shortages* (dependent upon retention of trained apprentices); *Health and Safety Performance* (with reduced WSIB premiums); and the *Availability of Subsidies* (e.g., tax credits).

164. The same cost/benefit tabulation is done by Prism for **Apprentices**. Costs include: *Earnings Reduction* (reduced wages, increasing incrementally over the training period); *Pre-Apprenticeship Training, Where Applicable* (where tuition and related costs are borne by individuals, with accompanying earnings loss); *In-School Costs* (tuition fees, materials, text books, travel and accommodation costs, child care costs, etc.); *Income Loss During In-School Training* (the difference between EI benefits and wages that would otherwise have been earned (sometimes supported by employer)); *Apprenticeship Registration Fees* (frequently paid by employer); *Tools and Related Insurance* (not always applicable; for some trades, tax deductibility is available); *Termination Risk* (subject to lay-off due to reduced work opportunities); and *Unpredictability of Duration*.
of Apprenticeship (cyclical unemployment patterns, varying by industry sector).

165. On the benefits side for Apprentices, two are potentially significant: Expected/Actual Career Earnings Gain (relative to unskilled or uncertified worker); and Mobility (portability of skills and recognition conferred by trade certification; for Red Seal trades this applies across jurisdictions).

166. For Training Deliverers, the Prism Report observes that a survey of training deliverers is not really practical owing to the varying generic costs relating to specific trades training programs. Apart from this trade training variation factor, it is suggested that in those jurisdictions that have standardized the training deliverer’s financial reporting, provincial data may make more precise cost estimates possible. In any event, the cost items listed include: Direct Instructional Costs (instructors, materials, curriculum development and upgrading); General and Managerial Overheads (for the full delivery facility, pro-rated for the trade in question); Learning Support Costs (counselling, testing, tutoring and basic skills upgrading); and Capital Costs (machinery, equipment, classroom furniture, special instructional equipment). Offset against these costs are the listed revenues (block grants/seat purchases; curriculum development grants, capital grants, tuition, classroom and other fees, industry contributions, cash or in kind).

167. The Government costs are divided into four categories. The first two can be combined, i.e., System Administration and Support to Training Deliverers (both capital and operating). The Report observed that it is not practical to assess these costs on a trade-by-trade basis. Jurisdictions that use a block grant system are able to provide information on the block grant, but may only be able to approximate the proportion of the grant which covers apprenticeship training. A similar difficulty exists with capital grants, which, while published in the public accounts, are difficult to allocate for individual programs like apprenticeship training. The third category is Income Support for Apprentices (chiefly EI support, but including income support programs for social assistance recipients engaged in apprenticeship training, available in some provinces). The final item is Support for Employers or Apprentices Through the Tax System (Ontario’s Apprenticeship Training Tax Credit Act falls within this category). Conversion of
voluntary trades to compulsory will have an impact on the fees and programs associated with the administration of the apprenticeship and certification system (see Appendix 13, Potential Costs Impact of 1,000 New Apprentices - Government Fees and Programs).

168. **Unions and training trust funds** are final categories identified by the Prism Report. The actual costs would require a survey of the *involved unions* (the costs of establishing staffing and equipping training centres, contributions to administration through committee participation, negotiated benefits for apprentices). As to **training trust funds**, the Report suggests that the *costs to the funds* could be estimated by a survey of trust fund administrators (with identification of the portion of the fund earmarked for apprenticeship, as opposed to upgrade training). Also noted is the necessity for netting out operating and capital grants received from governments to deliver apprenticeship training.

169. The CAF Report itself summarizes the cost/benefit results of apprenticeship by trade. It notes that “The net benefit of apprenticeship training increases in each year over the course of the apprenticeship period. In fact, employers in only three of the 15 trades (Construction Electrician, Mobile Crane Operator and Sheet Metal Worker) incur a net cost when training first-year apprentices.” The report goes on to provide, in tabular form, the net benefit flowing from apprenticeship programs for the 15 trades, expressed both in dollar terms and in benefit-cost ratios. In all cases, there is a net benefit ranging from 1.09 (including tax credits) in the case of the Mobile Crane Operator to 1.76 in the case of the Tool and Die Maker. The Report expresses these findings as follows: “…the results indicate that for every dollar spent on apprenticeship training, an employer receives a benefit of $1.38 or a net return of $0.38 on average. If eligible tax credits are included, the net return to employers increases to $0.44.”

170. Four other related and relevant findings are made. The revenue generated for the employer by an apprentice increases throughout the apprenticeship. Wages and benefits paid to apprentices increase commensurately with training and experience. The costs related to journeyperson time spent training apprentices declines through each year of the apprenticeship. And for most trades, the net benefit from the engagement of the
apprentice is generated from and after the second year of apprenticeship.

171. If more compulsory trades are created, additional work and attended costs, will be incurred by Ontario’s Job Protection Office (JPO) in connection with the Ontario/Quebec Mobility Agreement concluded between the Ministers of Labour for Ontario and Quebec in June, 2006. The principal provisions of that agreement are set out in the footnote below. Essentially, there is a reciprocal obligation for both provinces to recognize similar sets of compulsorily certified construction journeypersons and apprentices in their respective jurisdictions. Accordingly, I am advised that, depending on the nature and extent of conversion from voluntary to compulsory trades in Ontario, the JPO’s administrative and enforcement burdens will, to an indeterminate extent, increase.

172. Another cost impact factor has to do with insurance costs. I am advised by The Insurance Bureau of Canada that insurers – both those issuing commercial liability policies and those providing bonding – set their rates, in part, on the basis of the competency of persons employed by the insured employers. Specifically, I was given the following message from the Bureau:

The risks insurers see [i.e., those with whom they deal] are the professional contractors who insure their workers are qualified. Many have risk management programs to assist in reducing insurance costs. Many are aware that if they authorized an unlicensed tradesman to perform work on their behalf and a claim occurred, the insurance company may have grounds to deny the claim.

32 The Ontario/Quebec Mobility Agreement was concluded between the Ministers of Labour for Ontario and Quebec in June, 2006. It replaces Ontario’s Fairness Is a Two-Way Street Act, which Ontario agreed to repeal, and has done so.

The agreement, a complex document, provides for mutual recognition of the qualifications, skills, experience and occupational health and safety training of a similar set of construction workers in both provinces. Quebec agrees to recognize all certified Ontario journeypersons and duly registered Ontario apprentices under the TQAA. Ontario, for its part, recognizes the equivalent Quebec construction workers (certification is compulsory for all construction trades in Quebec) plus 40 “occupations” in the Quebec construction industry which are open to semi-skilled labourers. There are similar provisions for mutual recognition of the qualifications, skills and experience of construction contractors. Reference is made in the agreement to the ability of Ontario contractors to gain work on Quebec public sector contracts, as well as contracts undertaken by Quebec Hydro. For those Ontario construction workers who have experience in a voluntary trade but do not hold a certificate, there is provision for them to work in Quebec for their Ontario employer. In order to do so, they must receive a Trade Activity Card from the Jobs Protection Office (JPO) and the Ministry of Labour (MOL). They must also go to the CCQ and select a trade union to which they will be associated in connection with their Quebec work.
It is noted that in the standard commercial general liability application, the typical questions include whether or not the applicant intends to subcontract work, whether the applicant is a general contractor or a subcontractor and if subcontracting occurs, detailed information is requested concerning the work performed and the trades engaged. In addition, I was advised during the focus group meetings that significant rate reductions are available for those contractors who are able to satisfy their insurers that the workers engaged in their projects are fully certified under the province’s training legislation.

**Other Miscellaneous Considerations**

**Grandparenting Provisions**

173. Grandparenting means that an individual is granted a C of Q without having to write and pass the certification examination. Applicants must meet specific criteria set by the Ministry. If the Ministry, following assessment, determines that the criteria have been met, it then issues the Certificate. Both Acts include provisions which provide for a C of Q to be issued without examination. This is referred to as “grandparenting”: s.10(4) in the TQAA and s.9(5) in the ACA. Under the TQAA, the grandparenting provision applies at the time of the new trade designation only. The ACA provision is not directive in this regard.

174. During consultations, stakeholders advised that in considering conversion of a voluntary trade to a compulsory one, a grandparenting provision may well be required in order to minimize the impact on existing non-certified workers. At a minimum, the requesting trade is required to include a grandparenting provision, and its adequacy is then assessed. The TQAA grandparenting provision does not provide for grandparenting after a trade is designated. Consequently, a legislative or regulatory amendment may be required in order to permit a second grandparenting provision for trades being converted under the TQAA.

**Apprenticeship Training and Trade Union Jurisdiction**

175. These two issues – training, on the one hand, and union jurisdictional disputes on the other – have become intertwined. This is illustrated in the jurisprudence of the Ontario Labour Relations Board, extending now over some considerable period of time. I wish to
make it abundantly clear that training legislation should have no impact on jurisdictional claims. The Ontario Labour Relations Board has correctly recognized this principle in its case law. An elaboration of this issue (Appendix 14) sets out the principal decisions of the OLRB on this issue. Although the Board has been consistent in separating training legislation from labour relations legislation, it will be my recommendation that this separation be made explicit in the relevant statutes governing each field.

176. In recent years, following the passage of Regulation 572/99 under the Ontario Health and Safety Act, the tendency of some trade unions to pursue jurisdictional claims before the Ontario Labour Relations Board has intensified. For that reason, it is all the more important to stipulate, by statute, that neither training statutes, nor related provisions in other legislation or regulations, such as the OHSA and Regulation 572/99, can or should be used to support jurisdictional claims under the Labour Relations Act.

177. To underscore this principle, I draw the reader’s attention in particular to one of the decisions of the OLRB contained in the appendix, H.S. Donald Construction Limited (October 26, 2005). At para. 26 of that decision, the Board states:

Clearly there is some overlap between the necessary qualifications to perform the work and the ability to perform it safely. However, this argument must also be seen in the context of the purpose of the two statutes [TQAA and the OHSA]. The purpose of the TQAA is that of a training statute. The purpose of the OHSA is that of a health and safety statute. The OHSA…does not explicitly require the employer to employ or appoint “competent workers” in the performance of the work, nor does it define the necessary levels of skills or competency on the part of workers with respect to any other statute or any formal level of training or certification.

And later, at para. 29, the Board continues:

Nonetheless, in the context of the legislation and the regulatory history of these two statutes, I conclude that the proper reading of section 3 of Reg. 572/99 is that it simply gives OHSA inspectors the authority under OHSA to enforce the certification process under the TQAA on the job sites that inspectors visit. Although this action is taken under the OHSA, the inspectors are in fact enforcing the TQAA.

And still later at para. 30, the Board states:
It is therefore appropriate to look at the TQAA to determine the meaning of “trench” [the matter at issue involved the laying of metallic or non-metallic pipe into trenches to form sanitary or storm sewers, drains or water mains]. There is no purpose or reason to use section 1(1) of the OHSA construction regulation. The purpose of the definition in the construction regulation is to define those circumstances when certain other extensive and important provisions of the OHSA construction regulation apply to excavations and trenches that exceed 1.2 meters. *It is not to determine the qualifications of persons doing the work of laying sewer or drainage pipes in those trenches.*

Finally, in para. 35, the Board concludes:

> In enforcing section 3 of Reg. 572/99, however, the inspector is in fact enforcing the requirements of a different statute [i.e., different from the OHSA], and must look to the TQAA for the content and meaning of the terms, rather than to automatically import the same or similar terms from the OHSA and regulations enacted under that statute.

178. I agree with the Board’s determination in the *H.S. Donald* case, and its reasoning in reaching its decision. However, it is important that it be made abundantly clear that Reg. 572/99 has no bearing on a trade union’s jurisdictional claims. This should be appropriately clarified, by legislation or regulation.

**Ratios**

179. During the course of my inquiry, whether coincidentally or otherwise, controversy arose in the Legislature and the media over the “ratio” issue – the number of apprentices engaged in a trade by an employer in relation to the number of journeypersons employed in the same trade. The issue also arose during the focus group meetings and in submissions received from stakeholders. This report would be incomplete if it failed to expand upon this difficult but important issue.

180. I turn first to the historical context in which ratios arose and to the way in which they have evolved since inception. At paras. 14 and 16, *supra*, I refer to two seminal reports on the apprenticeship system in Ontario, the Simonett Report in 1963 and the Dymond Report in 1973 (see Appendix 15). Simonett refers to the need to ensure “that employers are willing to take a sufficient number of apprentices to provide for the future needs of industry”. Reference was made to two possible approaches. One would “require that every contractor maintain a specified ratio of apprentices to the number of journeymen in
his employ”. Another was the possibility of levying a special payroll tax on employers in each of the trades to finance the overall apprenticeship system. Although these options were raised (along with a further possibility that firms failing to employ an “appropriate complement of apprentices” not be permitted to bid on government contracts), no recommendations were made in the Simonett Report.

181. In 1973, the Dymond Report made further comments on ratios, characterizing them as a method “to prevent employers from using apprentices primarily as a source of cheap labour”. The specific recommendation in the report was “That the general ratios set under [the Act] be the legal ratios for each trade, that is, that neither higher nor lower ratios be permitted through special trade regulations”. The report goes on to say that the recommendation would not limit the apprenticeship/journeyman ratio as an issue for collective bargaining. Subsequently, there is an elaboration on the effect of ratios on labour supply and demand, in the context of assertions by critics that ratios are negotiated to limit the supply of apprentices, to the detriment of the economy – and that they are deliberately set to create artificial shortages that lead to inflationary wages. The report went on to consider the possibility of having ratios determined by an independent agency that would weigh the private interests of the parties against the broader public interest. However, no recommendation was made in this regard, principally because of the perceived difficulty of accurately forecasting “future manpower requirements”.

182. A year after Simonett reported, the government enacted what is now s. 10(2) of Regulation 1055 under the Act now known as the TQAA, governing most of the construction trades. It reads:

10(2) Unless otherwise prescribed, the number of apprentices who may be employed by an employer in a trade shall not exceed

(a) where the employer is a journeyperson in the trade, one apprentice plus an additional apprentice for each additional three journeypersons employed by the employer in that trade and with whom the apprentice is working; or

(b) where the employer is not a journeyperson in the trade, one apprentice for the first journeyperson employed by the employer plus an additional apprentice for each additional three journeypersons
employed by the employer in that trade and with whom the apprentice is working.

I could locate no record in Hansard or elsewhere to explain the rationale for these particular ratios which the government chose to enact. However, unlike other trade-specific regulations proposed by PACs, Reg. 1055 clearly constituted the government’s “standard”, setting the core ratio at 1:1 / 3:1. This overall standard has been maintained by seven consecutive governments, representing all three political parties, for some 44 years.

183. It will be noted that unlike the TQAA, the ACA contains no legislative provision for ratios. Instead, Industry Committees set “policy guidelines” recommending journeyperson-apprentice ratios for trades. Employers are given discretion as to whether or not to adhere to these guidelines.

184. As a result, ratios are only a contentious issue in the construction sector under the TQAA. With voluntary construction trades (23 in all), employers may – subject to any collective agreement obligations – use non-regulated tradespersons to perform the required work, thus avoiding the requirements of the voluntary trades’ ratios. However, this avoidance is not possible with compulsory trades. Accordingly, it is with the 10 compulsory construction trades that the principal controversy arises. In the recent public debate, the particular trades identified have been the Plumbers and the Electricians.

185. Returning to s. 10(2) of Regulation 1055, it will be noted that the 1:1 / 3:1 standard ratio has general application “unless otherwise prescribed”. In practice, this means that individual trades are permitted to seek trade-specific regulations which may contain, *inter alia*, ratios which are at variance from the standard Reg. 1055 ratios. The contents of these trade-specific regulations are worked out by the trades’ PACs and submitted to the Ministry for approval and enactment. So far as I have been able to determine, PAC ratio recommendations have never been refused, although Ministry officials frequently have had an influence in their formulation.

186. To what degree do the ratios for the 33 construction trades differ from the Reg. 1055 standard ratios? Six trades’ ratios are governed directly by Reg. 1055 and seven others,
with separate regulations, have identical ratios. Four other voluntary trades exceed the Reg. 1055 ratio levels and the remaining trades all have lower ratios.

187. Of particular note is the fact that unlike the voluntary trades, all of the compulsory trades have ratios at or lower than the Reg. 1055 standard ratio levels. Those who oppose ratios higher than 1:1 attribute fault to the “monopolistic” regulations said to have been worked out by labour and industry PACs who wish to artificially limit the supply and opportunity for apprenticeship work. This is a curious allegation, given that those against whom the charge is made – i.e., those in the compulsory trades – all have ratios below the standard ratios established under Reg. 1055 and maintained by successive governments over many years.

188. In any event, it is useful to record the contending arguments about the existing ratio system. Those in favour of the existing ratio system pointed to the necessity of ensuring that employers had a sufficient number of journeypersons to provide quality training to apprentices. They also contend that without an appropriate ratio system, employers wishing to exploit the system could “overload” their apprenticeship complement in order to take advantage of the lower apprenticeship wage rates. This echoes the Dymond report’s comment on ratios as a method “to prevent employers from using apprentices primarily as a source of cheap labour”. The existing ratio system, it was said, is also necessary to ensure safe workplaces. Some also referred to the danger of creating an oversupply of journeypersons in particular trades (“flooding the market”) unless ratios, at existing levels, calibrated to fulfil current and projected needs, are retained.

189. Those critical of the existing system said that too often it operates to artificially limit the supply of labour. Reference was made in particular to the needs of smaller employers who, because of the limitations of ratios, were often unable to fulfil their needs, especially in smaller labour market areas where there were an insufficient number of journeypersons. It was also pointed out that in the majority of the other Canadian
jurisdictions, ratios were established, by regulation, at 1:1. With most labour market analysts predicting skilled trades shortages in the labour market industry, it was contended that Ontario should lower its ratios to conform to those in other provinces. Also recommended were alternative substantive approaches: for example, basing ratios on business size, geographic regions (urban vs. rural), or, when making the ratio calculation, excluding the final year on the basis that by that time the apprentice has acquired virtual journeyperson status.

190. In recent years, some PACs have made ratio reductions: in 2007 by the Brick and Stone Masons, the Sprinkler Installers, the Ironworkers, the Reinforcing Rod Workers and the Architectural Glass and Metal Technicians. In 2005, similar reductions were made by the Sheet Metal Workers, Carpenters and the Refrigeration and Air Conditioning Systems Mechanics. And in 1991, the Electricians (both Construction and Maintenance and Domestic and Rural) also reduced their ratios. Others are said to be contemplating reductions, so there is a downward trend in ratios on a trade-by-trade basis.

191. Despite these trends, and depending on the labour market supply projections in each trade, ratios – even if below the Reg. 1055 standard – could unduly restrict supply. My mandate requires me to provide advice about a “decision framework” for considering applications for compulsory certification and to propose criteria for assessing such requests. In my Recommendations (see Chapter 12), I am proposing an independent roster of advisors to consider such requests. One of the criteria that I will be recommending will be the appropriateness of the applicant’s ratios in light of validly documented projections about labour market needs.

192. The other factors put forward by the critics of the existing ratio system are beyond my mandate. I have no authority to consider their merits: i.e., whether (and how) provision could be made for smaller employers, especially those in labour markets where there is a shortage of journeypersons; whether and on what basis one would make ratio

---

33 In Quebec, six trades have higher ratios than those in Ontario. There are scattered examples of higher ratios in some other provinces: for example (e.g., Ironworkers in Nova Scotia, Painters and Sprinkler Installers in Manitoba, Construction Boilermakers in Saskatchewan). However, the overwhelming number of trades in the other provinces are at a 1:1 ratio, except for B.C. where the training system is now fundamentally different.
determinations based on geographic regions; whether the final year of the apprenticeship should be excluded from the ratio calculation, etc. Likewise, an independent roster of advisors considering applications to convert a trade from voluntary to compulsory would not have authority to consider any such substantive changes relating to ratio-setting. These are separate and distinct matters for consideration by Ministry policymakers and ultimately by the Minister and Cabinet, since their adoption would require regulatory action well beyond the voluntary/compulsory conversion issue which I have been asked to address.

193. Given my limited mandate, some will contend that I should go no further in commenting on the ratio issue. But in view of the contentions made to me at the focus group meetings, I am persuaded that it would be advantageous for a process to be in place to enable the Minister to make informed judgments, on a regular periodic basis, as to the appropriateness of existing ratios. Historically, ratio recommendations have been made solely by the PACs and invariably accepted by the Minister. In my recommendations, I have proposed the establishment of a College of Trades, one of whose functions would be to augment the existing practice by establishing a standing independent advisory panel to comment on ratios not only in light of demands/supply forecasting but also having regard to the need to ensure that training standards are met and that ratios are not being abused by employers to employ cheap labour. It is recommended that the panel should include one or more prominent labour market economist with expertise in workforce forecasting.
CHAPTER 11 – FINDINGS

Introduction

194. The findings set out below should be read in the context of my comments on the inherent difficulties in arriving at conclusions based on data collected for purposes other than those related to my limited mandate – namely, comparing voluntary vs. compulsory certification on the basis of five specified impact factors – health and safety, consumer protection, registrations, completion rates, economic impact, and any other relevant factors that I may identify.

Health and Safety

195. Several stakeholders’ submissions asserted that WSIB statistics show that there are fewer lost time injuries in the compulsory trades than there are in those that are voluntary. These data were presented to the WSIB and the reply I received from the Board states that there is no reliable evidence from WSIB records to enable a comparison to be made between the health and safety records of persons in the compulsory and voluntary trades employed by employers insured under The Workplace Health and Safety Act. A similar response was received from the Ministry of Labour with respect to its data relating to the inspection of workplaces and the enforcement of the Occupational Health and Safety Act and the Regulations.

196. The Construction Safety Association of Ontario maintains an Injury Atlas in which lost time injuries and fatalities in the construction industry are recorded and analyzed. At my request, the CSAO provided what it referred to as the relevant information from the Injury Atlas. This material, however, covered two surveyed periods, 1987-1989 and 1997-1999, as well as certain subsequent periods referred to in two stakeholder submissions. A careful analysis of these data, all of which were based on WSIB records, did not produce results that would enable any conclusions to be drawn about the relevant health and safety records of those engaged in compulsory, as opposed to voluntary, trades.

197. I have examined the health and safety standards in the apprenticeship programs published by MTCU for both compulsory and voluntary trades. I can find no material distinction
between the two sets of standards, either in scope or substance. Thus, a plausible inference, and one that I am prepared to draw, is that the health and safety training of workers in a voluntary trade that was being converted to compulsory would only be enhanced to the extent that compulsory certification resulted in increased registration in completions in the converted trade.

**Registrations/Completions**

198. As I have observed in several earlier passages, in the absence of reliable statistical evidence, no irrefutable conclusions can be reached about the relative incidence of either registrations or completions in comparing voluntary and compulsory trades\(^{34}\). Some contend that it should be axiomatic that both will increase if the regulations require a particular trade to be compulsory, since failure to register and/or complete would contravene the law. This contention, based on the assumption that laws will be complied with, has obvious merit. But some contend that, viewed in isolation, it is too simplistic, and that other considerations come into play. Can the functions of the compulsory trade be defined with sufficient precision to permit them to be distinguished from those of other non-compulsory trades? Do the enforcing authorities have sufficient technical knowledge to identify those in non-compliance? Is the fact of compulsion, and the rigours and costs of apprenticeship training, likely to deter potential entrants from pursuing the trade? Will some attempt to avoid compulsory status by engaging in underground activities? And more generally, are existing deficient enforcement mechanisms such that adding more compulsory trades would be an exercise in futility?

199. Based on what I heard, especially from apprentices, it is clear to me that the status attached to a compulsory trade is, on balance, a significant attraction to entrants. There are several reasons for this, all persuasive. If the trade is voluntary, those who decide to pursue it through the apprenticeship route frequently find themselves working alongside others who are performing identical work, under the same conditions, but receiving wages in excess of the apprentice’s. Moreover, the “non-apprentice” is not required to

---

\(^{34}\) Using 2001 Census data, it is not possible to correlate occupations and formal trade qualifications. In the 2006 Census data, these correlations are said to be possible, but there are no precise breakdowns between compulsory and voluntary trades that would enable further comparisons to be made.
forego his/her income, or pay the tuition fees, for in-class training. In the compulsory trades, these invidious and discouraging distinctions are not present.

200. There is also the important issue of status. The journeyperson’s certificate, in a compulsory trade, is an important “badge of honour”, with credential value akin, if not equal, to a university or college degree. This fact was confirmed, time and again, during my meetings with stakeholders, both management and labour. The possibility of attaining the certificate also serves to encourage potential young entrants, and their parents, to recognize the value of trades training and also helps remove the unjustified stigma that has, for too long, operated as a deterrent to trades training as a desirable and respected career choice.

201. Some contend that the requirements of apprenticeship courses, if made compulsory, will discourage persons from entering the particular trade. I received no evidence that would support this speculative assertion. And I heard nothing from stakeholders in the existing compulsory trades that would give credence to the apprehension that their compulsory status had resulted in a shortage of applicants. Indeed, in most, if not all, of the compulsory construction trades, the numbers of applicants for admission to the trade habitually exceeds their intake capacity.35

202. It is also asserted by those favouring compulsory trades that the inevitable result is that the completion rates are greater than in the voluntary trades. It is said that with the voluntary trades, there is insufficient inducement to complete apprenticeship training. With the voluntary trades, there are no sanctions for failing to have the certificate that is issued on completion of the voluntary apprenticeship courses. And it is said that some employers prefer to retain apprentices who have acquired sufficient skills to perform the required work and who are prepared to forego completion and accept continued employment at the reduced apprenticeship rates. This results, according to the critics, in partially-trained workers, with less than full competency to perform their functions. In addition, these workers are more prone to work-related accidents. As well, they are

35 Ratios that are too high and/or inflexible may operate to limit intake in the compulsory trades, a factor dealt with later in this Chapter.
subject, it is argued, to earnings exploitation.

203. The proponents of compulsory certification say that if it is effectively enforced, it will become an important tool in combating the underground economy. Ministry of Labour inspectors, with power to compel the production of a requisite certificate or proof of apprenticeship registration, will be enabled to pursue their enquiries to determine if other non-training violations are occurring in relation, for example, to non-payment of WSIB premiums and/or the variety of statutory employment source deductions (e.g., EI, CPP, provincial health tax, income tax, etc.). There is, of course, the contrary view that the onerous requirements – and alleged increased payroll costs of compulsory certification – will drive even more employers into the underground economy. This theory is based on the premise that a fully-trained apprentice is a net cost burden to employers. However, there has been no reliable evidence produced to me to support this contention.

204. I have considered all submissions, as well as the behaviour and experience of those working in and with the trades, including the training authorities. In the result, I have concluded that there is a strong probability that registration and completion rates in compulsory trades will remain greater than those in the voluntary trades.

**Economic Impact**

205. As the Prism Economics study concludes, there is likely to be a substantial net financial benefit for employers who train apprentices to completion. The increased payroll and related costs, the study finds, will over the time of the apprenticeship be more than offset as a result of the productive contribution and improved health and safety performance of fully trained apprentices. The CAF report, basing its findings on the Prism study, concludes that for every $1 spent on apprenticeship training, the trainer employer receives (in addition to any eligible tax credits) an average benefit of $1.38 for an average net return of 38 cents. Major stakeholders, including the Ontario Chamber of Commerce, endorse this conclusion. Having heard no persuasive contrary submissions, I find that there is a strong probability that completed apprenticeship training results in net financial benefits for employers. While the costs of compulsory certification will increase for
government, the long-term industry and public benefits justify these increases.\textsuperscript{36}

\textit{Consumer Protection}

206. This is the impact area where there is a lack of data and informed experience. However, those working in the areas where complaints by consumers about the competence of tradespersons and the quality of their work were of the general view that the work of those in compulsory trades who completed their training courses would be considerably less likely to give rise to consumer or public complaints.

\textit{Summary of Findings}

207. It is clear to me that there are no universally applicable grounds upon which decisions to make voluntary trades compulsory can be made. As I put it at several of the focus group meetings there is no wholesale solution to what, in reality, are a set of retail problems.

208. Subject to this caveat, I have reached certain general conclusions on the specific impact factors within my mandate.

- Considered in the abstract, the strong probability is that both registration and completion rates tend to be higher with the compulsory trades.

- Because of the probability of increased registration and higher completion rates, the resulting overall increase in health and safety training should increase the health and safety performance of the trade sector involved. This assumes that health and safety training continues to be a component of the standards for the compulsory trades and also assumes that there are no qualitative or quantitative

\textsuperscript{36} Continuing benefits, of course, depend on continuing employment following completion of the apprenticeship period, and it is widely recognized that an employer’s commitment to full apprenticeship training is undermined, to a real but indeterminate extent, by the fact that there is no guarantee that the fully-trained apprentice will remain with the “training” employer – a risk that is increased by the practice of “poaching” by other employers, many of whom have no commitment themselves to training. The poaching problem is endemic to the system and possible remedy should be carefully assessed: for example, some incentive for apprentices who remain with the training employer for a fixed period following completion e.g. rebates for classroom fees, loan for tools forgiveness.
distinctions between the compulsory and voluntary trades in the setting of health and safety standards.37

- There is a paucity of hard evidence as to whether consumers have greater protection when trades are made compulsory. Instinct, supported by experiential evidence from some stakeholders, supports the inference that the tendency will be for enhanced consumer protection under a compulsory trade regimen.

- As to economic impact, compulsory certification is likely to lead to higher wages within the affected trade38. However, the net cost to employers is almost certain to be lessened when the following offsetting items are factored in: productivity gains, retention benefits, reduced risk of skill shortages and improved health and safety performance. The aggregate costs for apprentices, training deliverers and government will increase, but to the net benefit of the training system, consumers and the public at large.

209. There are other factors which, on applications dealing with individual trades in particular sectors may be relevant and if so, deserve to be given appropriate weight. Examples, by no means exhaustive, include the following:

- Whether, in light of reputable labour market supply/demand projections, the applicant’s ratio provisions might unduly restrict supply;

- The lack of functional complexity and/or the low hazards associated with the performance of the trade for which compulsory status is sought;

---

37 As one of the stakeholders correctly observed, health and safety training is not mandated by the TQAA. However, without exception, all standards under both the TQAA and the ACA now contain health and safety training standards and their continued inclusion is a matter under the control of the MTCU, and one which I am told is not intended to be altered.

38 Labour market economists are in general agreement that credentials (like compulsory certification) will tend to push wages up, whether or not the particular trade is unionized. In the long run, however, it is also generally agreed that wages cannot “defy the law of gravity” and that the supply and demand factors will operate to control wage behaviour. Thus, higher labour costs lead to reduced demand for a compulsory trade in those areas where it overlaps with a voluntary (and cheaper) trade, or where industrial pre-fabrication can replace on-site trade work.
● The unique features and/or conditions, if any, of some portions of a particular sector in which the trade operates where, for example, other micro-labour market issues or existing protective measures for the public may override the perceived advantages of compulsory certification;

● Any questionable contours of the particular trade’s functional components: e.g., the inclusion of non-hazardous, non-complex peripheral functions beyond the essential core components of the trade.

● Situations where the merits of compulsory status might be outweighed by the adverse effect on worker mobility in the overall labour market: e.g., the movement of workers from declining industries to construction.
CHAPTER 12 – RECOMMENDATIONS

Introduction

Having considered the various impact factors related to the possible conversion of trades from voluntary to compulsory status, my mandate requires me to propose a decision framework for doing so. As became apparent to me during the course of my inquiry, very careful consideration is required in order that the decision framework is such that the Minister will receive the most comprehensive and reliable advice on this critical conversion question.

Soon after I began my research, the complexities of the apprenticeship system became evident. In particular, it emerged that the various aspects of the system are, in varying degrees, interlinked and not easily isolated. This will be readily apparent from the preceding chapters. Examples begin with identification problems – i.e., what trades, in the first instance, qualify for apprenticeship status. For those that do, what are the appropriate contours of the trade, and should distinctions be made between core and peripheral elements, especially in relation to health and safety risks, consumer and public protection, and intensity and duration of training courses? What relevance is to be attributed to the historical division of apprenticeship into four sectors – construction, industrial, motive power and services – and within those four sectors, are there valid subsector categories which relate to the manner in which a trade should be described for certification purposes?

Then there is the difficult and contentious issue of ratios, and the contending arguments about their justification, essential purpose and potential misuse: on the one hand, the need to ensure adequate training with due regard for health and safety and the ultimate competency of the trainees, and to avoid employers using apprentices simply as cheap labour; and, on the other, the potentially monopolistic, restrictive labour market supply effects of ratios that may be too stringent. Related complex issues arise with respect to the overlaps between and among the various trades, questions concerning the validity or otherwise of distinctions in the size of firms and their location (urban vs. rural); and, not
least important, the current lack of reliable data to measure the relative impacts for business, labour and the public at large of voluntary vs. compulsory trade status.

Under the present system, some 150 trades operate in their individual and distinct silos with their administration largely governed by their individual PACs and ICs. While these committees have many strengths, and their membership is drawn from persons within the trade with impressive knowledge of the trade’s requirements, there appears to be little interaction or cross-communication between and among the committees. And the “public interest” does not appear to be one of the criteria for the committees’ recommendations made to the Ministry. Yet, as I have earlier observed, committee recommendations are invariably accepted by the Ministry as the basis for the formulation of individual trade regulations.

It is against this backdrop that I have analyzed the specific impact factors referred to in my mandate – health and safety, registration and completions, consumer protection and economic impact. There is a dearth of reliable data to measure each of those impact factors. Nevertheless, experiential evidence, I have concluded, is both relevant and persuasive and supports the general, non-trade specific conclusion that there is a strong probability that compulsory certification results in net overall benefits, as measured by the factors specified for consideration in my mandate.

In reaching this conclusion, I have throughout this report referred to the reliance that I have placed on the evidence received about the practical reactions, experience and behaviour of the stakeholders, particularly the apprentices themselves, to compulsion vs. voluntarism. In doing so, I have found confirmatory support in the literature on behavioral economics and, in particular, the pioneering work of Tversky and Kahneman in integrating insights from psychology into economics.39

---

39 See footnote 2 and, in particular, the comment about the tendency for people to be “effort adverse”, a relevant factor in determining whether, absent compulsion, apprentices would register and complete their courses. For further analysis, see Judgment Under Uncertainty: Heuristics and Biases ed. Kahneman, Tversky and Slovic, 1982 Cambridge University Press.
But these supportive conclusions about compulsory certification are not, in themselves, conclusive. Based on my research and on the submissions received, it is evident that, depending on the trade in question, there are other countervailing considerations that may be relevant. These include the issues to which I have already referred to above, namely the possible negative effects on labour supply, difficulties with trade descriptions, ratios, overlaps, cost factors unique to certain subsectors and smaller enterprises, etc. For this reason, any decision framework must provide for a comprehensive set of criteria to be weighed by those considering applications for compulsory status to ensure that the Minister receives the most comprehensive and reliable advice.

For the above reasons, I have concluded that an essential threshold question is whether current applications for compulsory certification should be considered before a permanent, overarching structure is put in place to enable all stakeholders to deliberate together, with a view to reaching a consensus on the optimal way to ensure that the advice given to the Minister will be based on fully-informed expert and independent evaluation of such applications based on all the appropriate criteria.

There are, in my view, essentially two viable approaches with respect to the “decision framework” which I have been asked to consider.

(a) **THE FIRST** is to establish an all-trades governance institution – a College of Trades – one of whose functions would be to establish a trades advisory panel to deal with applications for compulsory certification status, in light of a comprehensive and relevant set of criteria.

(b) **THE SECOND** alternate approach is to establish the trades advisory panel first, in order that outstanding applications for compulsory status can be dealt with expeditiously, with a view to subsequent integration of the advisory panel into the permanent all-trades governance institution once the structure, membership and mandate of that institution is finally established.
Specific Recommendations

1. *I RECOMMEND* that the Ministry consult with stakeholders with the objective of establishing a new, all-trades governance institution – the College of Trades – whose functions would include the establishment of expert panels to consider applications for compulsory certification and provide advice to the Minister; to engage in certification enforcement; to raise the profile and status of the trades; and provide for periodic review(s) of ratio provisions.

The structure should be one that is worked out consensually between the Ministry and the stakeholders. However, I have some suggestions that would, I hope, be of interest to the parties as they discuss this proposal.

I would favour using the term “College” to describe the institution, even though its principal functions will be different from those of the traditional self-governing professional college or professional association. The two functions that I would regard as desirable to borrow from the traditional College model, are first a board of governors that includes prominent and accomplished members of the public at large; and second, an accreditation role that, together with the “College” name would enhance trade status and prestige.

Decisions would be required as to the membership which, in my view, should include all apprentices and journeypersons covered by the TQAA and the ACA, as well as employer stakeholders. There would also have to be provisions for funding, public and/or private, and complaint mechanisms. As to the Board of Governors, membership should be appropriately apportioned among the following: employees (apprentices and C of Q holders); employers; trainers; and public members (with solid credentials and profile the community at large), with government members (representatives from MTCU, and possibly from MOL, MGCS, ESA and TSSA) having *ex officio*, non-voting Board membership.

Since the trades represent four distinct sectors – construction, industrial, motive power and service – the Ministry and the stakeholders with whom it consults will presumably
wish to discuss appropriate internal divisions within the college administration to handle the distinct requirements of the members of each sector.

If the parties are able to reach agreement to use an adaptation of the College structure, I would see it having four functions in addition to the traditional processes for handling complaints similar to those that arise in other professional self-regulating institutions.

(1) It would establish a panel of experts to consider applications for the compulsory certification of individual trades, based upon a set of pre-established criteria.

(2) It would establish and provide resources for a joint employer/employee “Enhanced Enforcement Unit” (EEU) to work in collaboration with the MOL and the MTCU in field investigations to identify and take remedial action against those contravening the TQAA and the ACA. This activity would relate principally, although not exclusively, to the compulsory trades. If, as I hope would be the case, the College would be established by statute, statutory enforcement powers could be given to the EEU members.

(3) It would establish a standing industry advisory panel to review the issue of ratios to advise the Minister, at regular intervals (say every 3 years), if and when ratios should be changed to meet the cyclical demands of the labour market in the various trades.

(4) It might, as well, assume responsibility for accrediting graduating apprentices and journeypersons and performing related College-like functions (e.g., research, providing for inter-sectoral trade communications, liaising with the TDAs, etc.) all aimed at providing the trades with an institutional structure to enhance their self-image, as well as their image in the eyes of the public.

As to the advice on ratios, I would suggest that potential advisor candidates be discussed by the College’s board of directors, with proposals to be made by stakeholders to the public members, who would have the ultimate authority to decide who those advisors should be. Presumably they would include one or more competent labour market
economist familiar with the apprenticeship system and labour market forecasting methodologies.

As to the suggestion for increasing enforcement resources, I would emphasize the importance of attempting to involve industry, labour and management in augmenting the enforcement role now performed solely by the Ministry of Labour inspectorate. The real knowledge of what is going on in the field lies with the industry participants. Their detailed and current day-to-day intelligence about field activities, effectively mobilized, could serve as an indispensable adjunct to the enforcement activities of the MOL inspectorate. This observation, accompanied by a similar recommendation about industry involvement, was made in a report authored by the writer and John O’Grady of Prism Economics on the underground economy.40

In a broad sense, this recommendation builds upon the preamble to my appointment, namely, the objective of ensuring that the apprenticeship and certification system “continues to meet proper safety standards, provides value to consumers, and serves to meet the needs of the province’s growing economy”. A properly-designed institution focussing primarily on four basic objectives – creating a panel or roster to evaluate applications for compulsory trade status; more effective enforcement; enhancement of the image and profile of the trades; and a process for periodic independent reviews of ratios – would promote even higher levels of registration, completion, competence and safety – and, not least important, a justifiably higher sense of professional pride for those participating in the trades.

If it is determined that there is an urgent need to deal with outstanding requests for compulsory certification, a system for doing so could be established prior to consultations on the creation of an all-trades governance institution. If so:

2. **I RECOMMEND the establishment of an ad hoc roster of qualified advisors, to be**

---

appointed by the Minister, to serve on panels to consider applications for compulsory certification on the basis of a stipulated set of criteria.

I emphasize the term “advisors”. The power to restrict access to an occupation is an extremely important legal concept and one that should be reserved for ministerial discretion. It would be undesirable in the parliamentary tradition for final decisions of this sort to be delegated to a body beyond ministerial control. Indeed, such an arrangement could well give rise to a “right to work” Charter challenge.

Before turning to the method of selecting advisors and a possible process model for them to follow in considering applications, I wish to set out my concept of their role in contradistinction to the separate, distinct and essential roles of the PACs and the ICs (hereafter referred to only as PACs). The PACs focus on trade standards and they develop, with the Ministry, the training programs needed to meet those standards. Because of their trade expertise, the PAC members are uniquely qualified to perform that role. There is nothing in this set of recommendations that is intended to diminish that or any other valuable function that the PACs are now performing. The proposed advisory panel’s role would be to receive the work of the PACs and consider applications for compulsory status in light of that work, together with the submissions of all interested parties, in light of a set of pre-established criteria (see below).

There are obviously a variety of options for establishing a roster of qualified advisors and determining a suitable process for them to follow in consideration of applications for compulsory certification. As I read my mandate, it requires me to set out a “decision framework” for considering compulsory certification applications. The approach that I would favour would include the following components.

- The Ministry, following consultations with the stakeholder groups, would propose a list of candidate advisors for the Minister’s consideration and approval.

- A list of independent candidates would include persons with knowledge and expertise in the workings of the labour market and the apprenticeship system. Potential nominees would include industry members – both labour and
management – labour market economists, representatives of training delivery agents and perhaps persons representing consumer interests.

- There should be a sufficient number of persons on the roster with experience in chairing panel sessions. One possible source for chairperson candidates might be those on the list of arbitrators approved by the Labour Management Arbitration Committee established under the *Labour Relations Act*.\(^4\)

- The roster of advisors would have an Executive Chairperson, supported by a small Secretariat, who would select panels of say 3-5 persons to hear individual applications.

- The Secretariat would ensure that all parties – stakeholders, consumers, trainers and others – were given notice of individual applications and afforded the opportunity to make submissions, written and oral, to the panel.

- Time limits would be set for the panel to receive submissions, written/oral, and submit its advisory decision to the Minister, who would retain the right to make the final decision. The acceptability and credibility of the system would be undermined if the time limits were unduly extended, but some reasonable latitude would be necessary to accommodate complex cases.

---

\(^4\) To achieve objectivity and ensure independence, retired industry and labour officials might be preferred, but this would be a matter for discussion in the consultation process.

\(^4\) All approved arbitrators are required to either have proven experience in adjudication or otherwise have to take and complete a comprehensive course on the substantive and procedural requirements of conducting proper hearings.
3. *I RECOMMEND* that in considering the submissions of the applicant and the other interested parties, the panel should take into account the public interest, assessed in light of the following criteria, and any other criteria determined by the Ministry to be relevant following consultations with stakeholders:

(a) the likely effect of compulsory status on health and safety, registrations, completions and consumer protection;

(b) the economic impact on employers, apprentices, training institutions and government;

(c) the journeyperson/apprentice ratio impact;

(d) the functional complexity of a trade for which compulsory status is sought;

(e) the safety hazards associated with the performance of the trade’s functions;

(f) the environmental enhancement ramifications, if any, of conversion to compulsory status;

---

43 Historically, the initial manifestation of the public interest in developing apprenticeship training was public safety. This was evident in 1944, when the Motor Vehicle Repairer was made compulsory on the basis of this criterion. Since then, matters have evolved and there is now a much better appreciation of the importance of mandatory and regulated training for worker health and safety. This is evident from a generation of experience with OSHA, first adopted approximately 30 years ago, as well as through the increased priority given to accident and occupational illness prevention by the WSIB. In addition, there is now a heightened understanding of the role of human capital in sustaining economic growth and prosperity. Compulsory certification, in appropriate circumstances, can be an underpinning for a highly-skilled and productive labour force – provided requirements for training certification are set in the context of fair and unhindered access to such training, and provided that the introduction of compulsory certification is done in a way that contributes to, rather than disrupts, the efficiency of the labour market.

44 To the extent possible, the hearing panels – to avoid having to traffic in abstractions – should communicate to the parties (as I attempted to do in my assignment) that they are expected to produce as much solid, empirical evidence as possible on each of the enumerated criteria.
the description of the elements of the trade and whether distinctions are warranted between core and peripheral elements in determining the appropriate contours of the trade’s description; 

whether there are unique features of all or some of the sector(s) in which the trade operates which might affect the appropriateness of compulsory status for sector(s) or a portion(s) thereof; 

whether compulsory status would have a detrimental effect on cross-sector, inter- or intra-provincial labour mobility; and

the nature of the grandparent provision for existing workers in the trade.

While each of the above factors should be addressed, the panel should have authority to exercise its discretion in determining the weight to be given to each of the enumerated criteria and any other factors that it deems to be relevant in making its advisory determination.

**Other Recommendations**

I have referred to the fact that the various data collection and analysis systems now in place – both federal and provincial – do not enable distinctions to be made between compulsory and voluntary trades. It is recognized that such information – for example, differing registration and completion rates, variations in health and safety performance measured by lost time injuries, and other measurements – could not in themselves lead to unqualified conclusions about the relative merits of compulsory vs. voluntary trades. There will always be other variables, most notably, perhaps, the cyclical nature of the economic sectors in which the various trades operate, which will come into play. Nonetheless, there appear to be no impediments to refining existing data collection systems to enable some more indicative compulsory/voluntary comparisons to be made. Therefore:

---

45 Here I am referring to the “overlap” issue and ways in which the panel may wish to reduce or eliminate the incidence of overlaps.
4. I RECOMMEND that the ministries and agencies involved – MTCU, MOL, the WSIB, the ESA, the TSSA and Tarion – form a working group, along with representatives of Statistics Canada responsible for the RAIS data, to explore viable and compatible revisions to their data collection and retrieval systems, so as to improve, so far as possible, the ability to make relevant statistically sound comparisons between compulsory and voluntary trades. This panel should be chaired by an independent appointee familiar with statistical methodologies.

The work performed by tradespersons in industrial plants, as has been mentioned (see para. 78) can be as difficult and dangerous, and, if inadequately performed, can have as adverse consequences for consumers, as the same work performed outside the plant. For this reason, the industrial plant exemption provision contained in section 5(1) of Reg. 1055 under the TQAA should be reviewed. It is recognized that this is a controversial subject. Many of the larger industrial employers, I was told, have training programs equal to or better than those provided for the compulsory trades. Some of those superior plans are developed and made enforceable under collective agreements. Smaller industrial employers expressed concerns about the costs associated with compulsory trade certification. Implicit in some of their representations are concerns about unionization. All of these and other issues should be fully aired and assessed. Accordingly,

5. I RECOMMEND that a joint review committee be established by MTCU, with representatives from key industries, industry associations, industrial unions, and unorganized industrial workers, to analyze the rationale for the current industrial plant exemption under the TQAA and report to the Minister. This panel should also be chaired by an independent qualified third party.

In preparing this report, including analyses of the numerous studies and commentaries on training, the written submissions received from the stakeholders, the informal meetings held with many groups, and the more formal focus group meetings in Toronto (2), Ottawa, Sudbury, Thunder Bay and London, I have heard nothing that would alter my view that the existence of two concurrently operating statutes governing apprenticeship –
especially with two separate processes by which trades are made compulsory or restricted – results in an inherently and unnecessarily complex and confusing situation. Accordingly,

6. I RECOMMEND that, following full and open consultations, one all-inclusive statute be developed and enacted to replace the ACA and the TQAA. This statutory integration should focus on a single administrative process for the way in which compulsory vs. voluntary trades are determined. Key substantive decisions will be required, including the scope and powers to be given to the Director of Apprenticeship; the powers that should be retained by the Minister and by Cabinet; the role and composition of the stakeholders advisory committees; and the way in which the stakeholders and the public are given meaningful access to and participation in a transparent process of decision-making. It should also be made clear, in any legislative redrafting, that nothing in the training legislation or in the Regulations under any Act (such as O. Reg. 572/99 under the Occupational Health and Safety Act) is to be construed as dealing with the jurisdictional rights of trade unions.

Conclusion

This inquiry has led me to the conviction that there is substantial potential to improve and enhance the standing and effectiveness of apprenticeable trades and their continued, strengthened contribution to the growth of the Ontario economy. I hope that the recommendations contained in this report will serve as a basis for informed consideration of practical ways in which this objective can be accomplished.

All of which is respectfully submitted this 28th day of April, 2008.

T.E. Armstrong, Q.C.
APPENDICES

Appendix 1 – Acronyms
Appendix 2 – Who Participated in the Review
Appendix 3 – Invitation to Make Written Submissions and Supporting Material
Appendix 4 – Invitation to Participate in Focus Group Meetings
Appendix 5 – History of Compulsory Certification
Appendix 6 – Trade Ratios
Appendix 7 – Red Seal Trades Designated in Ontario
Appendix 8 – Apprenticeship Funding
Appendix 9 – Designated Apprenticeship Trades
Appendix 10 – Compulsory/Restricted Trade Descriptions Resulting from Exemptions
Appendix 11 – MTCU registration and completion data
Appendix 12A – Sources of Apprenticeship Registration Data
Appendix 12B – Measuring Apprenticeship Completion Rate
Appendix 13 – Potential Costs Impact of 1,000 New Apprentices – Government Fees and Programs
Appendix 14 – OLRB Jurisprudence – Jurisdictional Disputes and the TQAA
Appendix 15 – Extracts from Simonett and Dymond Reports Regarding Ratios
Appendix 16 – Bibliography
### APPENDIX 1 - ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA</td>
<td><em>Apprenticeship and Certification Act, 1998</em></td>
</tr>
<tr>
<td>CAF</td>
<td>Canadian Apprenticeship Forum</td>
</tr>
<tr>
<td>CPA</td>
<td><em>Consumer Protection Act</em></td>
</tr>
<tr>
<td>CSAO</td>
<td>Construction Safety Association of Ontario</td>
</tr>
<tr>
<td>C of Q</td>
<td>Certificate of Qualification</td>
</tr>
<tr>
<td>DAA</td>
<td>Delegated Administrative Authority</td>
</tr>
<tr>
<td>EI</td>
<td>Employment Insurance</td>
</tr>
<tr>
<td>ESA</td>
<td>Electrical Safety Authority</td>
</tr>
<tr>
<td>ETC</td>
<td>Employment and Training Consultant</td>
</tr>
<tr>
<td>GTA</td>
<td>Greater Toronto Area</td>
</tr>
<tr>
<td>IC</td>
<td>Industry Committee</td>
</tr>
<tr>
<td>ICI</td>
<td>Industrial, Commercial and Institutional</td>
</tr>
<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
</tr>
<tr>
<td>JPO</td>
<td>Jobs Protection Office</td>
</tr>
<tr>
<td>LAC</td>
<td>Local Apprenticeship Committee</td>
</tr>
<tr>
<td>OHSA</td>
<td><em>Occupational Health and Safety Act</em></td>
</tr>
<tr>
<td>OLRB</td>
<td>Ontario Labour Relations Board</td>
</tr>
<tr>
<td>OYAP</td>
<td>Ontario Youth Apprenticeship Program</td>
</tr>
<tr>
<td>MGCS</td>
<td>Ministry of Government and Consumer Services</td>
</tr>
<tr>
<td>MOL</td>
<td>Ministry of Labour</td>
</tr>
<tr>
<td>MTCU</td>
<td>Ministry of Training, Colleges and Universities</td>
</tr>
<tr>
<td>PAC</td>
<td>Provincial Advisory Committee</td>
</tr>
<tr>
<td>RAIS</td>
<td>Registered Apprenticeship Information System</td>
</tr>
<tr>
<td>TQAA</td>
<td><em>Trades Qualification and Apprenticeship Act</em></td>
</tr>
<tr>
<td>TSSA</td>
<td>Technical Standards and Safety Authority</td>
</tr>
<tr>
<td>TDA</td>
<td>Training Delivery Agent</td>
</tr>
<tr>
<td>WSIB</td>
<td>Workplace Safety and Insurance Board</td>
</tr>
</tbody>
</table>
APPENDIX 2 - WHO PARTICIPATED IN THE REVIEW

Listed below are the institutions and organizations that made a submission to the Review, sent representation to focus group meetings or met with Mr. Armstrong.

A. Potvin Construction Limited
Aable Construction
Advantage Electric Thunder Bay Ltd.
Akon Residential Painting
Algonquin and Lakeshore Catholic District School Board - OYAP
Algonquin College
Aleris Specification Alloy Products Canada
All Canada Crane Rental Corp.
Angton Electric
ArcelorMittal-Dofasco
Architectural Glass & Metal Contractors Association
Architectural Glass & Metal Contractors and International Union of Painters and Allied Trades (Ontario)
Armadillo Interior
ASG Automation Tooling Systems – ATS Automation Tooling Systems
Ashcraft Home
Association of Millwrighting Contractors of Ontario
Association of Ontario Road Supervisors
Barwood Flooring
Bison Transport
Boilermakers Apprenticeship and Training Local 128
BOT Construction Ltd.
Bowen’s Appliance Service
Breeze Facilities Solutions
Brentview Construction (Ontario) Ltd.
Bricklayers & Allied Crafts Union
Brookfield Lepage Johnson Controls
Builders Warehouse BMR
Building and Construction Trades Council
CAW - Canada
CFPO Woolwich
Cambrian College
Canadian Apprenticeship Forum
Canadian Automatic Sprinkler Association
Canadian Blood Services
Canadian Culinary Federation
Canadian Manufacturers and Exporters
Canadian Federation of Independent Business
Capital Fence
Carleton Electric Ltd.
Carpenters/Acoustic & Drywall Union Local 2041
Carpenters’ District Council of Ontario
Carpenters Local 27 Joint Apprenticeship Training Trust
Carpenters Local 93
Carpenters Local 494
Carpenters Local 1669
Carpenters Local 1946
Carpenters Local 2486
Carpenters Union, Central Ontario Regional Council
Canadian Film and Television Production Association
Castor Foundation Repairs
Central Machine & Marine
Central Ontario Building Trades
Certified Fire Prevention
Chibae Drywall
Cholette Electric Inc.
City of Brampton
City of Hamilton – Water & Wastewater Division
City of Kingston
City of Mississauga
City of Oakville
City of Ottawa
City of Toronto
Classic Fire Protection Inc.
Colleges Ontario
ComFact Corporation
Con-Drain Company (1983) Limited
Concrete Floor Contractors’ Association
Construction Compulsory Trades Committee
Construction Labour Relations Association of Ontario
Council of Ontario Construction Associations
Covenant Construction
Cruickshank Construction Ltd.
D.P. Electric
Dalerose Country Inc.
Dearie Contracting
Deerhaven Farm & Garden
Dietrich Steel Ltd.
DiNardo C Group Inc.
Drapeau Automatic Sprinkler Corp.
Dundas Power Line Ltd.
Durham Region Local Training Board
Eastern Construction
Edwards Sprinkler Part of Troy Sprinkler
Electrical Contractors Association of Ontario
Electrical Power Council
Electrical Provincial Advisory Committee and Industry Committee
Electrical Safety Authority
Electrical Utilities Provincial Labour Management Health and Safety Committee
Elgin Middlesex Oxford Local Training Board
Employment & Education Centre
Entertainment Electrical Safety Committee of Ontario
Escape Fire Protection Ltd.
Fanshawe College
Fisher Wavy Inc.
G. Tackaberry & Sons Construction
GN Johnston Equipment
Gardiner Tree Trimming and Removal Ltd.
Georgian Bay Fire & Safety Ltd.
Georgina Trades Training Inc.
Glazier Local 200
Graham Bros. Construction Ltd.
Gramour Lumber
Grand Erie District School Board
Greater Ontario Regional Council of Carpenters and Allied Workers Local 494
Greater Ottawa Home Builders’ Association
Ground Force Training (AORS)
H.A. Madill Drywall Ltd.
Hamilton District Autobody Repair Association
Hamilton Training Advisory Board, YMCA
Hamilton Burlington and Skilled Trades Employer Partnership Strategy
Hamilton Wentworth District School Board
Harding Fire Protection Systems
Harris Rebar (A Division of Harris Steel Ltd.)
Hastings and Prince Edward District School
Heating, Refrigeration and Air Conditioning Contractors of Canada
Home for the Aged
Honey Electric Ltd.
Howard Bayle Heating and Air Conditioning
Human Resources Professional Association of Ontario
Huron Glass Inc.
Hydro One
Hydro One Networks Inc.
IAM & AW LL 1120 Machinist
Individual - Cabinetmaker
Individual - Film and Television Industry
Individual - Greater Ontario Regional Council of Carpenters Local 494
Individual – Instrumentation and Control Technician
Individual - Refrigeration and Air Conditioning Mechanic
Industry Committee Arborist
Industry Committee Automotive Service Technician
Industry Committee Elevator Devices Mechanic
Industry Committee IT and Contact Centres
Industry Committee Facility Operations
Industry Committee Farm Equipment Technician
Industry Committee Heavy Duty Equipment Technician
Industry Committee Horticulture Technician
Industry Committee Industrial Electrician
Industry Committee Parts Technician
Industry Committee Powered Lift Truck Technician
Industry Committee Precision Machining and Tool Trades Sector
Interior Systems Contractors’ Association
International Alliance of Theatrical Stage Employees, Moving Picture Technicians, Artists and Allied Crafts of the United States, its Territories and Canada
International Association of Heat and Frost Insulators and Asbestos Workers Local 95
International Association of Machinists
International Association Operative Plasterers and Cement Masons Local 124 represented by Jewitt Morrison and Associates
International Brotherhood of Electrical Workers (IBEW) Construction Council of Ontario
IBEW Local 586, Ottawa represented by Koskie Minsky
IBEW Local 402
IBEW Local 636
IBEW Local 1687
International Union of Bricklayers and Allied Craftworkers and the Ontario Provincial Conference of the International Union of Bricklayers and Allied Craftworkers (IUBAC)
IUBAC Locals 7, 6, 20 and 41
IUBAC Local 31
IUBAC Local 28
International Union of Painters and Allied Trades, Ontario Industrial Finishing and Skills Centre and Ontario Painter and Decorator Contractors Association
International Union of Painters and Allied Trades, Glaziers Local 1819
International Union of Operating Engineers, Local 793
Iron Workers District Council of Ontario
Iron Workers District Council of Ontario and Ontario Erectors’ Association
Iron Workers Local 700
Iron Workers Local 721
Iron Workers Local 765
Iron Workers Trade Improvement Plan
J.A. Macdonald (London) Ltd.
J-C Robinson & Sons
John & David Baer
Joint Training Apprenticeship Committee / United Association of Refrigeration and Air Conditioning Workers Local 787
Kenwok Services Ltd.
Kott Lumber Comp.
Kraus Floors
La Cité Collégiale
Landscape Ontario
Linamar Corp.
Labourers’ International Union of North America (LIUNA) Local 183
LIUNA Local 183 Training Centre
LIUNA Local 506 Training Centre
LIUNA Local 527 Training & Education Centre
LIUNA Local 1059 Training Trust Fund
LIUNA Local 1089
LIUNA (Tri-Funds)
Landscape Ontario
Lavis Contracting Co. Ltd.
LifeStyle Home Show
Local Apprenticeship Committee Electrical Local 586
Lochhead Appliances Service
London District Catholic School Board
London Home Builders’ Association
Longwood Builders Corp.
Lovett Electric Ltd.
Low Rise Forming Association
Lowe Fire Protection Inc.
Loyalist College
M J Labelle Co. Ltd.
M.P.P. Glengarry-Prescott-Russell
M. Scapillati Flooring Inc.
MacKinnon Transport Inc.
Maize Siding
Maple Reinders Construction
Masonry Contractors’ Association of Toronto
Mattamy Homes
McLean Taylor Construction Ltd.
McMaster Children’s Centre
Melloul-Blamey Construction Inc.
Millwright & Machine Erectors Local 1425
Millwright Regional Council of Ontario
Millwright Regional Council Local 1410
Millwright Local 1592
Minto Construction
Minto Communities Inc.
Minto Development
Mirror Works
Mohawk College
National Association of Broadcast Employees & Technicians Local 700 Communications, Energy & Paperworkers Union of Canada
Neree Lavictoire General Contracting
Northwest Training and Adjustment Board
Office of the Fire Marshall, Ontario
Ontario Association of Certified Engineering Technicians and Technologists
Ontario Association of Home Inspectors
Ontario Chamber of Commerce
Ontario Concrete and Drain Contractors Association
Ontario Construction Secretariat
Ontario Electric League
Ontario Federation of Labour
Ontario General Contractors’ Association
Ontario Good Roads Association
Ontario Home Builders’ Association
Ontario Industrial and Finishing Skills Centre
Ontario Marine Operators Association
Ontario Masonry Contractors’ Association
Ontario Municipal Fleet Safety Association
Ontario Painting Contractors Association
Ontario Pipe Trades Council of the United Association of Plumbers and Steamfitters and Apprentices of the United States and Canada represented by Alex J. Ahee Barrister and Solicitor
Ontario Power Generation
Ontario Road Builders’ Association
Ontario Sewer and Watermain Construction Association and the Greater Toronto Sewer and Watermain Contractors Association
Ontario Sheet Metal Workers and Roofers Conference on it’s own behalf and on behalf of it’s affiliated local unions
Ontrac Equipment Services Inc.
Open Shop Contractors Association
Operative Plasterers’, Cement Masons’, and Restoration Steelplejacks International Association of the United States and Canada Local 598
Orbital Home Integration
Orion Protection Inc.
Ottawa and District Labour Council
Ottawa Building Trades Council
Ottawa Sprinkler Installation Ltd.
Ottawa Valley Glass Enterprises Ltd.
Passport to Prosperity
Peak Eng. & Construction Ltd.
Petro Canada
| Pedersen Construction Inc.                      |
| Pioneer Construction Inc.                      |
| Power Workers’ Union                            |
| Provincial Advisory Committee Construction      |
| Boilermaker                                      |
| Provincial Advisory Committee Drywall, Acoustic |
| and Lathing Applicator                          |
| Provincial Advisory Committee Electrician       |
| Provincial Advisory Committee Plumber           |
| Provincial Advisory Committee Refrigeration and |
| Air Conditioning Mechanic                      |
| Provincial Advisory Committee Roofer            |
| Provincial Advisory Committee Sprinkler and Fire |
| Protection Installer                            |
| Provincial Building and Construction Trades    |
| Council of Ontario                              |
| RW Tomlinson                                    |
| Reitzel Heating & Sheet Metal                   |
| Residential Carpentry Contractors Association of |
| Greater Toronto                                 |
| Residential Construction Council Ontario        |
| Residential Framing Contractors’, Toronto        |
| Residential Framing Contractors Association of  |
| Metro Toronto and Vicinity Inc.                 |
| Residential Siding Contractors Association of   |
| Greater Metropolitan Toronto                    |
| Resilient Flooring Contractors Association of   |
| Ontario                                        |
| Rivard Mechanical                               |
| Robert Excavation                               |
| Rockland Fence                                  |
| Rosetown Central Refrigeration and Air          |
| Conditioning                                    |
| Ryder Truck                                     |
| Sarnia Construction Association                |
| Sheet Metal Workers and Built up Roofers        |
| Sheet Metal Workers’ International Association  |
| Local 285 Training Centre                       |
| Sheet Metal Workers Local 30                    |
| Sheet Metal Workers Local 235                   |
| Sheet Metal Workers Local 397                   |
| Sheet Metal Workers Local 504                   |
| Sheet Metal Workers Local 539                   |
| Sheet Metal Workers Local 562                   |
| Sheet Metal Workers International Association   |
| Simples Grinnell                                |
| Skills Canada - Ontario                         |
| St. Clair College                               |
| Stair Shop                                      |
| Sudbury and District Home Builder's Association |
| Sudbury and District Labour Council             |
| Sudbury Construction Association                |
| Suncraft 2008 Painting & Decorating             |
| Sutherland Global Services                      |
| Tamarac Homes                                   |
| Tartan Homes                                    |
| Technical Trades Institute                      |
| Teranorth Construction & Engineering Ltd.       |
| Terrazzo Tile & Marble Trade School Inc.        |
| The Corporation of the City of Oshawa           |
| The Corporation of the Town of Caledon          |
| The Electric Lift Truck Company                  |
| The Enterprise Canada Group                      |
| The Regional Municipality of Durham             |
| Top Performance Cleaning                         |
| Top Quality Exterior Design                      |
| The Veg Company Inc.                            |
| Toronto Concrete and Drain Ltd.                 |
| Toronto District School Board – Ontario Youth   |
| Apprenticeship Program                          |
| Toronto Training Board                          |
| Toronto Transit Commission                      |
| Toyota Canada Inc. Industrial Equip. Division    |
| Tri-Air Systems                                 |
| Troy Sprinkler Ltd.                             |
| Turnay Electric Ltd.                            |
| U.A. Local 46                                   |
Specialized expertise was obtained from:

Andrew Sharpe, Centre for the Study of Living Standards
James Arnett, Chair - The Agency Review Panel to Review Ontario’s Provincially-Owned Electricity Agencies
John O’Grady, John O’Grady Consulting Ltd.
Judith Maxwell, former head of the Economic Council of Canada and the Canadian Policy Research Networks
Kevin Whittaker, Ontario Labour Relations Board
Morris M. Kleiner, W.E. Upjohn Institute for Employment Research, Kalamazoo, Michigan
Morley Gunderson, University of Toronto, Centre for Industrial Relations

Construction Safety Association of Ontario
Construction Sector Council
Electrical Safety Authority
Industrial Accident Prevention Association
Insurance Bureau of Canada
Ontario Construction Secretariat
Ontario Ministry of Finance
Ontario Ministry of Government and Consumer Services
Ontario Ministry of Government and Consumer Services, Centre for Learning and Leadership – Eastern Region
Ontario Ministry of Labour
Ontario Ministry of Training, Colleges and Universities
Ontario Ministry of Transportation
Tarion Warranty Corporation
Technical Standards and Safety Authority
University of Toronto, Centre for Industrial Relations Library
Workplace Safety and Insurance Board
APPENDIX 3 - REQUEST FOR WRITTEN SUBMISSIONS

1) My invitation letter;
2) Statement of Work, summarizing the terms of my assignment;
3) Background paper on compulsory certification, including the history of apprenticeship and trade certification in Ontario, an overview of the apprenticeship and certification system currently in operation, and
4) A summary of the arguments advanced in the past for and against increasing the number of compulsory trades.
December 10, 2007

TO: Apprenticeship and Certification Stakeholders

On August 1, 2007, the Minister of Training, Colleges and Universities appointed me to conduct a review of the impact of expanding compulsory certification for trades that are now voluntary. I am writing to explain my task and to invite you to participate in this important work.

I am attaching three documents:

- A Statement of Work
- A backgrounder on apprenticeship and trade certification, and
- A summary of the arguments advanced in the past, for and against increasing the number of compulsory trades.

As you will see from the Statement of Work, my mandate is to consider how expanding compulsory certification to trades that are now voluntary would impact the following five factors: health and safety, the registration of new apprentices, the number of apprentices who would complete trades training, consumer protection, costs and the effect on the economy generally. It is important to emphasize that the review will not include making recommendations for government action with respect to existing requests for compulsory certification.

The weeks since my appointment have been devoted primarily to briefings and research relating not only to the apprenticeship system in Ontario, but also to comparable systems in other jurisdictions. I have also met with a relatively small number of groups and individuals who have expressed their wish to make preliminary representations. Meetings have also been held with economists from the Labour and Demographic Analysis Branch of the Ministry of Finance and the Labour Market Information and Research Branch of the Ministry of Training, Colleges and Universities, with a view to determining whether data exist that might assist whether, and to what extent, compulsory versus voluntary certification relates to the five impact factors that I have been instructed to consider.
I urge you to participate in this review. As a first step, I invite you to submit your written submissions concerning the effect of expanding compulsory certification on each of the five factors mentioned above.

It may be that you and/or your organization have already studied this issue. If so, I would appreciate receiving any survey or other research material which are you able to share with me. Your impressions are also welcome, but supporting research will undoubtedly carry greater weight in terms of the future policy development process.

Would you please send your written submissions to me by January 25, 2008, to:

Tim Armstrong  
Compulsory Certification Review Advisor  
c/o Ministry of Training, Colleges and Universities  
900 Bay Street  
17th Floor  
Mowat Block  
Toronto, Ontario  
M7A 1L2

or by email to: compulsory.certification@ontario.ca

I look forward to receiving your submissions. During the course of the review, I will also be arranging meetings with stakeholders from across Ontario. Particulars of those meetings will be provided to you in due course.

Thank you for your interest and support.

Sincerely,

Tim Armstrong  
Compulsory Certification Advisor

Attachments

Attachments are also available on the Ministry’s website:  
www.edu.gov.on.ca/eng/ccr/ and www.edu.gov.on.ca/fre/eao/
Review of the Impact of Expanding Compulsory Certification to Voluntary Trades

STATEMENT OF WORK

Background

The Government of Ontario wants to ensure that Ontario’s apprenticeship and certification system continues to meet proper safety standards, provides value to consumers and serves the needs of the province’s growing economy. To support this objective, the government has committed to review whether compulsory certification should be expanded to include trades for which certification is presently voluntary.

Tim Armstrong has been appointed Advisor of this review by the Minister of Training, Colleges and Universities (Minister) pursuant to subsection 2(2) of the Ministry of Training, Colleges and Universities Act, R.S.O. 1990, c. M.19.

Objectives

The mandate of the Advisor is to review the impact of expanding compulsory certification to trades that are voluntary and to submit a report to the Minister with his findings and recommendations on this issue. The review and the report must take into account the following factors:

i. Health and safety
ii. The registration of new apprentices
iii. The number of apprentices who complete apprenticeship training
iv. Consumer protection
v. Economic impact, and
vi. Any other factor(s) that the Advisor considers relevant to achieve the objectives.

Expected Outcome

The expected outcome of the review is a written report, to be submitted to the Minister within six months of the appointment of the Advisor, which fully addresses the stated objectives of the review and includes the following:

1. An impact analysis of expanding compulsory certification with reference to the factors listed above.

2. A decision framework, including recommendations and rationales, to facilitate a decision-making process regarding expanding compulsory certification to individual trades seeking compulsory certification. The framework may include recommendations on criteria that may be used to assess a request for compulsory certification. The benefits
and risks associated with implementing the recommendations are also to be assessed in the report.

The objectives and expected outcome do not include making recommendations for government action in respect of existing industry requests for compulsory certification.

All work (including research) produced by the Advisor relating to the objectives and expected outcome will be owned by the Crown in right of Ontario.

**Term**

The appointment is from August 1, 2007 to the earlier of the completion of the outcomes or six months from the date of appointment.
INTRODUCTION

Apprenticeship is an effective form of training used around the world to address the needs of employers in many different kinds of industries. It is a method of learning in which practising experts (journeypersons) pass on knowledge and skills to apprentices in a workplace setting. In Canada, apprenticeship is one of the few ways workplace training is recognized and credentialed, thus enhancing worker mobility. Most training takes place on the job; the theoretical training is delivered by institutions such as community colleges (colleges of applied arts and technology) and union and/or employer-sponsored training centres.

By helping build a skilled labour force, apprenticeship training enables the province to attract the investment it needs for economic growth and job creation. Employers, while covering most of the costs of training, have productive employees in the workplace, and workers earn wages while they learn relevant skills required in real workplaces.

The purpose of this background paper is to provide background on compulsory certification including the history of apprenticeship and trade certification in Ontario and an overview of the apprenticeship and certification system today.

COMPULSORY CERTIFICATION – BEGINNINGS

Compulsory certification means that a person must hold a valid certificate of qualification or be registered as an apprentice in a given trade to work or be employed in that trade. Conversely, voluntary certification means that a person does not have to hold a certificate of qualification or be a registered apprentice in order to work or be employed in the trade.

In 1944, at the request of management and labour representatives in the automotive repair industry, compulsory certification was introduced for the trade of motor vehicle repairer, to protect the public from the consequences of faulty work. In 1958, compulsory certification was introduced for the trade of hairdresser and, in 1963, for the trade of barber.

In 1964–65, following a report of the Select Committee of the Legislature on Manpower Training, specific construction apprenticeship trades were designated compulsory.

The only compulsory certified trade introduced since the 1960s is hoisting engineer (crane operator), which was introduced in 1982. Prior to 1982, hoisting engineer was a compulsory certified trade under the Operating Engineers Act. Today there are 21 compulsory/restricted trades. See Appendix 1 for a list of compulsory trades.

ONTARIO APPRENTICESHIP ACT (1928)
This Act reflected the Ontario government’s desire to increase the training of Ontario workers, primarily in the building trades, and to legislate their training and working conditions. It applied only to minors between the ages of 16 and 21.

**APPRENTICESHIP AND TRADESMEN’S QUALIFICATION ACT (1964), renamed TRADES QUALIFICATION AND APPRENTICESHIP ACT (1990)**

*Background to the Act*
In spite of the Ontario Apprenticeship Act, throughout the 1930s, 1940s and 1950s the apprenticeship system lost popularity and effectiveness in Ontario. An examination of the apprenticeship system in Ontario in 1961 found that it was not being successfully utilized as a means of training tradespeople. Because of concerns raised by those who wanted better trades training, particularly in the construction industry, in 1962 a Select Committee on Manpower Training was appointed by the Ontario Legislature. The committee was established to study apprenticeship and related training systems, together with the roles of government, industry, and labour in this area, and make recommendations about the training of workers, including all aspects of apprenticeship training.

In February 1963 the committee submitted its report. The following year, recommendations of the select committee were adopted in a new Apprenticeship and Tradesmen’s Qualification Act (ATQA), which replaced the Ontario Apprenticeship Act. Also, the government continued to support technical education: in 1965, the Legislature passed a bill amending the Department of Education Act to create a system of community colleges (colleges of applied arts and technology) in Ontario.

The ATQA introduced major changes including designating specific construction apprenticeship trades as compulsory to stimulate participation by giving those trades the increased credibility that came with compulsory certification.

The Select Committee on Manpower Training had also encouraged the government to apply the apprenticeship training system to manufacturing occupations. In the 1970s, reflecting the growth of Ontario’s manufacturing-based economy, the industrial/manufacturing trades began to use the apprenticeship model of training.

*Name change*
In 1990 the name of the Act was changed to the Trades Qualification and Apprenticeship Act (TQAA). Its provisions remained unchanged. The TQAA still governs apprenticeship in Ontario today along with the Apprenticeship and Certification Act, 1998 (ACA).

**APPRENTICESHIP AND CERTIFICATION ACT, 1998 (ACA)**

*Background to the Act*
In December 1996 the government launched a broad consultation process on apprenticeship reform. Stakeholders were invited to contribute to helping the government meet its goal of “a strong apprenticeship system to promote economic growth and to address the training needs of Ontario industries.”
The then Ministry of Education and Training held consultation meetings with stakeholders. A survey of approximately 1,200 active apprentices, former apprentices, and certified tradespeople was conducted to identify client service satisfaction levels and to solicit these clients’ views on such reform issues as funding, quality of training, and client service delivery.

During the consultations, stakeholders spoke about the strength of the apprenticeship system and model of training, while acknowledging that the system could be improved in many ways. There was agreement that the broad goals of reform should be to clarify the intent of the legislation and regulations, to ensure that they promote both high standards and consistency in applying the standards, and to encourage a greater sense of ownership by stakeholders.

The construction trades generally did not support the changes to the legislation and urged the retention of the TQAA. Concern was expressed that the new Act did not recognize or accommodate the construction sector’s unique needs. Other presenters viewed the streamlining of the existing legislation as unnecessary deregulation that would weaken the system and erode the trades. Some groups wanted industry to have more opportunity for input into the system. The Ministry also heard concern that the introduction of “skill set certification”—that is, certification based on a set of skills—would result in fragmentation of trades. Many groups expressed the fear that skill sets would reduce worker mobility by being too employer-specific.

After the consultations and public hearings on the legislation, the ACA received royal assent in 1998 and was proclaimed in 2000. The TQAA continues to apply to specific construction trades that are named in this Act or its General Regulation.

**Restricted Skill Sets**

The ACA provides that not every skill used in every trade requires a compulsory Certificate of Qualification. Legislation permits the issuing of a certificate (other than a Certificate of Qualification) for completion of training in a “skill set,” which is a specified skill or set of skills required for a trade or occupation. The term “skill set” is defined in the ACA as “one or more skills.” Under the TQAA, only trades can be designated as “certified” (requiring compulsory certification); the ACA allows skill sets to be designated as “restricted” (requiring compulsory certification).

Skill sets enable industry to develop, and government to certify, levels or areas within a trade or occupation. An example is the mandatory certification for workers who install wheels and rims on large trucks. People who wish to be certified for this work, or as a truck and coach service technician, must now prove they have the set of skills needed to perform such installations.

The ACA also allows for the overlapping of restricted skill sets, meaning that a particular skill set can fall within more than one restricted skill set, trade, or occupation. Under the ACA, a restricted skill set will always be “restricted” (compulsory), regardless of the work context within which the skill is used.
TRADE DESIGNATION

The TQAA establishes that once a trade is designated under the Act, no one, other than an apprentice, can work in that trade unless he or she holds a proper certificate; that is, a Certificate of Qualification. Trades designated under the Act are referred to as “compulsory” trades; that is, it is compulsory to hold a certificate, unless one was an apprentice, to practise that trade. An exemption from compulsory certification allows for voluntary certification. This process was introduced in 1964. There are 10 TQAA compulsory trades.

Under the ACA, the Director of Apprenticeship has the authority to designate trades or occupations. Restricted skill sets are designated in regulation. There are 11 ACA restricted/compulsory trades and 1 skill set program.

No criteria are stated or defined in either statute or in operational policy, for determining whether a trade should be designated compulsory or voluntary.

CERTIFICATION

Under the TQAA, when apprentices complete the terms of their program and successfully pass the certification examination with a mark of 70 per cent or better, they are awarded both a Certificate of Apprenticeship and a Certificate of Qualification. The Certificate of Apprenticeship signals the successful completion of the apprenticeship training components, while the Certificate of Qualification is awarded once the examination is passed.

Under the ACA, apprentices receive a Certificate of Apprenticeship upon completion of their apprenticeship training program. The Certificate of Qualification is issued upon successful completion of the certification examination.

Under the TQAA and ACA, journeypersons who have been working in the trades and tradespeople from other jurisdictions who can provide documented proof of comparable work experience and training can apply directly for certification without completing an Ontario apprenticeship program. If their work experience is deemed equivalent they are eligible to write the examination for certification. The pass mark is 70 per cent.

APPRENTICESHIP IN ONTARIO TODAY

Overview
Apprenticeship training in Ontario is a partnership among many players, including the following:

- Apprentices, who make a commitment to train in a specific apprenticeship occupation
- Individual employers, who provide on-the-job training to the apprentice
- Business and labour representatives, who work with the government through the Provincial Advisory Committees and Industry Committees to develop training standards and examinations
- Colleges of applied arts and technology and other trainers, such as union-employer training centres, which deliver in-school training
• The provincial government, which sets the legislative framework and program standards, develops curriculum standards for the in-school or theoretical component of apprenticeship programs, develops and administers examinations and the certification process, administers the system through the Ministry of Training, Colleges and Universities and its network of field offices, provides funding for in-school training, and enforces the compulsory/restricted certification requirements.

• The federal government, which contributes to the cost of in-school training for those apprentices who are eligible under the federal government’s employment insurance program, and which provides income support for eligible apprentices while in school.

At present, Ontario has more than 140 apprenticeship trades in the construction, motive power, industrial, and service sectors. Of these trades, 21 are compulsory. These 21 are in the construction and motive power sectors and the hairstyling trade from the service sector.

An average of 10,200 new Certificates of Qualification have been issued annually over the past five years.

2005-06 activity:

• Over 70,000 registered apprentices
• 66 training delivery agents provided in-school training (24 colleges, 42 union or employer-sponsored training centres)
• Estimated 29,000 apprentices received in-school training
• More than 21,000 new apprenticeship registrations
• Estimated 697,400 journeypersons
• Estimated 27,300 active employers

Investment: Employers/Industry
Employers cover 75–90 per cent of the cost of providing program content through the on-the-job component, including the cost of journeypersons’ time when they are training apprentices. They also bear the costs of relatively low productivity during the early stages of on-the-job learning and while apprentices attend in-school training. Some employers also top up income support for apprentices while they are attending school. Employer and employee representatives also contribute expertise and time and incur expenses when they help develop standards and examinations, participate on Advisory Committees and participate in promotion activities.

Investment: Government
The Ontario government funds the purchase of in-school training for apprentices and a standard per diem rate is used to determine the cost of programs. The federal government provides income support to employment-insurance-eligible apprentices.

The Ontario government provides funding to apprentices to offset the cost of purchasing tools and equipment. The program offers new apprentices loans to support their investment in the tools and equipment required to perform the trade in which they are registered.

The Ontario government funds the overall administration of the system and supports it with a network of field offices across the province. The offices provide a variety of client services, including the following:
• Employer-centred services, including assessing employer training needs; developing and helping to implement apprenticeship training programs, and monitoring apprentice contracts
• Client services, including registering apprentice contracts; delivering examinations; scheduling and following up on the in-school component of programs; providing assessment of qualifications, and processing renewal applications for journeypersons who hold certificates of qualification in compulsory trades
• Program-enhancement services, such as promoting and marketing apprenticeship programs; monitoring on-the-job training; acting as a third-party advocate for clients, and including providing individual counselling.

The province collects administrative fees for registration, examination, and certification services to offset some of the costs of these services.

There are several special apprenticeship initiatives which support program entry, training and capacity building: Ontario Youth Apprenticeship Program, Pre-Apprenticeship Training Program, Co-op Diploma Apprenticeship Program, Apprenticeship Training Tax Credit, Sector Initiatives Fund, Apprenticeship Scholarship and Employer Signing Bonus, Apprenticeship Innovation Fund, Skills Training Infrastructure Program, Employer Recognition Awards.

Investment: Apprentices
Classroom fees were introduced in 2002 – a fee of $10 per six-hour unit of training (in-school) is payable by apprentices. The fee is $400 for a typical 8 week period of training. Apprentices also incur some expenses related to attending school, including the loss of wages (in some cases this loss is offset by employment insurance benefits). Apprentices may also be required to purchase tools and equipment, and in some cases materials, in order to practise their skills.

COMPULSORY CERTIFICATION REVIEW

An adequate supply of skilled workers is vital to Ontario’s competitiveness and its ability to attract foreign investment. The demand for and supply of skilled workers is influenced by a wide range of factors including technological innovation in the workplace, the rate of economic growth, and changing demographics such as the aging of the workforce.

On May 16, 2007, the Minister of Training, Colleges and Universities announced its intent to review the impact of expanding compulsory certification. The Compulsory Certification Review will contribute to ensuring Ontario’s apprenticeship system continues to meet proper safety standards, provides value to consumers, and serves the needs of our growing economy. The review will deliberate the question: should more trades be made compulsory? What are the issues and considerations?

The review will focus on the impact of expanding compulsory certification with references to the following five factors: health and safety, the registration of new apprentices, the number of apprentices who complete trades training, consumer protection, and economic impact. The review will not comment on existing industry requests for compulsory certification.

A report will be submitted to the Minister by early 2008.
APPENDIX 1: LIST OF COMPULSORY TRADES

Total of 21 Compulsory/Restricted Trades

*Trades Qualification and Apprenticeship Act:* 10 compulsory trades

1. Electrician: Construction and Maintenance
2. Electrician: Domestic and Rural
3. Hoisting Engineer: Mobile Crane Operator Branch 1
4. Hoisting Engineer: Mobile Crane Operator Branch 2
5. Hoisting Engineer: Tower Crane Operator
6. Plumber
7. Refrigeration and Air Conditioning Systems Mechanic
8. Residential Air Conditioning Systems Mechanic
9. Sheet Metal Worker
10. Steamfitter

*Apprenticeship and Certification Act, 1998:* 11 Restricted Trades

1. Alignment and Brakes Technician
2. Auto Body and Collision Damage Repairer Branch 1
3. Auto Body Repairer Branch 2
4. Automotive Electronic Accessory Technician
5. Automotive Service Technician
6. Fuel and Electrical Systems Technician
7. Hairstylist
8. Motorcycle Technician
9. Transmission Technician
10. Truck and Coach Technician
11. Truck Trailer Service Technician
This summary covers arguments advanced in the past for and against increasing the number of compulsory trades. Arguments illustrate the complexity of the issue. There is no guarantee of advantage in the absence of effective enforcement.

1. Health and Safety

Preamble: In developing apprenticeship and certification standards for specific trades and occupations, the Ministry of Training, Colleges and Universities by design includes training to health and safety standards. The Ministry of Labour administers the *Occupational Health and Safety Act* under which worker health and safety requirements are set out. How will expanding compulsory certification for trades that are voluntary affect health and safety?

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Enhances worker safety</td>
<td>• Limits competition to the detriment of health and safety</td>
</tr>
<tr>
<td>• Inadequately trained workers are frequently the cause of substandard production / construction (notably “disaster” situations)</td>
<td>• Safety and competency can be adequately achieved in-house by supervisor, engineers and owners, without government intervention</td>
</tr>
</tbody>
</table>

2. Registration of New Apprentices

Preamble: For the past several years, the Ministry of Training, Colleges and Universities has set targets to increase registrations. This has been achieved through a variety of means, including establishing new apprenticeship trades and occupations. How will expanding compulsory certification for trades that are voluntary affect the registration of new apprentices?

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Enhances attraction for worker entrants</td>
<td>• Artificially limits entry through restrictive ratios</td>
</tr>
<tr>
<td>• Increases the number of apprentices, as work may only be performed by a certified worker or registered apprentice</td>
<td>• Other factors such as commitment to training and market forces influence registration rather than compulsory certification</td>
</tr>
<tr>
<td>• Stimulates training</td>
<td>• Unnecessary regulatory requirement</td>
</tr>
</tbody>
</table>
3. The Number of Apprentices Who Complete Trades Training

Preamble: There appears to be a shift to or equal focus on completions and registrations. How will expanding compulsory certification for trades that are voluntary affect the number of apprentices who complete trades training?

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
</table>
| • Compulsory trades, properly enforced, require completion and discourage abuse by employers who curtail completion to maintain advantage of low wage apprentices  
• The Certificate of Qualification is a mark of excellence | • Improved completions are a result of other factors including commitment to training and market forces rather than compulsory certification |

4. Consumer Protection

Preamble: According to the government’s website, it is the goal of the Ministry of Government and Consumer Services to promote a fair, safe and informed marketplace — one in which consumer rights are fully protected. Legislation protects these rights by setting out ground rules covering most consumer transactions. How will expanding compulsory certification for trades that are voluntary affect consumer protection?

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
</table>
| • Improves public/consumer safety and satisfaction  
• Leads to greater “quality” construction and products  
• Protects public from results of dangerous incompetence  
• Levels the playing field and prevents unfair, unqualified competition, benefiting industry, labour and consumers alike  
• Inadequately trained workers are frequently the cause of substandard production/construction (notably “disaster” situations) | • Limits competition to the detriment of consumer protection  
• Public/consumer interests adequately protected by  
  o sophisticated purchasers  
  o building codes and special regulations  
  o warranties  
  o supervision  
  o competitive pressures to maintain “good business reputation” |
5. Economic Impact

Preamble: What is the economic impact of expanding compulsory certification to trades that are voluntary?

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
</table>
| **Labour Supply**  
  - Increases labour supply and enhances mobility |  
  - Automatically limits supply of labour, with negative effects, especially in tight labour market. Generally inefficient means of allocating labour; restricts mobility (in situations where only partial skills required) |
| **Cost**  
  - Results in lower liability for employers – less litigation, fewer customer complaints, lower insurance premiums, etc.  
  - Provides justifiably higher wages and greater job security  
  - Provides reduced, graduated labour costs during apprenticeship periods  
  - Fairly compensates labour for requisite skills  
  - Results in reduction of underground economy activity (assuming effective enforcement)  
  - Promotes asset preservation i.e. capital maintenance |  
  - Raises aggregate labour costs  
  - Favours organized labour with attendant upward labour costs (wages and benefits)  
  - With upward costs, impacts ability to compete in domestic and international markets (principally applicable to manufacturers)  
  - Involves costly, logistically difficult enforcement  
  - Increases cost to government |
| **Competitiveness**  
  - Enhances business reputations as a result of improved competence and efficiency  
  - Ensures adequate on-the-job training through appropriate ratios and in-class instruction  
  - With expertly staffed, carefully monitored training centres, provides greater prospects for superior initial training and for keeping up with advances in trades technologies |  
  - Limits competition to the detriment of health, safety and consumer protection  
  - Limits flexibility to needs of new economy  
  - Intra-provincial compulsory trades regimen may limit inter-provincial mobility  
  - Favours organized labour e.g. labour supply/control, jurisdictional preservation, work opportunities |
| **Underground Economy**  
  - Results in reduction of underground economy activity (assuming effective enforcement)  
  - Levels the playing field for employers who have provisions similar to compulsory certification in their collective agreements |  
  - Compulsory certification, while it may level playing field, gives unwarranted advantage to otherwise inefficient firms and also increases costs to consumers  
  - Tends to increase activity in underground economy (i.e., avoidance of compulsory certification) |
<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levels the playing field and prevents unfair, unqualified competition, benefiting industry, labour and consumers alike</td>
<td></td>
</tr>
</tbody>
</table>

6. Miscellaneous Ramifications – Whole Trade and Skill Sets

<table>
<thead>
<tr>
<th>Whole Trade</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homogenous workforce of broadly-based skills means higher performing economy than mix of skills from low to high, narrow to broad</td>
<td>Rigid trade boundaries hamper flexible work practices</td>
</tr>
<tr>
<td>Skill-set, partially-trained craft workers frequently do not understand the impact of their work on the totality of the job or undertaking</td>
<td>Give rise to jurisdictional conflicts in “overlapping” areas. Difficulty defining the boundaries of compulsory trades, with jurisdictional disputes on the periphery</td>
</tr>
<tr>
<td>By avoiding semi-skilled specialties within trades, provides better and more stable career prospects</td>
<td>Fails to meet the needs of niche, specialized employers where modular training is appropriate and sufficient</td>
</tr>
<tr>
<td>Prevents cross-trade, multi-skilling</td>
<td>Precludes the strategic introduction of intermediate, modular and skill-set training</td>
</tr>
<tr>
<td>Preserves justifiable pride in craft by tradespersons</td>
<td>Restricts mobility (in situations where only partial skills required)</td>
</tr>
<tr>
<td>Provides greater measure of career security</td>
<td>Some tasks within compulsory “trade” do not require all competencies and may be more efficiently handled by “helpers”</td>
</tr>
<tr>
<td>Increases general skill level of overall workforce, ensures better product and service quality</td>
<td>Prevents rapid response to meet changes in manufacturing and construction technology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Skill Set</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill sets provide more flexibility for employers faced with frequently changing work requirements</td>
<td>Restricts mobility</td>
</tr>
<tr>
<td>Permits flexible response to range of varying and often unpredictable assignment needs</td>
<td>Creates partially-skilled specialties within trades, restricts career prospects</td>
</tr>
<tr>
<td>Reduces incidence of jurisdictional conflict</td>
<td>Impedes potential merger of craft unions</td>
</tr>
</tbody>
</table>
January 14, 2008

TO: Apprenticeship and Certification Stakeholders

On December 10, 2007, I wrote to you inviting you to make written submissions concerning the effect of expanding compulsory certification to voluntary trades. The due date for submissions is January 25, 2008 and I look forward to receiving them.

In that correspondence I indicated that I would be meeting with stakeholders from across the province. I am pleased to share the details of these meetings. Six focus group meetings will be held:

- Monday, February 11, 2008 – TORONTO
- Friday, February 15, 2008 – TORONTO
- Tuesday, February 19, 2008 – OTTAWA
- Wednesday, February 20, 2008 – SUDBURY
- Thursday, February 21, 2008 – THUNDER BAY
- Friday, February 22, 2008 – LONDON

Each session will be a half day (please see the registration form attached for details). The meeting format will be small group facilitated discussions on issues arising from the written submissions.

Thank you for your interest and support and I look forward to meeting with you.

Sincerely,

Tim Armstrong
Compulsory Certification Advisor

Attachment
### APPENDIX 5 - HISTORY OF COMPULSORY CERTIFICATION

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1928</td>
<td><em>The Apprenticeship Act</em> enacted</td>
<td>In the 1920s there was a shortage of skilled tradespersons in the construction trades and employers and organized labour were striving to devise better training methods for young workers. The construction trade unions and employers formed a voluntary organization in 1927, Construction Apprenticeship Council of Ontario, to develop apprenticeship schemes. The Council’s efforts resulted in the <em>Apprenticeship Act</em> in 1928. Specific trades are designated from 1928 through to the enactment of the replacement legislation in 1964.</td>
</tr>
<tr>
<td>1944</td>
<td>The Act is amended to provide for compulsory and grandparent provisions.</td>
<td>Note: Trades made compulsory are underlined.</td>
</tr>
<tr>
<td>1944</td>
<td>Motor Vehicle Repair compulsory trade established. Intended to protect public from faulty motor vehicle repairs.</td>
<td>Note: Motor Vehicle Repair trade separated into four branches: Motor Mechanic, Body Repairer, Electrical and Fuel System Repairer, Metal Worker.</td>
</tr>
<tr>
<td>1953</td>
<td>Motor Vehicle Repair trade separated into four branches: Motor Mechanic, Body Repairer, Electrical and Fuel System Repairer, Metal Worker.</td>
<td>Automotive trades continue to be split into the 1990s.</td>
</tr>
<tr>
<td>1962</td>
<td>Select Committee on Manpower Training</td>
<td>A select committee of the house (chaired by Hon. Simonett) is appointed to examine, investigate, inquire into, study and make recommendations concerning the <em>Apprenticeship Act</em>, all aspects of the apprenticeship system, training of workers, and roles of government, industry and labour in this field.</td>
</tr>
<tr>
<td>(i)</td>
<td>In order to build up the apprenticeship program, more incentive must be provided to encourage young workers to enter into it. This can only be done by affording those who successfully complete an apprenticeship program due and proper recognition for their accomplishment.</td>
<td>Stimulate training argument.</td>
</tr>
<tr>
<td>(ii)</td>
<td>To this end it is our view that compulsory certification should be applied to all trades which can be expected to benefit from it. Where adopted this will ensure that only those who have proven their competency to practice a given trade will be permitted to engage in it. This will not only act as an incentive for those considering a career in the building trades but will also serve to protect the interests of the public by assuring them a minimum standard of work.</td>
<td>Public protection argument (criteria).</td>
</tr>
</tbody>
</table>
standard of competence. (It is to be noted that compulsory certification is now in effect in the motor vehicle trades and in hairdressing.)

There is the danger that compulsory certification could be employed as part of a general scheme to restrict numbers and take advantage of the public. It will be up to those government officials who are closest to the apprenticeship program to guard against any such possibility.

We must also insist that compulsory certification not be applied to any trade unless it is accompanied by legislation or regulations consistent with the following recommendations.

1963 Barber compulsory trade established

1964 The introduction of the Apprenticeship and Tradesmen’s Qualification Act, 1964, is debated in the House.

Jan 20/64 – First Reading of the bill: Hon. Mr. Rowntree (Minister of Labour)
“...to make provision for the formal recognition of tradesmen; to meet the evident need for more skilled workmen who will be required in this province in the years ahead; to encourage the training of people already in industry to enable them to cope with the technological changes which are so rapidly taking place; to help provide opportunities for many of the young people of the province who will be graduating from secondary school in the years ahead.”

Jan 28/64 – Second Reading of the bill: Hon. H.L. Rowntree (Minister of Labour)
“...In discussions with all interested groups representing employers and employees, educators and others, it has become apparent that we need to place increasing emphasis on at least two major considerations: One is the need to train more people in the increasing range of trade skills required in industry today. The other is the need to provide qualified apprentices and tradesmen with some tangible evidence to verify this skill and training in order to give them their rightful status in their field and in the eyes of the public they serve. Recognizing the vital importance of this second consideration, we have decided to establish compulsory certification in a number of key trades under the apprenticeship programme and to extend voluntary certification to a number of other trades in which no certificates of qualification have previously been available. I would like to emphasize that the introduction of compulsory certification is a step designed not to restrict our tradesmen but to enhance their standing
by enabling them to provide themselves, their employer or prospective employers, and the general public with positive proof of their qualifications. The value and effectiveness of such compulsory certification has already proved itself in three trades in the province, motor vehicle repairer, hairdressing and barbering. The improved standing which these trades have experienced since gaining compulsory certification, has made it obvious that extending this feature to other trades will benefit all concerned… we are convinced we can greatly improve the status of all those presently engaged in these trades; and equally important, that the incentives which effective training and certification will provide will greatly increase the interest of our young people in entering and qualifying themselves in these trades and thereby increase their numbers. Experience with the motor vehicle repair, hairdressing and barbering trades already bears this out.”

May 7/64 – House committee, “…sections 1 to 22 inclusive agreed to.”

1964  *Apprenticeship and Tradesmen’s Qualification Act, 1964* (replaces *The Apprenticeship Act*)

1964  **Electrician Construction & Maintenance** compulsory trade established  
**Electrician Domestic & Rural** compulsory trade established  
**Refrigeration and Air Conditioning Mechanic** compulsory trade established  
**Watch Repairer** compulsory trade established

1965  **Plumber** compulsory trade established  
**Steamfitter** compulsory trade established  
**Sheet Metal Worker** compulsory trade established

1966  **GENERAL ADVISORY COMMITTEE ON INDUSTRIAL TRAINING ESTABLISHED.**  
Formed to assist the government in adapting the apprenticeship system to the changing manpower requirements of general industry as well as to study the merits and impacts of compulsory certification in the industrial trades.

1968  **REPORT OF THE GENERAL ADVISORY COMMITTEE ON INDUSTRIAL TRAINING**
TRAINING

After receipt of interim report (1967), the Ministry proceeded to amend the regulation to provide for voluntary certification for persons employed in general industry.

Extract (page 4)

1. The regulations for trades designated as certified trades be amended as expeditiously as possible to provide for the exemption from the Act and Regulations in their present form of persons employed in general industry.

2. Provisions be made for the Voluntary Certification of persons employed in general industry in trades designated as certified trades, provided such persons meet the requirements of Provincial Government Standards. The Ontario Government is to be commended for its attempt to alleviate the shortage of skilled tradesmen and to upgrade the competence of those already in the trades through the application of Compulsory Certification. This committee recognized that Compulsory Certification should have a beneficial effect on trades in the construction and service industries. However, this Committee feels that Compulsory Certification will not have the same beneficial effect in general industry for the following reasons:

1. Present legislation requires some employees in industry to acquire a Certificate of Qualification in the trades because their jobs include elements of such trades. If the employee is unable to qualify for a Certificate, the result is that the work must be done by someone else. This concentrates the work in the hands of people who traditionally have not done this work, at the expense of those who always have.

2. The arbitrary definition of trades by regulation creates jurisdictional problems where none previously existed.

3. Compulsory certification:
   a) Makes no recognition of the fact that the skill mix will vary in industry, for example, in the mechanical and electrical trades.
   b) Fails to recognize that, in smaller industrial organizations especially, there is insufficient work in each certified trade to warrant full-time employees.
   c) Threatens the job security of many people in that it prohibits the specialist in one or two areas of the trade from following gainful employment.
   d) Fails to recognize that some of the elements of the certified trades are performed by persons licensed by other Provincial Government agencies but who may not qualify for a Certificate of Qualification.
   e) May inhibit the evolution of effective work patterns. Developing technology requires more flexibility than that permitted by the
rigid definition of traditional trades by regulation.”

1969  Transmission Mechanic compulsory trade established
Alignment and Brakes Mechanic compulsory trade established
Motorcycle Mechanic compulsory trade established
Truck-Trailer Mechanic compulsory trade established

1970  TASK FORCE ON INDUSTRIAL TRAINING
Established by the Ministry of Labour to study existing industrial training programs and to make recommendations. This included the need for ensuring adequate standards of competence in the skilled work force, and government’s responsibility in this area through, for example, compulsory certification.

1973  TRAINING FOR ONTARIO’S FUTURE: REPORT OF THE TASK FORCE ON INDUSTRIAL TRAINING, CHAIRED BY W.R. DYMOND

Extract from the Report:
(Page 172) “Recommendation 33
a. That the general powers for the Compulsory Certification of trades be removed from the Apprenticeship and Tradesmen’s Qualification Act, except for a section continuing its applicability in the motor vehicle repair trades, until such time as an adequate motor vehicle inspection system is developed.
b. That the Voluntary Certification Certifications of Qualification be applied to and promoted in those trades that were formerly subject to compulsory certification, with the exception of the motor vehicle repair trades now subject to compulsory certification. That Voluntary Certificates of Qualification continue to be available to tradesmen whose experience in the trade is no longer than the minimum period of an apprenticeship and who have passed Certificate of Qualification tests. That Voluntary Certificates of Qualification be awarded to the graduates of Ontario apprenticeship programs who possess Certificates of Apprenticeship, and to red-seal certificate-holders from other provinces. That there still be a significant requirement to determine and attest to the qualifications of immigrant tradesmen and workers who have acquired journeyman qualifications through on-the-job experience.”
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td><strong>ELECTRICIAN TRADE AND “OHSA”</strong>&lt;br&gt;Electrician TQAA certification requirements in worker health and safety legislation. Later, the requirement is set out under the consolidated worker health and safety legislation (<em>Occupational Health and Safety Act</em>), then Regulation 213/91 Construction Projects, s.181.</td>
<td>Electrician and crane operator (1986) trades are the only trades included in both OHSA and apprenticeship legislation. Assume that worker health and safety concerns warranted the complementary OHSA requirement.</td>
</tr>
<tr>
<td>1982</td>
<td><strong>Hoisting Trades</strong> transferred from the Ministry of Consumer and Corporate Relations (MCCR): Mobile Crane Operator and Tower Crane Operator. Formal apprenticeship program implemented.</td>
<td>While with MCCR and from 1969, there was a licensing requirement for operators of hoisting equipment.</td>
</tr>
<tr>
<td>1986</td>
<td><strong>CRANE OPERATOR TRADES AND OHSA</strong>&lt;br&gt;Crane Operator TQAA certification requirements in worker health and safety legislation. Later, the requirement is set out under the consolidated worker health and safety legislation (<em>Occupational Health and Safety Act</em>), then Regulation 213/91 Construction Projects, s.150.</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td><strong>Mobile Crane Operator</strong> trade split into two branches: branch 1 (over 8 tons), branch 2 (8-15 tons).</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td><strong>The Apprenticeship and Tradesmen’s Qualification Act, 1964</strong> renamed to the <strong>Trades Qualification and Apprenticeship Act, 1990</strong></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td><strong>Auto Body Repairer</strong> trade split: <strong>Auto Body and Collision Damage Repairer</strong>, <strong>Auto Body Repairer</strong></td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>Barber and hairdresser made into single trade of <strong>Hairstylist</strong>.</td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td><strong>ENFORCEMENT TRANSFERRED TO MOL</strong>&lt;br&gt;Enforcement of the TQAA compulsory certification requirement for construction and motive power trades is transferred to the Ministry of Labour. Transfer is done through a Delegation of Authority and Order-In-Council (OIC). Enforcement of the hairstylist trade remains with MTCU.</td>
<td>OIC is revoked in 2004.</td>
</tr>
<tr>
<td>1994</td>
<td><strong>Watch Repairer</strong> trade de-designated due to lack of activity since its inception.</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td><strong>ONTARIO-QUEBEC EQUIVALENCY PROVISION</strong>&lt;br&gt;<em>Fairness is a Two-Way Street Act</em> (FTWSA) is in effect (date not specified)</td>
<td>While the TQAA general regulation is not mentioned.</td>
</tr>
</tbody>
</table>
confirmed). TQAA General Regulation 1055 is amended to include an equivalency provision of compulsory construction trades for Quebec eligible workers.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>Motor Vehicle Mechanic trade is renamed and split: <strong>Automotive Service Technician and Truck and Coach Technician</strong></td>
<td>exemption provision was put in place, it was not in effect while FTWSA was in effect. The Act is revoked in 2006 with the introduction of the Ont-Que Labour Mobility Agreement.</td>
</tr>
<tr>
<td>1996</td>
<td><strong>Apprenticeship Reform</strong></td>
<td>Technology change drives the split.</td>
</tr>
<tr>
<td></td>
<td>Consultations begin. Introduces concept that whole trades need not be compulsory but rather skill sets.</td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td><strong>The Apprenticeship and Certification Act, 1998</strong></td>
<td>Compulsory/restricted criteria are not included in the legislative framework other than what is set out in the purpose section.</td>
</tr>
<tr>
<td></td>
<td>ACA Receives Royal Assent. Purpose section 1(c) of the Act includes “to expand opportunities for Ontario workers, increase the competitiveness of Ontario businesses and ensure public and worker protection.” New terminology is introduced, notably skill sets and restricted skill sets rather than compulsory trade.</td>
<td>Trade introduced as a result of enforcement activity in respect of businesses that install remote starters only.</td>
</tr>
<tr>
<td>1999</td>
<td><strong>Automotive Electronic Accessory Technician</strong> compulsory trade established (subset of Automotive Service Technician and Fuel and Electrical Systems Technician)</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td><strong>O. Reg 572/99 UNDER OHSA ESTABLISHED</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regulation sets out enforcement requirements of compulsory construction and motive power trades.</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td><strong>The Apprenticeship and Certification Act, 1998, Restricted Skill Set Regulation, Exemptions and General Regulations</strong> Legislation and regulations come into force.</td>
<td>The TQAA is amended to apply to the construction trades as identified in the Act or regulation. The ACA applies to all other trades.</td>
</tr>
</tbody>
</table>
2002 Water Meter Installer skill set established.
ACA Restricted Skill Set Regulation and TQAA Plumber Regulation amended.

2002 Elevating Devices Mechanic trade designated under the ACA. This trade is compulsory under the *Technical Standards and Safety Act*. Completed apprentices are eligible to write the TSSA certification examination. The trade is compulsory under separate legislation.

2004 ENFORCEMENT OIC REVOKED (MOL)
MOL no longer enforces the TQAA or ACA. Enforcement is through OHSA O. Reg. 572/99.

2005 Residential Air Conditioning Systems Technician established (branch of Refrigeration and Air Conditioning Mechanic) Recommended by the PAC.

2006 ONTARIO-QUEBEC LABOUR MOBILITY AGREEMENT SIGNED
Provides for Quebec workers with appropriate certification in construction compulsory trades to work in Ontario without having to have the Ontario certification as well. Note that not all compulsory trades are deemed equivalent (a match) at this time. Commitment made to evaluate these trades for matching.

2006 TICKETING INTRODUCED
Applies to TQAA compulsory construction trades only - not ACA trades.

2006 MTCU ISSUES EXEMPTIONS DOCUMENT
Ministry document sets out all exemptions from TQAA and ACA provisions including overlapping skills.

2007 COMPULSORY CERTIFICATION REVIEW ANNOUNCED
Tim Armstrong appointed as independent advisor to review the impact of expanding compulsory certification to voluntary trades taking into account 5 factors:
1. health and safety
2. the registration of new apprentices
3. the number of apprentices who complete trades training
4. consumer protection, and
5. economic impact.
Journeyperson to apprentice ratios are a requirement under the TQAA. The ratio provision sets out a requirement that an individual may be registered as an apprentice to an employer if there are the prescribed number of journeypersons employed (journeyperson is the trainer and/or qualified individual). The minimum or default ratio is set out in the general regulation 1055 ss.10(2). The ratio is 1 journeyperson to 1 apprentice (1 to 1), then 3 journeypersons for every additional apprentice (or 3 to 1).

The following table lists the current and previous prescribed ratios for each trade under the TQAA.

<table>
<thead>
<tr>
<th>TRADE</th>
<th>RATIO</th>
<th>REGULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Cement (Concrete) Finisher</td>
<td>1:1, 3:1</td>
<td>1055</td>
</tr>
<tr>
<td>3. Cement Mason</td>
<td>1:1, 4:1</td>
<td>1046</td>
</tr>
<tr>
<td>4. Construction Boilermaker</td>
<td>1:1, 3:1</td>
<td>1047</td>
</tr>
<tr>
<td>5. Construction Millwright</td>
<td>1:1, 4:1</td>
<td>1046</td>
</tr>
<tr>
<td>6. Drywall, Acoustic &amp; Lathing Applicator</td>
<td>1:1, 4:1</td>
<td>97/01</td>
</tr>
<tr>
<td>7. Drywall Finisher and Plasterer</td>
<td>1:1, 3:1</td>
<td>99/01</td>
</tr>
<tr>
<td>10. Floor Covering Installer</td>
<td>1:1</td>
<td>98/01</td>
</tr>
<tr>
<td>11. General Carpenter</td>
<td>1:1, 4:1</td>
<td>1056</td>
</tr>
<tr>
<td>13. Heat &amp; Frost Insulator</td>
<td>1:1, 3:1</td>
<td>1055</td>
</tr>
<tr>
<td>14. Hoisting Engineer : Mobile Crane Operator, Br. 1</td>
<td>1:1</td>
<td>1060</td>
</tr>
<tr>
<td>15. Hoisting Engineer: Mobile Crane Operator, Br. 2</td>
<td>1:1</td>
<td>1060</td>
</tr>
<tr>
<td>16. Hoisting Engineer: Tower Crane Operator</td>
<td>1:1</td>
<td>1060</td>
</tr>
<tr>
<td>TRADE</td>
<td>RATIO Journeyperson to Apprentice</td>
<td>REGULATION</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-----------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td></td>
<td>Current Ratio J : A</td>
<td></td>
</tr>
<tr>
<td>17. Ironworker-Structural and Ornamental</td>
<td>1:1, 2:1</td>
<td>329/07</td>
</tr>
<tr>
<td>Br 2</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>18. Ironworker- Generalist Br 1</td>
<td>1:1, 2:1</td>
<td>329/07</td>
</tr>
<tr>
<td>19. Painter and Decorator Br 1</td>
<td>1:1, 2:2, 3:2, 4:2, 5:3</td>
<td>101/01</td>
</tr>
<tr>
<td>Commercial &amp; Residential</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>20. Painter and Decorator Br 2</td>
<td>1:1, 2:2, 3:2, 4:2, 5:3</td>
<td>101/01</td>
</tr>
<tr>
<td>Industrial P &amp; D</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>21. Plumber</td>
<td>1:1, 3:1</td>
<td>1073</td>
</tr>
<tr>
<td>22. Powerline Technician</td>
<td>1:1</td>
<td>1067</td>
</tr>
<tr>
<td>23. Precast Concrete Erector</td>
<td>1:1, 3:1</td>
<td>1055</td>
</tr>
<tr>
<td>24. Precast Concrete Finisher</td>
<td>1:1, 3:1</td>
<td>1055</td>
</tr>
<tr>
<td>25. Refrigeration &amp; Air Conditioning Systems</td>
<td>1:1, 2:1, 2:3:4</td>
<td>75-05</td>
</tr>
<tr>
<td>Mechanic</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>26. Residential Air Conditioning Systems</td>
<td>1:1, 2:1, 2:3:4</td>
<td>75-05</td>
</tr>
<tr>
<td>Mechanic</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>27. Reinforcing Rodworker Br 3</td>
<td>1:1, 2:1</td>
<td>329/07</td>
</tr>
<tr>
<td>28. Restoration Mason</td>
<td>1:1, 3:1</td>
<td>1055</td>
</tr>
<tr>
<td>29. Roofer</td>
<td>1:1, 3:1</td>
<td>96/01</td>
</tr>
<tr>
<td>30. Sheet Metal Worker</td>
<td>1:1, 3:1</td>
<td>1077</td>
</tr>
<tr>
<td>31. Sprinkler &amp; Fire Protection Installer</td>
<td>1:1, 1:2:1</td>
<td>1078</td>
</tr>
<tr>
<td>32. Steamfitter</td>
<td>1:1, 3:1</td>
<td>1079</td>
</tr>
<tr>
<td>33. Terrazzo, Tile &amp; Marble Setter</td>
<td>1:1, 3:1</td>
<td>1055</td>
</tr>
</tbody>
</table>

**Apprenticeship and Certification Act (ACA)**

The ACA is silent with respect to journeyperson to apprentice ratios. However, Industry Committees have identified ratio guidelines in Program Summaries.

46 Program Summary document is the comparable to a trade-specific regulation. It includes the trade definition and requirements and guidelines particular to the trade. Ratios are identified as guidelines, that is, it is not a requirement.
### Legislated Ratios Across Jurisdictions (J/A)

<table>
<thead>
<tr>
<th>Trade</th>
<th>NL</th>
<th>NS</th>
<th>PE</th>
<th>NB</th>
<th>QC</th>
<th>ON</th>
<th>MB</th>
<th>SK</th>
<th>AB</th>
<th>BC</th>
<th>NT</th>
<th>YT</th>
<th>NU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor Covering Installer</td>
<td>NT</td>
<td>NT</td>
<td>NT</td>
<td>NT</td>
<td>NT</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Carpenter</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>5:1</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1-</td>
<td>NR</td>
<td>1:1</td>
<td>1:1</td>
</tr>
<tr>
<td>Mobile Crane Operator</td>
<td>1:1</td>
<td>NT</td>
<td>NT</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>NT</td>
<td>NT</td>
<td>NT</td>
</tr>
<tr>
<td>Painter and Decorator - Industrial</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1</td>
<td>1:1</td>
<td>NT</td>
</tr>
<tr>
<td>Roofer</td>
<td>NT</td>
<td>NT</td>
<td>NT</td>
<td>1:1</td>
<td>4:1</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1</td>
<td>1:1</td>
<td>NT</td>
</tr>
<tr>
<td>Sheet Metal Worker</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>2:1</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
</tr>
<tr>
<td>Steamfitter</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
<td>2:1</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1-</td>
<td>1:1</td>
<td>1:1</td>
<td>1:1</td>
</tr>
</tbody>
</table>

NT – No Trade: NR – No Ratio
<table>
<thead>
<tr>
<th>Red Seal Trade Name</th>
<th>Ontario Trade Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Equipment Technician</td>
<td>Agricultural Equipment Mechanic</td>
</tr>
<tr>
<td>Appliance Service Technician</td>
<td>Appliance Service Technician</td>
</tr>
<tr>
<td>Automotive Painter</td>
<td>Automotive Painter</td>
</tr>
<tr>
<td>Automotive Service Technician</td>
<td>Automotive Service Technician</td>
</tr>
<tr>
<td>Baker</td>
<td>Baker</td>
</tr>
<tr>
<td>Boilermaker</td>
<td>Construction Boilermaker</td>
</tr>
<tr>
<td>Bricklayer</td>
<td>Brick and Stone Mason</td>
</tr>
<tr>
<td>Cabinetmaker</td>
<td>Cabinetmaker</td>
</tr>
<tr>
<td>Carpenter</td>
<td>General Carpenter</td>
</tr>
<tr>
<td>Construction Craft Worker</td>
<td>Construction Craft Worker</td>
</tr>
<tr>
<td>Construction Electrician</td>
<td>Electrician Construction and Maintenance</td>
</tr>
<tr>
<td>Cook</td>
<td>Cook</td>
</tr>
<tr>
<td>Electric Motor System Technician</td>
<td>Electric Motor System Technician</td>
</tr>
<tr>
<td>Electronics Technician (Consumer Products)</td>
<td>Electronic Service Technician</td>
</tr>
<tr>
<td>Floorcovering Installer</td>
<td>Floor Covering Installer</td>
</tr>
<tr>
<td>Glazier</td>
<td>Architectural Glass and Metal Technician</td>
</tr>
<tr>
<td>Hairstylist</td>
<td>Hairstylist</td>
</tr>
<tr>
<td>Heavy Duty Equipment Technician</td>
<td>Heavy Duty Equipment Mechanic</td>
</tr>
<tr>
<td>Industrial Electrician</td>
<td>Industrial Electrician</td>
</tr>
<tr>
<td>Industrial Mechanic (Millwright)</td>
<td>Industrial Mechanic (Millwright)</td>
</tr>
<tr>
<td>Instrumentation and Control Technician</td>
<td>Industrial Instrument Mechanic</td>
</tr>
<tr>
<td>Ironworker (Generalist)</td>
<td>Ironworker – Generalist</td>
</tr>
<tr>
<td>Ironworker (Reinforcing)</td>
<td>Reinforcing Rodworker</td>
</tr>
<tr>
<td>Ironworker (Structural/Ornamental)</td>
<td>Ironworker - Structural and Ornamental</td>
</tr>
<tr>
<td>Lather (Interior Systems Mechanic)</td>
<td>Drywall, Acousting and Lathing Applicator</td>
</tr>
<tr>
<td>Machinist</td>
<td>General Machinist</td>
</tr>
<tr>
<td>Metal Fabricator (Fitter)</td>
<td>Metal Fabricator (Fitter)</td>
</tr>
<tr>
<td>Mobile Crane Operator</td>
<td>Hoisting Engineer: Mobile Crane Operator -</td>
</tr>
</tbody>
</table>
Branch 1

- Motor Vehicle Body Repairer (Metal and Paint)
  - Auto Body and Collision Damage Repairer, Br. 1
- Motorcycle Mechanic
  - Motorcycle Technician
- Painter and Decorator
  - Painter and Decorator - Commercial and Residential
- Partsperson
  - Parts Technician
- Plumber
  - Plumber
- Powerline Technician
  - Powerline Technician
- Recreation Vehicle Service Technician
  - Recreation Vehicle Technician
- Refrigeration and Air Conditioning Mechanic
  - Refrigerating and Air Conditioning Systems Mechanic
- Roofer
  - Roofer
- Sheet Metal Worker
  - Sheet Metal Worker
- Sprinkler System Installer
  - Sprinkler and Fire Protection Installer
- Steamfitter/Pipefitter
  - Steamfitter
- Tilesetter
  - Terrazzo, Tile and Marble Setter
- Tool and Die Maker
  - Tool and Die Maker
- Transport Trailer Technician
  - Truck-Trailer Service Technician
- Truck and Transport Mechanic
  - Truck and Coach Technician
- Welder
  - Welder

Source: [http://www.red-seal.ca/Site/trades/province/on.htm](http://www.red-seal.ca/Site/trades/province/on.htm)
APPENDIX 8 - APPRENTICESHIP FUNDING

IN-SCHOOL SEAT PURCHASE PROGRAM

<table>
<thead>
<tr>
<th></th>
<th>01-02</th>
<th>02-03</th>
<th>03-04</th>
<th>04-05</th>
<th>05-06</th>
<th>06-07</th>
<th>07-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding ($M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compulsory</td>
<td>25.8</td>
<td>23.0</td>
<td>24.6</td>
<td>26.8</td>
<td>28.7</td>
<td>38.2</td>
<td>32.6</td>
</tr>
<tr>
<td>Voluntary</td>
<td>24.6</td>
<td>20.5</td>
<td>20.7</td>
<td>21.7</td>
<td>24.7</td>
<td>34.3</td>
<td>30.6</td>
</tr>
<tr>
<td>Total</td>
<td>50.4</td>
<td>43.5</td>
<td>45.3</td>
<td>48.5</td>
<td>53.4</td>
<td>72.5</td>
<td>63.2</td>
</tr>
<tr>
<td>Per Diem</td>
<td>59.81</td>
<td>51.01*</td>
<td>52.23</td>
<td>53.47</td>
<td>54.74</td>
<td>56.03</td>
<td>56.03</td>
</tr>
</tbody>
</table>

Notes:
1. * Classroom fee introduced August 1, 2002. The per diem in 02-03, and every year thereafter, excludes the classroom fee of $10.00 per day (6 hours/day).
2. The dollar values are based on annual seat plans for classes that have been validated rather than on annual accrued expenditures. For 07-08, verification of classes is in progress and the dollar value will be adjusted once the process has been completed.
3. In-school seat purchase values are influenced by added/deleted/adjusted classes, and part-time/full-time enrolment.
4. Please note other variables:
   • The in-school duration of a typical trade/occupation is 24 weeks (3 periods of 8 weeks each).
   • There are trades/occupations with more and less in-school durations.
   • There are trades/occupations that receive a higher per diem due to the cost of delivering the training: crane trades, heavy equipment operator trades, powerline technician.

PRE-APPRENTICESHIP PROGRAM

<table>
<thead>
<tr>
<th></th>
<th>04-05</th>
<th>05-06</th>
<th>06-07</th>
<th>07-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding ($M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compulsory</td>
<td>2.7</td>
<td>2.0</td>
<td>2.6</td>
<td>3.0</td>
</tr>
<tr>
<td>Voluntary</td>
<td>3.4</td>
<td>6.0</td>
<td>5.3</td>
<td>4.9</td>
</tr>
<tr>
<td>Total</td>
<td>6.1</td>
<td>8.0</td>
<td>7.8</td>
<td>7.9</td>
</tr>
<tr>
<td>No. of Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compulsory</td>
<td>13</td>
<td>10</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>Voluntary</td>
<td>9</td>
<td>33</td>
<td>28</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>43</td>
<td>40</td>
<td>38</td>
</tr>
</tbody>
</table>

Notes:
1. Projects are awarded through an annual competitive process.
2. Funding is based on the value of the contract which may span 1-2 years, and does not reflect actual expenditures by fiscal year.
3. Some projects include both compulsory/restricted and voluntary/unrestricted trades.
## CO-OP DIPLOMA APPRENTICESHIP PROGRAM

<table>
<thead>
<tr>
<th></th>
<th>04-05</th>
<th>05-06</th>
<th>06-07</th>
<th>07-08</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Funding ($M)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compulsory</td>
<td>2.7</td>
<td>5.2</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>Voluntary</td>
<td>2.6</td>
<td>11.8</td>
<td>14.2</td>
<td>8.3</td>
</tr>
<tr>
<td>Total</td>
<td>2.6</td>
<td>14.5</td>
<td>19.4</td>
<td>9.6</td>
</tr>
<tr>
<td><strong># Projects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compulsory</td>
<td>-</td>
<td>7</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Voluntary</td>
<td>6</td>
<td>24</td>
<td>30</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>31</td>
<td>42</td>
<td>22</td>
</tr>
</tbody>
</table>

Notes:
1. Projects are awarded through an annual competitive process.
2. Funding is based on the value of the contract which may span 2-3 years, and does not reflect actual expenditures by fiscal year.

Source: Ministry of Training, Colleges and Universities
April 2008
## APPENDIX 9 - DESIGNATED APPRENTICESHIP TRades

### Year Established and Number of Active Apprentices (as of Mar 31, 2007)

**Trades Qualification and Apprenticeship Act: 10 compulsory trades**

<table>
<thead>
<tr>
<th>#</th>
<th>Trade Description</th>
<th>Yr Est.</th>
<th>Act. Appr Mar31/07</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Electrician: Construction and Maintenance (electrician trade originally designated in 1937; made compulsory in 1964)</td>
<td>1937</td>
<td>8,530</td>
</tr>
<tr>
<td>2</td>
<td>Electrician: Domestic and Rural</td>
<td>1964</td>
<td>126</td>
</tr>
<tr>
<td>3</td>
<td>Mobile Crane Operator Branch 1</td>
<td>1982</td>
<td>378</td>
</tr>
<tr>
<td>4</td>
<td>Mobile Crane Operator Branch 2</td>
<td>1990</td>
<td>70</td>
</tr>
<tr>
<td>5</td>
<td>Tower Crane Operator</td>
<td>1982</td>
<td>103</td>
</tr>
<tr>
<td>6</td>
<td>Plumber (originally designated in 1937; made compulsory in 1965)</td>
<td>1937</td>
<td>4,133</td>
</tr>
<tr>
<td>7</td>
<td>Refrigeration and Air Conditioning Systems Mechanic (originally designated in 1947; made compulsory in 1964)</td>
<td>1947</td>
<td>1,908</td>
</tr>
<tr>
<td>8</td>
<td>Residential Air Conditioning Systems Mechanic (branch of refrigeration &amp; air conditioning mechanic)</td>
<td>2005</td>
<td>171</td>
</tr>
<tr>
<td>9</td>
<td>Sheet Metal Worker (originally designated in 1937; made compulsory in 1965)</td>
<td>1937</td>
<td>2,054</td>
</tr>
<tr>
<td>10</td>
<td>Steamfitter (originally designated in 1937; made compulsory in 1965)</td>
<td>1937</td>
<td>847</td>
</tr>
</tbody>
</table>

**Trades Qualification and Apprenticeship Act: 23 voluntary trades**

<table>
<thead>
<tr>
<th>#</th>
<th>Trade Description</th>
<th>Yr Est.</th>
<th>Act. Appr Mar31/07</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Brick and Stone Mason (bricklayer and mason trades originally designated in 1928; made a TQAA trade in 1970)</td>
<td>1970</td>
<td>1,292</td>
</tr>
<tr>
<td>2</td>
<td>Cement (Concrete) Finisher</td>
<td>1999</td>
<td>245</td>
</tr>
<tr>
<td>3</td>
<td>Cement Mason</td>
<td>1967</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Construction Boilermaker</td>
<td>1978</td>
<td>175</td>
</tr>
<tr>
<td>5</td>
<td>Construction Millwright</td>
<td>1972</td>
<td>404</td>
</tr>
<tr>
<td>6</td>
<td>Drywall, Acoustic and Lathing Applicator (formerly Lather, 1967)</td>
<td>2001</td>
<td>763</td>
</tr>
<tr>
<td>7</td>
<td>Drywall Finisher and Plasterer (formerly Plasterer which was originally designated in 1928; made a TQAA trade in 2001)</td>
<td>2001</td>
<td>332</td>
</tr>
<tr>
<td>8</td>
<td>Floor Covering Installer</td>
<td>2001</td>
<td>141</td>
</tr>
<tr>
<td>9</td>
<td>General Carpenter (formerly Carpenter which was originally designated in 1928; made a TQAA trade in 1971)</td>
<td>1971</td>
<td>5,366</td>
</tr>
<tr>
<td>10</td>
<td>Architectural Glass and Metal Technician (formerly Glazier and Metal Mechanic which was originally designated in 1970)</td>
<td>2007</td>
<td>610</td>
</tr>
<tr>
<td>11</td>
<td>Heat and Frost Insulator</td>
<td>1999</td>
<td>247</td>
</tr>
<tr>
<td>13</td>
<td>Ironworker – Generalist Branch 1 (see above)</td>
<td>2007</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Painter and Decorator Branch 1, Commercial and Residential (painter and decorator trade originally designated in 1928; made a TQAA trade in 1972)</td>
<td>1972</td>
<td>399</td>
</tr>
<tr>
<td>15</td>
<td>Painter and Decorator Branch 2, Industrial (see above)</td>
<td>1972</td>
<td>18</td>
</tr>
<tr>
<td>16</td>
<td>Powerline Technician</td>
<td>1979</td>
<td>846</td>
</tr>
<tr>
<td>17</td>
<td>Precast Concrete Erector</td>
<td>1999</td>
<td>49</td>
</tr>
<tr>
<td>18</td>
<td>Precast Concrete Finisher</td>
<td>1999</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Trade Description</td>
<td>Year Established</td>
<td>Number</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------</td>
<td>------------------</td>
<td>--------</td>
</tr>
<tr>
<td>19</td>
<td>Reinforcing Rodworker</td>
<td>1999</td>
<td>233</td>
</tr>
<tr>
<td>20</td>
<td>Restoration Mason</td>
<td>1999</td>
<td>67</td>
</tr>
<tr>
<td>21</td>
<td>Roofer</td>
<td>2001</td>
<td>157</td>
</tr>
<tr>
<td>22</td>
<td>Sprinkler and Fire Protection Installer</td>
<td>1976</td>
<td>492</td>
</tr>
<tr>
<td>23</td>
<td>Terrazzo, Tile and Marble Setter</td>
<td>1999</td>
<td>110</td>
</tr>
</tbody>
</table>

**Apprenticeship and Certification Act, 1998: 11 Restricted Trades**

<table>
<thead>
<tr>
<th></th>
<th>Trade Description</th>
<th>Year Established</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Alignment and Brakes Technician</td>
<td>1969</td>
<td>137</td>
</tr>
<tr>
<td>2</td>
<td>Auto Body and Collision Damage Repairer Branch 1</td>
<td>1953</td>
<td>1,580</td>
</tr>
<tr>
<td>3</td>
<td>Auto Body Repairer Branch 2</td>
<td>1990</td>
<td>221</td>
</tr>
<tr>
<td>4</td>
<td>Automotive Electronic Accessory Technician</td>
<td>1999</td>
<td>91</td>
</tr>
<tr>
<td>5</td>
<td>Automotive Service Technician (motor vehicle repairer trade originally designated in 1937; made compulsory in 1944)</td>
<td>1937</td>
<td>12,244</td>
</tr>
<tr>
<td>6</td>
<td>Fuel and Electrical Systems Technician</td>
<td>1953</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Hairstylist (hairdresser trade originally established in 1937; made compulsory in 1944)</td>
<td>1937</td>
<td>8,016</td>
</tr>
<tr>
<td>8</td>
<td>Motorcycle Technician</td>
<td>1969</td>
<td>298</td>
</tr>
<tr>
<td>9</td>
<td>Transmission Technician</td>
<td>1969</td>
<td>126</td>
</tr>
<tr>
<td>10</td>
<td>Truck and Coach Technician</td>
<td>1996</td>
<td>3,656</td>
</tr>
<tr>
<td>11</td>
<td>Truck Trailer Service Technician</td>
<td>1969</td>
<td>252</td>
</tr>
</tbody>
</table>

**Apprenticeship and Certification Act, 1998: 107 Unrestricted Trades**

<table>
<thead>
<tr>
<th></th>
<th>Trade Description</th>
<th>Year Established</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aboriginal Early Childhood Educator</td>
<td>2000</td>
<td>38</td>
</tr>
<tr>
<td>2</td>
<td>Agriculture - Dairy Herdserson</td>
<td>2001</td>
<td>63</td>
</tr>
<tr>
<td>3</td>
<td>Agricultural Equipment Technician</td>
<td>1971</td>
<td>261</td>
</tr>
<tr>
<td>4</td>
<td>Agriculture - Fruit Grower</td>
<td>2002</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Agriculture - Swine Herdserson</td>
<td>2002</td>
<td>19</td>
</tr>
<tr>
<td>6</td>
<td>Aircraft Maintenance Engineer</td>
<td>2000</td>
<td>88</td>
</tr>
<tr>
<td>7</td>
<td>Appliance Service Technician</td>
<td>2001</td>
<td>48</td>
</tr>
<tr>
<td>8</td>
<td>Arborist</td>
<td>2000</td>
<td>281</td>
</tr>
<tr>
<td>9</td>
<td>Automotive Glass Technician</td>
<td>2003</td>
<td>37</td>
</tr>
<tr>
<td>10</td>
<td>Automotive Painter</td>
<td>1969</td>
<td>185</td>
</tr>
<tr>
<td>11</td>
<td>Baker</td>
<td>1978</td>
<td>109</td>
</tr>
<tr>
<td>12</td>
<td>Baker-Patissier</td>
<td>1981</td>
<td>299</td>
</tr>
<tr>
<td>13</td>
<td>Bearings Mechanic</td>
<td>2000</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>Blacksmith</td>
<td>2000</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>Cabinetmaker</td>
<td>1982</td>
<td>757</td>
</tr>
<tr>
<td>16</td>
<td>Chef</td>
<td>2004</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>Child &amp; Youth Worker</td>
<td>2000</td>
<td>980</td>
</tr>
<tr>
<td>18</td>
<td>Composite Structures Technician</td>
<td>2000</td>
<td>20</td>
</tr>
<tr>
<td>19</td>
<td>CNC Programmer</td>
<td>2005</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>Construction Craft Worker</td>
<td>2001</td>
<td>1,230</td>
</tr>
<tr>
<td>21</td>
<td>Cook - Assistant Br. 1</td>
<td>1977</td>
<td>279</td>
</tr>
<tr>
<td>22</td>
<td>Cook Br. 2</td>
<td>1967</td>
<td>4,879</td>
</tr>
</tbody>
</table>
Apprenticeship and Certification Act, 1998: 107 Unrestricted Trades

<table>
<thead>
<tr>
<th>No.</th>
<th>Trade Description</th>
<th>Yr. Est.</th>
<th>Act. Appr Mar 31/07</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>Die Designer</td>
<td>2005</td>
<td>2</td>
</tr>
<tr>
<td>24</td>
<td>Draftsperson – Mechanical</td>
<td>2000</td>
<td>7</td>
</tr>
<tr>
<td>25</td>
<td>Draftsperson - Plastic Mould Design</td>
<td>2000</td>
<td>36</td>
</tr>
<tr>
<td>26</td>
<td>Draftsperson - Tool &amp; Die Design</td>
<td>2000</td>
<td>12</td>
</tr>
<tr>
<td>27</td>
<td>Early Childhood Educator</td>
<td>2000</td>
<td>3,332</td>
</tr>
<tr>
<td>28</td>
<td>Early Childhood Educator – Inclusion Practices</td>
<td>2000</td>
<td>103</td>
</tr>
<tr>
<td>29</td>
<td>Educational Assistant</td>
<td>2001</td>
<td>814</td>
</tr>
<tr>
<td>30</td>
<td>Electric Motor System Technician</td>
<td>2000</td>
<td>47</td>
</tr>
<tr>
<td>31</td>
<td>Electrical Control (Machine) Builder</td>
<td>2000</td>
<td>10</td>
</tr>
<tr>
<td>32</td>
<td>Electrician – Street Railway Electrician Linesperson</td>
<td>2000</td>
<td>13</td>
</tr>
<tr>
<td>33</td>
<td>Electrician (Signal Maintenance) (TTC)</td>
<td>2000</td>
<td>63</td>
</tr>
<tr>
<td>34</td>
<td>Electronic Service Technician</td>
<td>2000</td>
<td>38</td>
</tr>
<tr>
<td>35</td>
<td>Elevating Devices Mechanic</td>
<td>2002</td>
<td>393</td>
</tr>
<tr>
<td>36</td>
<td>Entertainment Industry Power Technician</td>
<td>2005</td>
<td>2</td>
</tr>
<tr>
<td>37</td>
<td>Exterior Insulated Finishing Systems Mechanic</td>
<td>2005</td>
<td>84</td>
</tr>
<tr>
<td>38</td>
<td>Facilities Mechanic</td>
<td>2000</td>
<td>375</td>
</tr>
<tr>
<td>39</td>
<td>Facilities Technician</td>
<td>2000</td>
<td>127</td>
</tr>
<tr>
<td>40</td>
<td>Fitter – Assembler (Motor Assembly)</td>
<td>2000</td>
<td>1</td>
</tr>
<tr>
<td>41</td>
<td>Fitter Welder</td>
<td>2000</td>
<td>1</td>
</tr>
<tr>
<td>42</td>
<td>Gemsetter/Goldsmith</td>
<td>2000</td>
<td>7</td>
</tr>
<tr>
<td>43</td>
<td>General Machinist</td>
<td>1978</td>
<td>3,847</td>
</tr>
<tr>
<td>44</td>
<td>Hardware, Lumber and Building Materials Retailer</td>
<td>2006</td>
<td>57</td>
</tr>
<tr>
<td>45</td>
<td>Heavy Duty Equipment Technician</td>
<td>1969</td>
<td>1,103</td>
</tr>
<tr>
<td>46</td>
<td>Heavy Equipment Operator: Dozer</td>
<td>2002</td>
<td>101</td>
</tr>
<tr>
<td>47</td>
<td>Heavy Equipment Operator: Excavator</td>
<td>2002</td>
<td>119</td>
</tr>
<tr>
<td>48</td>
<td>Heavy Equipment Operator: Tractor Loader Backhoe</td>
<td>2002</td>
<td>132</td>
</tr>
<tr>
<td>49</td>
<td>Horse Groom</td>
<td>2000</td>
<td>135</td>
</tr>
<tr>
<td>50</td>
<td>Horse Harness Maker</td>
<td>2001</td>
<td>1</td>
</tr>
<tr>
<td>51</td>
<td>Horticultural Technician</td>
<td>2002</td>
<td>677</td>
</tr>
<tr>
<td>52</td>
<td>Hydraulic/Pneumatic Mechanic</td>
<td>2000</td>
<td>21</td>
</tr>
<tr>
<td>53</td>
<td>Industrial Electrician</td>
<td>1986</td>
<td>1,937</td>
</tr>
<tr>
<td>54</td>
<td>Industrial Mechanic Millwright</td>
<td>1979</td>
<td>4,319</td>
</tr>
<tr>
<td>55</td>
<td>Information Technology Hardware Technician</td>
<td>2000</td>
<td>378</td>
</tr>
<tr>
<td>56</td>
<td>Information Technology- Contact Centre-Technical Support Agent</td>
<td>2006</td>
<td>3,732</td>
</tr>
<tr>
<td>57</td>
<td>Information Technology Network Technician</td>
<td>2000</td>
<td>84</td>
</tr>
<tr>
<td>58</td>
<td>Information Technology – Contact Centre – Inside Sales Agent</td>
<td>2006</td>
<td>76</td>
</tr>
<tr>
<td>59</td>
<td>Information Technology – Contact Centre – Customer Care Agent</td>
<td>2006</td>
<td>133</td>
</tr>
<tr>
<td>60</td>
<td>Instrumentation and Control Technician</td>
<td>2000</td>
<td>147</td>
</tr>
<tr>
<td>61</td>
<td>Locksmith</td>
<td>2000</td>
<td>30</td>
</tr>
<tr>
<td>62</td>
<td>Machine Tool Builder &amp; Integrator</td>
<td>2000</td>
<td>192</td>
</tr>
<tr>
<td>63</td>
<td>Marine Engine Technician</td>
<td>1980</td>
<td>225</td>
</tr>
<tr>
<td>64</td>
<td>Metal Fabricator (Fitter)</td>
<td>2000</td>
<td>380</td>
</tr>
<tr>
<td>65</td>
<td>Micro Electronics Manufacturer</td>
<td>2000</td>
<td>113</td>
</tr>
<tr>
<td>66</td>
<td>Motive Power Machinist</td>
<td>1969</td>
<td>77</td>
</tr>
<tr>
<td>67</td>
<td>Mould Designer</td>
<td>2005</td>
<td></td>
</tr>
</tbody>
</table>
### Apprenticeship and Certification Act, 1998: 107 Unrestricted Trades

<table>
<thead>
<tr>
<th>Yr Est.</th>
<th>Act. Appr Mar31/07</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>0</td>
</tr>
<tr>
<td>1978</td>
<td>788</td>
</tr>
<tr>
<td>2000</td>
<td>1</td>
</tr>
<tr>
<td>2000</td>
<td>76</td>
</tr>
<tr>
<td>2000</td>
<td>579</td>
</tr>
<tr>
<td>2000</td>
<td>5</td>
</tr>
<tr>
<td>2000</td>
<td>47</td>
</tr>
<tr>
<td>2001</td>
<td>195</td>
</tr>
<tr>
<td>1991</td>
<td>31</td>
</tr>
<tr>
<td>2001</td>
<td>63</td>
</tr>
<tr>
<td>2003</td>
<td>25</td>
</tr>
<tr>
<td>2000</td>
<td>74</td>
</tr>
<tr>
<td>2000</td>
<td>303</td>
</tr>
<tr>
<td>2006</td>
<td>82</td>
</tr>
<tr>
<td>2000</td>
<td>121</td>
</tr>
<tr>
<td>2007</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>10</td>
</tr>
<tr>
<td>2005</td>
<td>17</td>
</tr>
<tr>
<td>2000</td>
<td>68</td>
</tr>
<tr>
<td>2000</td>
<td>106</td>
</tr>
<tr>
<td>2000</td>
<td>1</td>
</tr>
<tr>
<td>2000</td>
<td>2</td>
</tr>
<tr>
<td>2000</td>
<td>21</td>
</tr>
<tr>
<td>2000</td>
<td>9</td>
</tr>
<tr>
<td>1980</td>
<td>380</td>
</tr>
<tr>
<td>2003</td>
<td>28</td>
</tr>
<tr>
<td>2003</td>
<td>34</td>
</tr>
<tr>
<td>2000</td>
<td>27</td>
</tr>
<tr>
<td>2000</td>
<td>2</td>
</tr>
<tr>
<td>2000</td>
<td>28</td>
</tr>
<tr>
<td>2001</td>
<td>7</td>
</tr>
<tr>
<td>1978</td>
<td>2,138</td>
</tr>
<tr>
<td>2000</td>
<td>3</td>
</tr>
<tr>
<td>2001</td>
<td>120</td>
</tr>
<tr>
<td>2006</td>
<td>52</td>
</tr>
<tr>
<td>2004</td>
<td>13</td>
</tr>
<tr>
<td>2006</td>
<td>8</td>
</tr>
<tr>
<td>2000</td>
<td>11</td>
</tr>
<tr>
<td>2002</td>
<td>738</td>
</tr>
<tr>
<td>2000</td>
<td>6</td>
</tr>
</tbody>
</table>

- **68** Mould or Die Finisher
- **69** Mould Maker
- **70** Native Clothing & Crafts Artisan
- **71** Native Residential Construction Worker
- **72** Network Cabling Specialist
- **73** Optics Technician (Lens and Prism Maker)
- **74** Packaging Machine Mechanic
- **75** Parts Technician
- **76** Pattern Maker
- **77** Pool & Hot Tub/Spa Service Technician
- **78** Pool/Hot Tub & Spa Installer
- **79** Powered Lift Truck Technician
- **80** Precision Metal Fabricator
- **81** Process Operator-Power
- **82** Process Operator: Refinery, Chemical & Liquid Processes
- **83** Process Operator: Food Manufacturing
- **84** Pump Systems Installer
- **85** Railway Car Technician
- **86** Recreation Vehicle Technician
- **87** Retail Meat Cutter
- **88** Roll Grinder/ Turner
- **89** Saddlery
- **90** Saw Filer/Fitter
- **91** Ski Lift Mechanic
- **92** Small Engine Technician
- **93** Special Events Coordinator
- **94** Surface Blaster
- **95** Surface Mount Assembler
- **96** Thin Film Technician
- **97** Tire Wheel and Rim Mechanic
- **98** Tool & Cutter Grinder
- **99** Tool & Die Maker
- **100** Tool & Gauge Inspector
- **101** Tool/Tooling Maker
- **102** Tractor Trailer Commercial Driver
- **103** Turf Equipment Technician
- **104** Utility Arbortist
- **105** Water Well Driller
- **106** Welder
- **107** Wooden Boat Rebuilder/Repairer
### Apprenticeship and Certification Act, 1998: 1 Skill Set

<table>
<thead>
<tr>
<th>Skill Set</th>
<th>Yr Est</th>
<th>Act. Appr Mar31/07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Meter Installer (Skill Set)</td>
<td>2002</td>
<td>1,018</td>
</tr>
</tbody>
</table>

**Notes:**
1) ACA Trades identified as designated in 2000 were employer-established trades under the TQAA and transferred to the ACA in 2000.

Source: Ministry of Training, Colleges and Universities
April 2008
The TQAA Exemptions

**Electrician (Reg. 1051)**

- This Regulation covers both construction and maintenance electricians, as well as domestic and rural electricians, both of which are defined. The exemptions stipulated in the Regulations include permanent employees of an industrial plant; persons enrolled in OYAP or similar programs; pre-apprentices; the ACA industrial electrician who maintains or installs machinery in an industrial plant; certified refrigeration and air conditioning systems mechanics performing electrical work on the controls on equipment related to commercial refrigeration or air conditioning units and wiring to “an existing fuse disconnect”; similar work being performed on residential air conditioning and refrigeration units (including wiring to an existing panel); persons employed by an outside contractor performing electrical work on machines and equipment used in manufacturing; those performing electrical work on power lines and equipment supplying electricity to consumers on street, highway, and traffic lighting equipment (lineworker); sprinkler and fire protection installers; electrical work on elevators and ski lifts (covered by TSSA); those authorized under TSSA Act and Regulations to do electrical wiring to fuel-fired (natural gas or propane) appliances; those working on amusement devices (TSSA); persons working on telephone equipment or on electrical equipment that plugs into an electrical source; and persons performing electrical work on pump installations under the Ontario Water Resources Act.

**Hoisting Engineer (Reg. 1060)**

- This compulsory trade covers mobile crane operator (Branch 1, moving material more than 8 tons) and Branch 2 (moving more than 8 tons, but less than 15 tons). It also covers a tower crane operator, with a boom and vertical mast. The only non-duplicative exemption relates to operators of hoisting equipment for firefighting or towing motor vehicles.

**Plumber (Reg. 1073)**

- The most notable exemptions are pipe laying into trenches for sewers, drains or water mains; water meter installers (covered by both TQAA and ACA compulsory/restricted Regulations); steamfitters installing piping for conveying gas or tubing for pneumatic or air handling systems; refrigeration and air conditioning mechanics (both commercial and residential, covered by two separate Regulations); sprinkler and fire protection installers (separate Regulation under TQAA, voluntary); construction millwrights (TQAA voluntary Reg.); and industrial mechanic millwright (ACA unrestricted); construction
boilermaker (TQAA voluntary); welders under the TSSA; those working on natural gas or propane appliances piping (under the TSSA).

**Refrigeration and Air Conditioning Mechanic (Reg. 75/05)**

- Covers a variety of work relating to cooling or heating systems installed and used in residential, industrial, commercial or institutional settings. Residential air conditioning systems mechanics are separated as are those who install independent units in residences with limited power capacity. Exemptions include outside contractors (ACA industrial electrician); persons dealing with self-contained portable plug-in appliances; those involved in production of systems; certified electricians performing electrical work on refrigeration and air conditioning units; those authorized under the TSSA dealing with the “gas side” of refrigeration and air conditioning units.

**Sheet Metal Workers (Reg. 1077)**

- The general description refers to sheet metal work of a certain gauge and relates to manufacturing, fabricating, assembling, handling, erecting, installing, dismantling, reconditioning, adjusting, altering, repairing or servicing. Exemptions include glaziers and metal mechanics (Regulation under TQAA); refrigeration and air conditioning mechanics installing sheet metal ductwork, including residential air conditioning units; electricians; sheet metal work relating to the electrician trade (cable trades, control boxes, etc.); construction millwrights (TQAA) and industrial mechanic millwrights (ACA); brick and stone masons (TQAA Regulation); general carpenters (metal siding, eaves troughs, roofing, etc., TQAA Regulation); installation of metal doors and window framing, etc. (glazier and metal mechanic, TQAA Regulation); ironworker (TQAA Regulation); holders of fuel industry certificates or natural gas and propane appliance work (TSSA Regulation).

**Steam Fitter (Reg. 1079)**

- General description refers to installation, maintenance and repair of heating/cooling re-industrial systems and installation of piping and tubing for conveying of gas or any pneumatic or air handling system. Exemptions include certified plumbers; certified refrigeration and air conditioning systems mechanics (TQAA Regulation); ACA industrial mechanic millwrights (process piping in industrial plants); construction boilermakers (TQAA Regulation); construction millwrights (TQAA Regulation); ACA industrial mechanic millwrights; welders under the TSSA performing welds on equipment installed by qualified steam fitters; persons holding fuel (natural gas or propane) certificates (under the TSSA).

**The ACA Exemptions**

- There are 10 ACA restricted motive power trades or restricted skill sets (Reg. 565). These are alignment and brakes technicians; auto body repairer; auto body and collision repairer; automotive electronic accessory technician; automotive service technician; fuel and electrical systems mechanic; motorcycle technician; transmission technician; truck and coach technician; truck-trailer repairer.
• Note that Section 12(1) of the Act requires individuals in restricted skill sets to hold a certificate, be it registered apprenticeship, or holder of a letter of permission.

• There are a number of exemptions under the Motor Power Trades Exemption Regulation (566), including those who remove or replace wheels or rims, auto glass, exhaust systems, radiators, cooling system hoses, thermostats, engine drive belts, horns, light bulbs and sealed beam units, lenses, fuses, batteries and battery cables, radios, shock absorbers or springs, oil and air filters, fuel filters and spark plugs, persons who change or replenish fluids, repair and balance tires and wheels, and do lubrication.

• Other miscellaneous exemptions of a technical nature are also stipulated, the most notable of which are those involved in the replacement of wheels or rims on motor coaches and heavy trucks who have completed a course of study approved by the Director and holding an MTCU-issued Certificate of Achievement.

• The two other restricted ACA skills sets are the water meter installer (Reg. 565) and the hairstylist (Reg. 565).
APPENDIX 11 - REGISTRATION AND COMPLETION DATA

New Registrations
Percentage of Total by Year

Completions
Percentage of Total by Year

Notes:
1. The early 2000s was chosen as the beginning point for data analysis as it was during this time that government began setting registration targets. Focussed effort was spent on achieving targets through increased marketing, the development of new apprenticeable trades/occupations and introduction of incentives and special apprenticeship programs.
2. Since 2002, some 20 new voluntary / unrestricted trades have been established. One compulsory trade branch is established in 2005.
3. The new registration data suggests that voluntary/unrestricted registrations outpace compulsory/restricted trades; and completion data suggests that compulsory/restricted trades have a better completion record. However, this is likely attributable to a lag effect. Without a more sophisticated cohort system, inferences from the above data are not possible.

Source: Ministry of Training, Colleges and Universities, April 2008
While it may be helpful in showing that registrations overall have been increasing, it does not enable comparisons to be made about the relative effect of compulsory vs. voluntary trades on the rates of registration. In order to make such an assessment, information would be needed about the size and the labour market supply/demand factors in each of the enumerated trades. Moreover, since none of the trades were, during this period, converted from voluntary to compulsory, the figures reveal nothing about the conversion effect on registration rates.

The number of variables that influence the effect of compulsory certification or that may be changed by the implementation of compulsory certification is vast and the Ministry has not captured data for these variables in its records. These conditions may include:

- Specific economic conditions
- Labour mobility pushes/pulls in Ontario
- Individual sector economic health
- Trade/ skills demand in Ontario
- Effects of control of skill areas by unions, collective agreements
- Effects of Labour Board decisions on distribution of work
- Existence of or increases in regulatory enforcement
- Development of incentives for employers and apprentices to participate
- Implementation of other programs designed to influence any of the above

Generally, the information available on the Ministry’s database relates to individual tombstone data, trade, in-school success, length of time in apprenticeship program and certificates issued for apprentices/ exam applicants. While there may be a lot of other data to be mined, data on the main influencers identified above is not available on the database so direct correlations cannot be easily made.
APPENDIX 12A - SOURCES OF APPRENTICESHIP REGISTRATION DATA

Registered Apprenticeship Information System (RAIS), Statistics Canada

The main public source of apprenticeship data is the Registered Apprenticeship Information System (RAIS) of Statistics Canada.47

This is an annual survey conducted by the Statistics Canada on a calendar year basis. It is compiled from administrative records provided by provinces. It is not based on surveys of apprentices. The Ministry of Training, Colleges and Universities provides data for Ontario.

The purpose of the Statistics Canada survey is to gather information on individuals who receive training and those who obtain certification within a trade where apprenticeship training is being offered. Specifically, the survey compiles data on the number of registered apprentices taking in-class and on-the-job training in trades that are either Red Seal or non-Red Seal and where apprenticeship training is either compulsory or voluntary. It also compiles data on the number of provincial and interprovincial certificates granted to apprentices or tradespersons48.

The survey collects individual records of all registered apprentices in an electronic format. RAIS provides data on new registration, completion, discontinuation and suspension by major trade sector and trade codes since 1991. The latest year for which data are now available is 2005 (released in November 2007).

Statistics Canada performs quality control by comparing the most recent data year with past data years to detect any unusual or unexpected changes. Comparisons of tabulated data are also made with the data published by the provinces and territories, where available.

Below is a RAIS table showing new registration by major trade group for Ontario for 2000 to 2005.

---

47 Another public source is the Census. With the release of the 2006 Census, data on individuals who have completed a Registered Apprenticeship will be available for the first time. Information on apprenticeship certification, combined with the respondent’s occupational classification, will for the first time allow for an accurate measurement of the number of individuals within the labour force, and within a specific trade, who are certified. Data on earnings will also be available. Data on educational attainment and occupation is scheduled for release March 4, 2008. Data on income and earnings is scheduled for release May 1, 2008.

48 In the context of this survey, a tradesperson is an individual who received training within a trade where apprenticeship training is voluntary and did not register for the apprenticeship training but succeeded in obtaining their certification within that trade.
New Registrations by Trade Group and Year, Ontario 2000-2005

<table>
<thead>
<tr>
<th>Trade Group</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>Change</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building and Construction</td>
<td>1,310</td>
<td>1,620</td>
<td>1,910</td>
<td>2,275</td>
<td>2,375</td>
<td>2,785</td>
<td>410</td>
<td>17.3</td>
</tr>
<tr>
<td>Electrical, Electronics and Related</td>
<td>1,895</td>
<td>2,065</td>
<td>1,960</td>
<td>2,160</td>
<td>2,215</td>
<td>2,490</td>
<td>275</td>
<td>12.4</td>
</tr>
<tr>
<td>Food and Service Trades</td>
<td>2,750</td>
<td>3,430</td>
<td>2,570</td>
<td>2,995</td>
<td>3,400</td>
<td>3,545</td>
<td>145</td>
<td>4.3</td>
</tr>
<tr>
<td>Industrial and Related Mechanical</td>
<td>1,285</td>
<td>1,220</td>
<td>1,200</td>
<td>1,730</td>
<td>1,415</td>
<td>1,850</td>
<td>435</td>
<td>30.7</td>
</tr>
<tr>
<td>Metal Fabricating Trades</td>
<td>3,430</td>
<td>3,085</td>
<td>2,750</td>
<td>3,160</td>
<td>3,190</td>
<td>3,705</td>
<td>515</td>
<td>16.1</td>
</tr>
<tr>
<td>Motor Vehicle and Heavy Equipment</td>
<td>3,615</td>
<td>3,990</td>
<td>3,910</td>
<td>4,340</td>
<td>4,790</td>
<td>5,490</td>
<td>700</td>
<td>14.6</td>
</tr>
<tr>
<td>Other Trades</td>
<td>715</td>
<td>875</td>
<td>910</td>
<td>1,325</td>
<td>1,550</td>
<td>1,680</td>
<td>130</td>
<td>8.4</td>
</tr>
<tr>
<td>Total All Trades</td>
<td>15,000</td>
<td>16,290</td>
<td>15,210</td>
<td>17,985</td>
<td>18,930</td>
<td>21,540</td>
<td>2,610</td>
<td>13.8</td>
</tr>
</tbody>
</table>

Source: Registered Apprenticeship Information System (RAIS), Statistics Canada

The RAIS also provides data on the number of registered apprentices at the beginning of the year, the number registered during the year, the number of apprentices successfully completed the program during the year, number of suspension/cancellation during the year. The following table is an example of such information for building and constructions trades for 2004 and 2005.

### Registration and Completion of Apprenticeship Program in Building and Construction Trades, Ontario

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Registered at the beginning of the period</td>
<td>9,755</td>
<td>11,040</td>
</tr>
<tr>
<td>New Registration during the period</td>
<td>2,375</td>
<td>2,785</td>
</tr>
<tr>
<td>Successfully completed during the period</td>
<td>235</td>
<td>290</td>
</tr>
<tr>
<td>Suspended/Cancelled during the period</td>
<td>865</td>
<td>1,135</td>
</tr>
<tr>
<td>Continuing at the end of the period</td>
<td>11,030</td>
<td>12,400</td>
</tr>
</tbody>
</table>

Source: Registered Apprenticeship Information System

**Limitations of RAIS**

- Statistics Canada collects data for a given year during February-September of the following year. Then they check for internal consistencies, e.g., missing and invalid codes, data element inconsistencies, executing frequency tables and examining outliers for certain data elements. This takes about two years to make the data ready for release. Data for 2005 were released on November 15, 2007.

- The RAIS was not designed for longitudinal analysis. It originated as a database used to monitor registration and completion of apprenticeship training. As a result, any kind of cohort based analysis is not possible from the RAIS data as it is.

- Trade codes used are based on the Canadian Classification and Dictionary of Occupations (C.C.D.O.). CCDO was the key reference document that classified all the occupations in the Canadian labour market during the 1970s and 80s. In an attempt to better track and identify the occupations found in today's labour market, HRSDC introduced the new National Occupational Classification (NOC) code in 1993. Statistics Canada uses NOC-S coding system. Data on labour market characteristics of Canadians/Ontarians are available only in NOC-S code. In many cases, it is not possible to determine a one-to-one relationship between CCDO and NOC-S occupational titles, which makes it very difficult to use apprenticeship data along with other data to do any analysis.
RAIS data do not differentiate between completion and certification. Completers are understood as being apprentices with certification.

RAIS data do not permit measurement of Inter-provincial mobility, since identifiers are changed when an apprentice changes jurisdiction. It is possible that apprentices moving from one province and registering and/or completing in another province are included in ‘dropouts’ in their original province.

RAIS does not provide any data by industry sector.

This database does not have any information on labour market outcomes (e.g., wage) of registered apprentices and tradespersons.\(^4^9\)

While creating a longitudinal file for 1993 cohort using personal records, Statistics Canada identified the following general problems in data records received from provinces:

- wrong trade changes (usually these were frequent trade changes over the years for the same apprentice that were likely due to changes in a jurisdiction’s trade code structure);
- not real starters (these were apprentices who were recorded as having completed in the starting year (1993) a program for which the duration was nominally two years or more);\(^5^0\)
- apprentices recorded as having completed in the same trade twice;
- apprentices recorded as having discontinued in the same trade in two consecutive years;
- apprentices who were recorded as having skipped years with no indication of discontinuation or new registration or reinstatement;
- continuers with no records in the following years;
- completers in a trade who were recorded as having continued or discontinued in the same trade in the following years; and
- individuals who were recorded as being continuers in a new trade with no new registration.

**MTCU Administrative Data**

MTCU maintains a database for apprenticeship registration, completion, certification etc. This database contains individual records of all registered apprentices and journey persons certified by the ministry. As mentioned earlier, RAIS data for Ontario is based on the individual records maintained in this database. However, the occupation titles used in RAIS are different from the MTCU administrative data in many cases.

Prepared by:

Ministry of Training, Colleges and Universities, March 2008

---

\(^4^9\)In addition to Census (2006), there is no database that tracks labour market outcomes of apprentices except occasional apprenticeship survey such as the National Apprenticeship Survey (NAS) which was conducted by the Statistics Canada during January-April 2007. Provincial results of the survey are expected to be available in September 2008. The Programs Branch of MTCU is expected to receive an embargoed copy of the draft for comments.

\(^5^0\)The exclusion of those apprentices creates a slight difference between the number of new registered apprentices in longitudinal file and the published RAIS numbers.
APPENDIX 12B - MEASURING APPRENTICESHIP COMPLETION RATE

Completion rate is an indicator of success of the apprenticeship system. In apprenticeship literature, there are several approaches of measuring completion rates and there appears to be no agreed method.

An “ideal” measure of completion rate would be based on tracking a cohort of individuals from start to finish of their training period. Currently, there is no such longitudinal database available that tracks a cohort that enters the apprenticeship system in a given year.

The only publicly available database on apprenticeship is Statistics Canada’s Registered Apprenticeship Information System (RAIS). The aggregate data generated by RAIS for new registrations and completions do not reflect the flow of individuals through the system.

Completion rates based on aggregate data calculated as a share of registered apprentices who receive certification requires qualification.

- The aggregate number of apprentices who complete their training in a given year includes individuals from different cohorts.
- Aggregate data do not account for discontinuers who recommenced in a different program.
- The duration of training varies substantially across trades.

There is also gap between completion and certification.

- Completion indicates that training requirements have been fulfilled and certification is usually obtained after completion.
- Some apprentices can obtain certification without necessarily completing. They would have cancelled their apprenticeship programs and got sufficient experience to challenge and pass certification examination.
- Some apprentices may have completed requirements but wait for few years before taking the provincial certification examination.

The RAIS data do not differentiate between completion and certification. Completers are understood as being apprentices with certificates. Current data on completion gathered through RAIS i.e. satisfying requirements of in-class and on-the-job training, corresponds closely to certification data.

The main difference between completion and certification figures is explained by the fact that RAIS collects information on people who originally registered as apprentices, who then left and later received a certificate as a tradesperson. Most of these people do not have a completion status as an apprentice.

Methodologies of measuring completion rate

In apprenticeship literature, there are several approaches of measuring completion rates. Selection of an acceptable method of measuring completion rate depends on the data availability.
They used several approaches as follows:

1. Completion Rate 1 (CR1): Ratio of completions (C) in year t to new registrations (NR) four years earlier (t-4).

\[ CR1 = \frac{C_t}{NR_{t-4}} \times 100 \]

This method approximates the cohort methodology. The average program duration is assumed to be four years. According to this method, the completion rate may be more than 100% since the number of completions in year t may be higher than the number of new registrations in year t-4.

2. Completion Rate 2 (CR2): Ratio of completions in a given year (t) to the average of new registrations of three, four and five years prior to year t. This method is similar to the above but it takes the average of three registration years in consideration that the duration may be greater or smaller than four years. The formula used is as follows:

\[ CR2 = \frac{C_t}{(NR_{t-3} + NR_{t-4} + NR_{t-5})/3} \times 100 \]

The authors suggest that the completion rate 2 is perhaps the most appropriate, since it adjusts for various durations. However, this method may also yield more than 100% completion rate.

Completion rates were calculated using both methods (CR1 and CR2). The calculations of two types of rates for Canada show that the differences between the two rates for different years across trades are not dramatic (see table).

<table>
<thead>
<tr>
<th>Summary Table 3: Completion Rates by Trade, 1996 and 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion Rate 1</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>1996</td>
</tr>
<tr>
<td>Industrial &amp; Mechanical Trades</td>
</tr>
<tr>
<td>Electrical &amp; Electronics Trades</td>
</tr>
<tr>
<td>Metal Fabricating Trades</td>
</tr>
<tr>
<td>Category</td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>Motor Vehicle &amp; Heavy Equipment Trades</td>
</tr>
<tr>
<td>All Trades</td>
</tr>
<tr>
<td>Food &amp; Services Trades</td>
</tr>
<tr>
<td>Building &amp; Construction Trades</td>
</tr>
<tr>
<td>Other Trades</td>
</tr>
</tbody>
</table>

Source: Main Table 17a, Sharpe et al. (2008)

* - Indicates percentage point changes rather than growth rates

3. Completion/Registration Rate: This is the ratio of the number of completions in a given year to total registrations in that year. If the number of new registrations remains constant over time and no apprentices withdraw from the program, this ratio would be the reciprocal of the program duration. As the majority of programs last four years, this figure under the above conditions would be 25 per cent. Thus, increases in registrations and longer program durations would introduce a downward bias independent of factors affecting the true completion rate. This ratio is not a completion rate as it relates the number of new registrations in a program to the number of persons who actually complete the program after the normal length or duration of the program has lapsed. For this reason, the authors do not apply the term completion rate to this ratio.

4. In their 2008 study Sharpe, Arsenault and Lapointe computed another type of completion rate, which they termed “long-term” completion rates: the sum of completions over the sum of new registrations over the 1996-2005 period with four years lag for the latter.


The lag of four years is introduced to simulate a cohort, so that the sum of completions and the sum of registrations relate to the same cohort of apprentices. According to the authors, in the case of “long-term” completion rate, the issue of a longer completion period creates less distortion because it only affects the tail of the period. Moreover, it avoids the issue of choosing a base year for comparison, which can create major problems if certain apprenticeship programs suffered or benefited from exceptional circumstances.

According to this method, the completion rate for all trades during the 1991-2005 was 48.5% in Canada. This rate closely resembles the one the Statistics Canada computed using a cohort method (described below).

**B. Statistics Canada (Registered Apprentices: The class of 1992, a decade later, November 2005)**

This study looks at completion issues following a longitudinal cohort of registered apprentices, who first started their programs in 1992, over a period of 11 years. The completion rate based on
a cohort approach used in this study, measures the number of apprentices who started in 1992 and completed over 1992-2002.

The report uses two types of measurement (as explained below) but discusses a few types of completion rates that may be calculated using the longitudinal data.

1. Annual Cohort’s Completion Indicator (ACCI)

\[
ACCI = \frac{\text{Completers in year } t \text{ from Cohort } t-x} {\text{registered in year } t-x} \times \frac{1}{x}
\]

\( x \) = duration of the program

\( t \) = current year

These completers are apprentices who registered in the same year. They are compared with the total population who registered when they started their training program.

This approach should be used by trade and jurisdiction to reflect the variation of the program duration. The interpretation of this indicator is valid for a specific cohort over time. However the comparison between cohorts must be done carefully since various socio-economic factors can influence cohorts differently over time. The maximum value of this ratio is 100% completion rate assuming no dropouts or transfers.

For an annual rate, apprentices from cohort \( t-x \) who have completed before or after the year \( t \) are excluded. Dropouts are included. Apprentices who completed in the current year but do not belong in the studied cohort are not included in the numerator.

2. Cumulative Cohort’s Completion Indicator (CCCI)

\[
CCCI = \frac{\text{Cumulative completers by year } t \text{ from Cohort } t-x} {\text{registered in year } t-x} \times \frac{1}{x}
\]

\( x \) = duration of the program

\( t \) = current year

This approach allows the comparison of the performance of any cohort over time. It also allows the monitoring of cohorts’ performance over comparable periods of time. It includes all apprentices from a single cohort who have completed by the current year.

3. Raw Completion Indicator (RCI1): at the start of the year, with all registered.

\[
RCI_1 = \frac{\text{Completers current year}} {\text{Cumulative registered at start of current year}}
\]

This ratio looks at the completion rate at the beginning of a year. The ratio gives one of the lowest rates since its denominator includes anyone registered, those who are taking a long time to complete and those who have been registered for a period shorter than the duration of the program. The ratio can never be equal to 100% unless the program lasts one year with no
dropouts or delayers. The longer the program, the more years of registered apprentices will be included in the denominator.

4. **Raw Completion Indicator (RCI2): at the end of the year, with all registered**

\[
\text{RCI}_2 = \frac{\text{Completers current year}}{\text{Cumulative registered at end of current year}}
\]

This ratio looks at the completion rate at the end of a year. It is the lowest of all rates since not only it has the same issues as the first one but it increases the denominator by including new registered in the current year, which are the least likely to complete within the same year.

5. **Raw Completion Indicator (RCI3): at the start of the year, with continuers**

\[
\text{RCI}_3 = \frac{\text{Completers current year}}{\left(\text{Cumulative registered} - \text{discontinuers} - \text{completers}\right) \text{ at end of current year}}
\]

This ratio looks at the completion rate at the start of a year. It removes completers and dropouts from previous years.

6. **Raw Completion Indicator (RCI4): at the end of the year, with continuers**

\[
\text{RCI}_4 = \frac{\text{Completers current year}}{\left(\text{Cumulative registered} - \text{discontinuers}\right) \text{ at end of current year} - \text{completers at start of current year}}
\]

This ratio looks at the completion rate at the end of the current year, thus removing people who left during the current and previous years. Apprentices completing in the current year are kept. The result of this ratio is lower than the previous one because the current year’s cohort adds a value in the denominator much larger than the number of dropouts removed within that same year.

7. **Population-based Completion Indicator (PCI)**

\[
\text{PCI} = \frac{\left[\text{Completers of current year}\right]}{\left[\text{Population with usual age at graduation}\right]}
\]

This indicator is commonly used to calculate a completion rate for postsecondary degrees/diplomas (college and university):

The expected age for each grade is: College studies: 21 years old; Bachelor: 22 years old; Master: 24 years old; Doctorate: 27 years old. These completion rates are currently under revisions.

This approach would not be advisable for Apprentices population given its wide variation of ages.

**Methods used by the Statistics Canada**

The study measures both annual completion rates and cumulative completion rate by trades for apprentices registered in 1992 using a longitudinal cohort created from the Registered
Apprenticeship Information System (RAIS). Although it was a pilot work initially, the Statistics Canada expects to repeat the work for the coming years, with one new cohort added each year.

The 2005 study finds that (see table below for details):

- A total of 8,342 people registered in an apprenticeship program in 1992 in Ontario
- 3,905 of them (46.8%) completed a trade during the course of 11 years (see Appendix table). An additional 138 individuals who started as new apprentices in 1992, did not complete their programs but obtained a certificate afterwards. As a result, 48.5% (or 4,043 individuals) got certificates in 11 years (by 2002).
- Most certifications (about 56%) occurred during the 4th to 6th year (ie. during 1995-1997).
- A total of 998 apprentices (12%) were still continuers after the 11th year
- However, a total of 4,298 (or 51.5%) dropped out, but many of them (12.2%) came back and obtained certification.

The pilot study of the Statistics Canada cited above created a longitudinal file based on individual data from three provinces including Ontario. Although the Statistics Canada plans to repeat the same exercise for subsequent years, it takes about five years to release the results. It is understood that the longitudinal analysis of 1993 cohort for 1993-2003 period will be available in March 2008.

Registered Apprentices: The Class of 1992, a Decade Later

Table 2

<table>
<thead>
<tr>
<th>Program</th>
<th>Median duration of time spent in program</th>
<th>Total 1992 registered in program</th>
<th>Total completers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td></td>
<td>8,342</td>
<td>3,905</td>
<td>46.8</td>
</tr>
<tr>
<td>Age group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 to 19</td>
<td>5</td>
<td>990</td>
<td>532</td>
<td>53.7</td>
</tr>
<tr>
<td>20 to 24</td>
<td>5</td>
<td>3,053</td>
<td>1,532</td>
<td>50.2</td>
</tr>
<tr>
<td>25 to 29</td>
<td>4</td>
<td>1,773</td>
<td>780</td>
<td>44.0</td>
</tr>
<tr>
<td>30 to 39</td>
<td>4</td>
<td>1,842</td>
<td>815</td>
<td>44.2</td>
</tr>
<tr>
<td>40 or more</td>
<td>4</td>
<td>684</td>
<td>246</td>
<td>36.0</td>
</tr>
<tr>
<td>1992 Main trades</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor vehicle and heavy equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automotive service technician</td>
<td>5</td>
<td>1,672</td>
<td>909</td>
<td>54.4</td>
</tr>
<tr>
<td>Motor vehicle body repairer (metal and paint)</td>
<td>1</td>
<td>240</td>
<td>72</td>
<td>30.0</td>
</tr>
<tr>
<td>Motor vehicle steering suspension and brakes mechanic</td>
<td>3</td>
<td>135</td>
<td>52</td>
<td>38.5</td>
</tr>
<tr>
<td>Heavy duty equipment mechanic technician</td>
<td>4, 5, 6</td>
<td>73</td>
<td>50</td>
<td>68.5</td>
</tr>
<tr>
<td>Mobile crane operator</td>
<td>3</td>
<td>51</td>
<td>32</td>
<td>62.7</td>
</tr>
<tr>
<td>Other1</td>
<td>4</td>
<td>306</td>
<td>124</td>
<td>40.5</td>
</tr>
</tbody>
</table>

Electrical, electronics and related
<table>
<thead>
<tr>
<th>Trade</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction electrician</td>
<td>5</td>
<td>5</td>
<td>693</td>
<td>447</td>
<td>64.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial electrician</td>
<td>1, 4, 5</td>
<td>11</td>
<td>366</td>
<td>166</td>
<td>45.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powerline technician</td>
<td>4</td>
<td>5</td>
<td>52</td>
<td>21</td>
<td>40.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>81</td>
<td>57</td>
<td></td>
<td>70.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Building construction trades**

<table>
<thead>
<tr>
<th>Trade</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpenter</td>
<td>1</td>
<td>4</td>
<td>559</td>
<td>193</td>
<td>34.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building service technician</td>
<td>2, 4</td>
<td>3</td>
<td>181</td>
<td>110</td>
<td>60.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roofer</td>
<td>3</td>
<td>3</td>
<td>122</td>
<td>26</td>
<td>21.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bricklayer</td>
<td>4</td>
<td>4</td>
<td>120</td>
<td>17</td>
<td>14.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drywall installer</td>
<td>1</td>
<td>1</td>
<td>103</td>
<td>40</td>
<td>38.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native residential construction worker</td>
<td>2</td>
<td>2</td>
<td>98</td>
<td>34</td>
<td>34.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>398</td>
<td>76</td>
<td></td>
<td>19.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Food and service trades**

<table>
<thead>
<tr>
<th>Trade</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cook</td>
<td>3</td>
<td>4</td>
<td>436</td>
<td>139</td>
<td>31.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hairdresser/Hairstylist</td>
<td>1</td>
<td>3</td>
<td>394</td>
<td>191</td>
<td>48.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>134</td>
<td>31</td>
<td></td>
<td>23.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Metal fabricating trades**

<table>
<thead>
<tr>
<th>Trade</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plumber/Gasfitter</td>
<td>4, 5</td>
<td>5</td>
<td>326</td>
<td>205</td>
<td>62.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machinist</td>
<td>1, 2, 3, 4, 6, 8</td>
<td>4</td>
<td>233</td>
<td>115</td>
<td>49.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheet metal worker</td>
<td>4, 5</td>
<td>5</td>
<td>219</td>
<td>124</td>
<td>56.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tool and die maker</td>
<td>1, 2, 4</td>
<td>5</td>
<td>149</td>
<td>97</td>
<td>65.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moulder and engraver</td>
<td>1</td>
<td>5</td>
<td>94</td>
<td>43</td>
<td>45.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>188</td>
<td>86</td>
<td></td>
<td>45.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Industrial and mechanical trades**

<table>
<thead>
<tr>
<th>Trade</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial mechanic (millwright)</td>
<td>3</td>
<td>4</td>
<td>302</td>
<td>193</td>
<td>63.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refrigeration and air conditioning mechanic</td>
<td>4, 5</td>
<td>5</td>
<td>173</td>
<td>110</td>
<td>63.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial plant operator</td>
<td>4</td>
<td>5</td>
<td>99</td>
<td>22</td>
<td>22.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>80</td>
<td>49</td>
<td></td>
<td>61.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other trades**

<table>
<thead>
<tr>
<th>Trade</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape gardener</td>
<td>1</td>
<td>3</td>
<td>160</td>
<td>27</td>
<td>16.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>105</td>
<td>47</td>
<td></td>
<td>44.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

1. All categories ‘Other’ include different trades with various program durations. Program durations are not listed since they could not be associated with a specific trade.

Source: Statistics Canada, Registered Apprenticeship Information System.

Catalogue no. 81-595-MIE2005035
Based on Regulations, ministry fee schedules, and program announcements, what is the financial impact on the Government of Ontario based on 1000 new apprenticeship registrations?

1. Registration Fee - estimate $40,000.00 (revenue)

   A $40 fee is payable to the Government of Ontario to register the Contract of Apprenticeship or Training Agreement. The Ministry does not record who remits the payment. It could be the apprentice, employer, sponsor, or other.

2. Apprenticeship Scholarship Program – estimate up to $1,000,000 (expenditure)

   $1,000 is payable by the Government of Ontario to the participant who is under 25 years of age, completes upgrading to meet the academic entry requirements of apprenticeship, and is registered as an apprentice. Uptake in 2006-07 was almost 400 candidates.

3. Employer Signing Bonus Program - estimate up to $2,000,000 (expenditure)

   $2,000 is payable to the employer who supports the apprenticeship scholarship candidate’s apprenticeship registration and provides apprenticeship training. Uptake in 2006-07 was nearly 120 employers.

4. Loans for Tools Program - estimate up to $800,000 (loan)

   The Government of Ontario makes a Loan available to first-year registered apprentices. Loans range from $400 to $800 depending on the apprenticeship trade sector: $300 service; $400 industrial; $400 construction; $800 motive power. The loan is repayable interest-free during and up to one year after the apprentice’s training. In 2006-07, over 5,300 loans were issued for a total of $2.7M.

5. Apprenticeship Training Tax Credit Program - estimate not calculated.

   The tax credit is available to private sector employers for 124 eligible trades (out of over 150 apprenticeship trades). The tax credit provides up to $15,000 towards eligible apprentices’ salaries and wages for the first 36 months of training. The amount of the tax credit will vary depending on the size of the employer’s payroll, the apprentice’s length of employment with the employer for the tax year.
6. In-School Seat Purchase Program - estimate $6.7M (*expenditure*)

Seat purchase funding is payable by the Government of Ontario to approved training delivery agents (TDA) that deliver approved in-school curriculum for each trade. The per diem in 2006-07 was $56.03 excluding classroom fees. Apprentices typically complete 8 weeks of school for each of 3 levels for a cost of approximately $6,723 over the three-year duration of their training (8 weeks = 40 days x 56.03 = $2241 x 3 years = $6723.60).

There are several variables which may have an impact on the expenditure:
- The length of the in-school component: the typical length of in-school is 24 weeks (3 periods of 8 weeks) but there are variations depending on the trade.
- Per diems are established for a fiscal year. Apprenticeship durations range from 2 to 5 years so there may be changes in the per diem during the duration of the apprenticeship. The Ministry funds the TDA based on the per diem less the classroom fee.
- There may be apprentices who will not attend the full in-school requirement e.g. in-school exemptions or non-completers.

7. Classroom fee - estimate $1.2M (*revenue for TDAs*)

The fee is payable to the approved training delivery agent. Apprentices, employers and training delivery agents may pay the fee and/or contribute to the fee. The regulated fee is $10 for every six-hour unit (1 day) of study. Apprentices typically complete 8 weeks of school for each of 3 levels for a cost of approximately $1200 over the three-year duration of their training (8 weeks = 40 days x 10.00 = $400 x 3 years = $1200). This estimate does not take into consideration in-school exemptions or non-completers, or variations in the length of the in-school component.

8. C/Q Examination Fee - estimate $100,000 (*revenue*)

The fee of $100 is payable by the examination candidate to the Government of Ontario. Not every designated trade includes a certification examination, and not every completed apprentice will write the certification examination. Examination candidates are not always successful on the first attempt and will re-write. The re-write fee is also $100.

9. Renewal Fee - estimate up to $60,000 every 3 years (*revenue*)

The fee to renew a Certificate of Qualification is $60 every 3 years payable by the C/Q holder to the Government of Ontario. The estimate assumes that the 1000 “apprentices”, now C/Q holders, are in compulsory/restricted trades. This assumes that the C/Q holders pay the renewal fee on time. (There is a one-time late fee of $100 plus $20 for each additional full year of expiration.)
There are a number of OLRB decisions where unions who represent members in compulsory trades argue that the “compulsory” factor entitles them to jurisdiction over aspects of the trade that overlap with other non-compulsory trades. The following outlines some of these cases and indicates how the OLRB has dealt with them.

1. **TESC Contracting Company Ltd., August 17, 2007 (1668-06-JD)**

   - In this case, the Plumbers asserted jurisdiction over rigging, offloading, handling and setting of piping equipment weighing in excess of 2 tons. The contractor (TESC) had assigned the work to the Iron Workers.

   - The UA argued that only persons who can legally perform the work of the *compulsory* certified trades, i.e., plumbers or steamfitters, are permitted to perform that work. The Iron Workers’ members are members of a *voluntary* trade under the TQAA. The UA argued that being certified has nothing to do with union affiliation, but is a matter of having the work in dispute performed lawfully.

   - The UA’s argument relies on both TQAA and Regulation 572/99 under OHSA. Section 3 of the Regulation, it argues, means that only members of a compulsory trade can perform the work in dispute.

   - Expanding upon that argument, the UA points out that while plumbers and steamfitters are listed in Schedule 2 of Regulation 572/99 (hence “compulsory”), Iron Workers are not and are therefore not a scheduled trade within the meaning of the Regulation.

   - The Iron Workers relied on an earlier board decision, *E.S. Fox Limited [1989] OLRB Rep. July 738*. In the *Fox* case, the Board found the TQAA did not establish watertight compartments for each trade, nor did it confer exclusive jurisdiction over a trade’s work. The UA claimed that the *Fox* decision was no longer applicable, since it was decided before the enactment of Reg. 572/99. Accordingly, it argued that Section 3 of the Regulation creates a barrier against any person who is not compulsorily certified from performing any of the work of the trade.

   - The Board in TESC relied on a subsequent case, *Bruce Power 2006 CANLII 33923* and in particular paragraph 31:

     “The panel adopts the E.S. Fox analysis in its entirety. The Board notes that many trades have work in training components that overlap one another. This is perfectly reasonable. It makes sense that plumbers, iron workers, and other trades such as millwrights should all acquire rigging skills to further the performance of their trade. This does not grant exclusive jurisdiction over such work to any one trade. It does not mean that any one trade has a monopoly over the safe performance of any particular type of work.”
In so holding, the Board rejected the UA’s argument that the effect of Section 3(3) of Reg. 572/99 means that the work is to be found in the schedules to the trade regulations. The Board held that what should be looked at is Section 1 of each trade regulation and not the work experience and in-school training schedules that further describe the work of the trade.

In effect, the Board concluded that Section 3(3) of Reg. 572/99 requires a close examination of the work done exclusively by each “scheduled trade”. It distinguished between Section 1 of the trade regulations, which it held sets out the work to be done by persons in the trade, from the schedules to those trade regulations which establish the skills and experience needed to work competently in those trades. It is the former test which is to be applied in establishing the work of the trade. In this case, “rigging” was set out in Section 1 of the Iron Workers’ trade regulations.

In summing up, the Board held that the trades under the TQAA are not synonymous with a union’s work jurisdiction. It held that Reg. 572/99 does not prohibit persons who are trained in the skills described in the steamfitter regulation from performing the work in question if that person is also trained in the same work described in another trades’ regulation (i.e. the Iron Worker).

2. Bruce Power LP, 2006 CANLII 33923

This was a dispute brought by the UA against the Labourers and the Iron Workers in connection with the installation of oil interceptors (devices that filter out oil from the water flowing through Bruce Power’s drainage system). The UA relied, in part, on the TQAA in asserting jurisdiction. In rejecting the UA’s argument, the Board relied on the E.S. Fox case and in particular paras. 9 through 12. The essential comments from the Fox case are the following:

- The lines of demarcation between the jurisdictions of the various industry trades have never been clear and have, in recent years, tended to become even more blurred.

- The TQAA was not intended to and has not had the effect of eliminating or lessening jurisdictional overlaps. It does not stipulate that certain work can only be done by certain people. It does not specifically prohibit anyone from doing any particular kind of work, whether or not such work is part of the work done by persons engaged in a compulsory trade.

- In order to determine the trade in which a construction employee is working, it is essential to consider ALL of the work that the employee is qualified to or does do and not merely that part of his/her work which falls within the description of work done by a compulsory certified trade, particularly where such work clearly or arguably falls within an overlap between the jurisdiction of two or more trades.
For the reasons set out in the Fox decision, the Board rejected the UA’s claim to exclusive jurisdiction over the installation, and permitted the Labourers and Iron Workers to continue to perform the work in question.

3. **HS Donald Construction Limited (October 26, 2005)**

In this case, the contested work involved the installation of drain pipe in trenches from residential properties to the main sewer line running under the adjacent road allowance.

The case came on as an appeal from an order by a Ministry of Labour inspector which held that, because of the provisions of Reg. 572/99 under the OHSA, the work should have been done by compulsory certified Plumbers, rather than by Labourers.

At paragraph 11 of its decision, the Board has this to say about the TQAA:

“There has been an apprenticeship act of some sort in Ontario since the 19th century. In 1961, the province expanded the scope of the Act beyond the regulation of contracts of apprentices (who are usually young workers) to use the statute to extend and reinforce the role of training in the province of Ontario. The 1964 Act introduced a feature that had been missing from previous acts. It required that some trades were to be “compulsory” in the sense that one could not do the work of that trade unless one held a certificate of qualification or was a registered apprentice in the trade. **Indeed, Section 10 of the TQAA makes all trades “compulsory” unless exempted by regulation. The identification of which trades were to be exempted and which were to be compulsory is not something that can be easily explained. However, the trade of a plumber has been compulsory since 1965.**”

At para. 26 of its decision, the Board states:

“Clearly there is some overlap between the necessary qualifications to perform the work and the ability to perform it safely. However, this argument must also be seen in the context of the purpose of the two statutes [the TQAA and the OHSA]. The purpose of the TQAA is that of a training statute. The purpose of the OHSA is that of a health and safety statute. The OHSA...does not explicitly require the employer to employ or appoint “competent workers” in the performance of the work, nor does it define the necessary levels of skills or competency on the part of workers with respect to any other statute or any formal level of training or certification.”

At para. 29 of the decision, the Board states:

“Nonetheless, in the context of the legislation and the regulatory history of these two statutes, I conclude that the proper reading of Section 3 of Reg. 572/99 is that it simply gives OHSA inspectors the authority under OHSA to enforce the certification process under the TQAA on job sites that inspectors visit. Although this action is taken under the OHSA, the inspectors are in fact enforcing the TQAA.”

And in para. 30, the Board states:

“It is therefore appropriate to look at the TQAA to determine the meaning of “trench”. There is no purposive reason to use Section 1(1) of the OHSA Construction Regulation. The purpose of the definition in the Construction Regulation is to define those circumstances when certain other extensive and important provisions of the OHSA Construction Regulation apply to excavations
and trenches that exceed 1.2 meters. *It is not to determine the qualifications of persons doing the work of laying sewer drainage pipes in those trenches.*

- In para. 34, the Board concludes that since the laying of metallic or non-metallic pipe into trenches to form sanitary or storm sewers, drains or water mains is not covered by Section 1 of the TQAA plumbers regulation, it is, accordingly, not covered by Section 3 of Reg. 572/99. “regardless of the depth or dimensions of the trench or excavation or depression into which those pipes are laid.”

- Finally, in para. 35, the Board concludes:

> “In enforcing Section 3 of Reg. 572/99, however, the inspector is in fact enforcing the requirements of a different statute [i.e., different from the OHSA], and must look to the TQAA for the content and meaning of the terms, rather than to automatically import the same or similar terms from the OHSA and regulations enacted under that statute.”

[Note: Based on the Board’s finding, the implication appears to be that if the laying of pipe had been covered by Section 1 of the TQAA Plumbers regulation, the work would have had to be done by the Plumbers, rather than the Labourers.]


- This was a dispute between the UA and the Iron Workers involving the rigging, handling, installing and support of beams for pipes. It was launched as a jurisdictional dispute by the Iron Workers.

- The representations concerning the TQAA appear in paras. 23 and 24. The UA argued that since it was a compulsory trade under the TQAA and because the enforcement of the TQAA “is to be found in the OHSA”, it would be unlawful to award the work in dispute to any other person or trade (i.e., other than plumbers).

- The Board, in rejecting that argument, relied on the *E.S. Fox* case, the relevant portions of which are referred to above in connection with the *Bruce Power* case. In addition, the Board in this case made the following comments about the TQAA:

> “The TQAA…is a training statute; it is not a statute applying standards of quality or safety to work methods in the construction industry. *The concept of compulsory trades was introduced into that Act in 1961 as a means of compelling employers to hire apprentices so that a sufficiently large supply of skilled labour would be available in the face of declining immigration from Europe. Its purpose was to ensure that non-licensed and unregistered apprentices were not learning the trade badly or in a limited or partial fashion (see Report of the Royal Commission on Apprenticeship and Training by J. Simonette, 1961). In this case, as the Board said in E.S. Fox, if the work is performed by an iron worker as part of the trade of an iron worker, then they are working in the voluntary trade of an iron worker and are not performing work in the compulsory trade of a plumber or a pipefitter. If a person is performing that work as part of the trade of a plumber or pipefitter, then that person must be registered as an apprentice or a journeyman.*”
If a person is performing the work as a member of no trade, or as an unlicensed member of a compulsory trade, then they are in violation of the TQAA. Clearly, this work can be performed by either trade [i.e., either the Plumbers or the Iron Workers] in compliance with the terms of the TQAA. This factor favours no one.”
“(xi) To ensure that employers are willing to take a sufficient number of apprentices to provide for the future needs of the industry is most difficult. The simple answer would be to require that every contractor maintain a specific ratio of apprentices to the number of journeymen in his employ. Short of this it might be desirable to levy a special payroll tax on all employers in each of the trades to finance the apprenticeship system. Such funds could be used to assist those contractors who were willing to carry their share of apprenticeship training.

Another possibility – and the one which appeals to us most – avoids the blatant aspects of compulsion. If no firm was allowed to bid on any government construction project unless it normally employed an appropriate complement of apprentices, this would certainly go a long way towards building up an adequate supply of qualified journeymen for the future. If this did not prove a sufficient inducement we could then fall back on either or both of the previous possibilities.”

“Recommendation 21: That the general ratios set under the Apprenticeship and Tradesmen’s Qualification Act be the legal ratios for each trade, that is, that neither higher nor lower ratios be permitted through special trade regulations.

This change would help ensure that the purpose of the ratios – to prevent employers from using apprentices primarily as a source of cheap labour – would be achieved. It would also remove the private party practice of imposing rigid restrictions on labour supply by influencing government regulations.

It should be stressed that Recommendation 21 would not eliminate the apprentice-journeyman ratio as a collective bargaining issue, nor the possibility of incorporating into collective agreements ratios that are more restrictive than the general ratios specified under the Apprenticeship and Tradesmen’s Qualification Act. In fact, this occurs at present, and it is appropriate that such ratios be developed through collective bargaining rather than through government regulation, for it is in the collective bargaining area that questions of labour supply, which affect the income and employment of workers, should be settled.

There are many who will not agree that when strong craft unions exist the number of trainees entering a trade should be ultimately determined through collective bargaining. There have been numerous criticisms, particularly in the building trades, that the supply of graduates from apprenticeship is inadequate to meet the needs of the economy. Accusations have been made that craft unions have deliberately created a shortage that has led to inflationary wage trends. Given these views, it would be tempting to suggest that ratios which regulate the number of
trainees entering a trade be determined by an agency that considers both private and public interests on the basis of projections of both labour supply and demand.

The validity of these criticisms is extremely difficult to appraise. The Task Force has not been in a position to make a systematic assessment of the supply of graduate apprentices, relative to the requirements of the Ontario labour market. This would have to be done on a trade-by-trade basis, and in the analysis, large elements of judgment would be necessary.

Because of the instability of the construction industry, it would be a most difficult, if not impossible, task to make an accurate forecast of its manpower requirements. Partly because of insufficient confidence in existing technical capacities to forecast future manpower requirements, the Task Force has refrained from recommending that government assume the responsibility for regulating the number of trainees entering apprenticeship. Public responsibility for such regulation would also include taking the consequences for the results of the apprenticeship system with respect to surpluses or shortages of journeymen.

In the construction industry this responsibility is now largely assumed by employers and unions through collective bargaining arrangements. Because of unstable employment in the building trades, unions have sought to control the labour supply to avoid considerable surpluses of manpower during periods of slack demand. The Task Force believes that it is not in a position to criticize trade union policies which are designed to create greater stability of employment for their members, as distinct from policies designed to inflate wages to economically undesirable levels. Unfortunately, given the institution of collective bargaining and the response mechanisms in the labour market, it is virtually impossible to separate these two effects.”
APPENDIX 16 - BIBLIOGRAPHY


33. Interprovincial Standards Red Seal Program, [http://www.red-seal.ca/Site/trades/province/on.htm](http://www.red-seal.ca/Site/trades/province/on.htm), Red Seal Secretariat, Human Resources and Social Development Canada


55. Ontario Ministry of Training, Colleges and Universities, Construction Craft Worker Apprenticeship In-school Curriculum Standards, Queen’s Printer for Ontario, 2002.


74. Tarion Warranty Corp. [http://www.tarion.com/HOME/About+Tarion/](http://www.tarion.com/HOME/About+Tarion/)
