# Fire Research Report

# Fire Safety in small tourist accommodation businesses: working towards developing best practice models

# **University of Auckland**

# March 2003

In spite of recent initiatives by the New Zealand Fire Service to reduce the risk of fire in small businesses in the tourist accommodation industry, there had been little or no research into fire safety in this sector. The intention of this study is to address this lack of information by investigating the fire safety issues facing those operating in this sector and to examine both the relationship between the small business sector and the New Zealand Fire Service and role played by small business stakeholders in fire safety in small tourist accommodation businesses.

The study investigated small accommodation businesses within four geographical areas Manukau, Franklin, North Shore and Rodney. It also interviewed key stakeholders from the New Zealand Fire Service, the territorial local authorities and the fire consultancy industry.

The findings revealed that there are a number factors that impact on the small business owner's compliance with fire safety regulations, such as their access to resources, their level of management skills, the influence of industry associations, the regulatory environment and their relationship with the regulatory agencies and small business advisors. Based on the findings it is also possible to construct models of compliance and non-compliance behaviour and present different types of compliant and non-compliant businesses. However, influential factors cannot be seen in isolation but must be viewed as being interconnected and part of the context of operating a small business in a highly competitive industry.

Felicity Lamm, Erling Rasmussen, Lisa Callagher, Micheal Hibbert, and Colin Ross New Zealand Fire Service Commission Research Report Number 37 ISBN Number 0-908920-95-4 © Copyright New Zealand Fire Service Commission

# New Zealand Fire Service Commission Contestable Research Fund

# Fire Safety in Small Tourist Accommodation Businesses: Working Towards Developing Best Practice Models

By

Dr Felicity Lamm with Dr Erling Rasmussen, Lisa Callagher, Michael Hibbert and Colin Ross

# Abstract

In spite of recent initiatives by the New Zealand Fire Service to reduce the risk of fire in small businesses in the tourist accommodation industry, there had been little or no research into fire safety in this sector. This lack of knowledge was particularly disturbing as the tourist accommodation industry has been identified as a high risk industry. Unless we understand *why* and *how* small tourist accommodation businesses comply or do not comply with fire safety regulations, fire safety initiatives to reduce fires and fire-related injury and fatalities in small businesses will be ineffectual. Therefore, the intention of this study has been to address this lack of information by investigating the fire safety issues facing those operating in this sector and to examine both the relationship between the small business sector and the New Zealand Fire Service and role played by small business stakeholders in fire safety in small tourist accommodation businesses.

The study investigated small accommodation businesses within four geographical areas Manukau, Franklin, North Shore and Rodney. It also interviewed key stakeholders from the New Zealand Fire Service, the territorial local authorities and the fire consultancy industry.

The findings revealed that there are a number factors that impact on the small business owner's compliance with fire safety regulations, such as their access to resources, their level of management skills, the influence of industry associations, the regulatory environment and their relationship with the regulatory agencies and small business advisors. Based on the findings it is also possible to construct models of compliance and non-compliance behaviour and present different types of compliant and non-compliant businesses. However, influential factors cannot be seen in isolation but must be viewed as being interconnected and part of the context of operating a small business in a highly competitive industry. Also, it is more useful to consider the type of small business and the management of the business rather than its occupancy rates when examining the level of fire safety compliance and practices.

The predominate conclusions of this study are: that fire safety compliance and practice in the small business sector does not take place in a vacuum, that neither fire safety compliance behaviour nor practice are static and that there is not one single factor that influences fire safety compliance and practice. All to often researchers and government officials separate fire safety from the other small business functions, such as finance and planning etc. Solutions and theories applied to fire safety in the small business sector are meaningless unless consideration is given to all aspects of operating a small business. In addition, as small businesses are more susceptible to a fluctuating economic, political and social environment than larger businesses, small business owners typically function on a "just-in-time" basis in all areas including fire safety. Therefore, the owner's compliance behaviour and fire practices may vary considerably as a result of single or multiple changes. Finally, this project has shown that implementing fire safety enforcement or preventative strategies in the small business sector would be better served by adopting a broad approach that gives credence to a network of multiple factors to achieve the desired outcome.

# Page Number

Ex	ecutive Summary	i
1.	Introduction	1
2.	Profile of the NZ Accommodation Industry	3
	New Zealand Accommodation Businesses	3
	Defining Small Accommodation Businesses	4
	Summary	6
3.	Previous Research on Fire Safety in Small Tourist	
	Accommodation Businesses	7
	Fire Risks in Small Accommodation Businesses	7
	Capabilities of the Small Accommodation Business	10
	Regulatory Behaviour of Small Business Owners	10
	The Efficacy of Fire Safety Regulations	11
	Relationship Between the New Zealand Fire Service	
	and the Small Business Sector	13
	Relationship Between the Small Business Sector and	
	the Territorial Local Authorities	14
	Relationship Between the Small Business Sector and	
	Consultants	16
	Summary	17
4	T 11.	10
4.	Legislation	18
	The Building Act, 1991 and the Building Code, 1992	18
	The Fire Service Act, 1975, the Fire Safety and	
	Evacuation of Buildings Regulations, 1992 and the	20
	Forest and Rural Fires Act, 1977	20
	Shared Responsibilities Between the New Zealand Fire	22
	Service and the Local Territorial Authorities	23
	Health and Safety in Employment Act, 1992	24 25
	One Act and One Authority Approach	
	Summary	26
5.	Methodology	27
	Research Approach	27
	Research Design	28
	Small Business Case Studies	29
	Profile of the Case Studies	30
	Mail-out Questionnaire	32
	Profile of the Businesses and Respondents Investigated	
	by Mail-out Questionnaire	32
	Telephone Interviews	34
	Profile of the Telephone Interviews	34
	Key Stakeholders	34
	New Zealand Fire Service	34
	Territorial Local Authorities	35
	Industry Associations and Fire Safety Consultants	35

Contents

Summary
---------

6.	Results	36
	Overview	36
	Small Accommodation Businesses	36
	Key Factors Influencing Non-compliance	37
	Key Factors Influencing Compliance	43
	Summary	47
	Industry Associations and Fire Safety Consultants	48
	Accommodation Industry Associations	48
	Fire Safety Consultants	50
	Summary	53
	Territorial Local Authorities	54
	System Failures	54
	Lack of Formalised Contact with the New Zealand Fire	
	Service	57
	Summary	58
	New Zealand Fire Service's Fire Safety Officers	58
	Legislation and Enforcement	58
	Achieving Compliance in Small Accommodation	
	Businesses	63
	Summary	64
	Summary	64
7.	Discussion	66
	The Characteristics of the Small Accommodation	
	Business Sector	66
	Regulatory Behaviour in the Small Accommodation	
	Business Sector	68
	Regulatory Framework and its Enforcement Agencies	73
	Interrelationships Between the Various Groups	75
	Summary	77
8.	Conclusions and Recommendations	78
	Conclusions	78
	Recommendations	80
Re	ferences	81
Ap	ppendix	89
Lis	st of Tables	
	1: Profile of New Zealand Accommodation Businesses	3
	2: New Zealand Fire Statistics for 2000-2001	8
	3: Demographic Profile of the Four Geographical	29
	Areas	
	4: Type of Small Accommodation Business Case	30
	Studies	2.5
	5: Characteristics of the Case Studies	31

6: Type of the Small Accommodation Business	33
Surveyed by Mail	
7: Responses from the Mail-out Questionnaire	33
8: The Location of the Small Accommodation	34
Businesses outside the Four Geographical Areas	
9: Comments associated with the question "What	38
impacts have regulations had on your business?"	
10: A Summary of Fire-related Rules in the Small	46
Accommodation Businesses	
List of Figures	
1: Inter-relationships and Roles in OHS Compliance	16
2: Taxonomy of non-compliant behaviour	72
3: Taxonomy of compliant behaviour	72

# Acknowledgements

I am most grateful to the New Zealand Fire Service Commission for funding this project and for their encouragement throughout its duration. I am also indebted to Mark Burgess and Neville Mercer, from the University of Auckland's UniServices, who provided the financial administration for this project and dispensed sound advice.

I would like to thank Lisa Callagher, Michael Hibbert and Colin Ross for their willingness to assist on this project and the methodical way in which they undertook most of the fieldwork. I would also like to thank Erling Rasmussen for his enormous support throughout the project.

Finally, I would like to thank all those people who were willing to be involved in this project and who gave so much of their time to be interviewed. I hope I have done justice to their sentiments. It is also hoped that this report provides the basis for future reforms of the fire safety legislation and that it enhances better fire safety practices.

Any mistakes and inadequacies in this report remain my own.

Dr Felicity Lamm 24<sup>th</sup> March, 2003

# **EXECUTIVE SUMMARY**

# Background

The New Zealand Fire Service's emergency incident statistics show that small firms experience a higher percentage of property damage caused by fire compared to larger businesses (Cropp, 1991). This is particularly disturbing for those <sup>1</sup>small businesses operating in the tourist accommodation industry, such as backpacker hostels, urban and rural home-stays and bed and breakfast accommodation. Unfortunately, there was little evidence to state why this may be the case as much of the research on fire safety compliance and practice relate to medium and large firms, in spite of the fact that small businesses make up approximately 98 per cent of New Zealand businesses (Statistics New Zealand, 2001).

Although there is a scarcity of research on fire safety in small tourist accommodation businesses, there have been a number of studies on small businesses relevant to the topic. These studies indicate that management practices of small firms differ from those of large firms and that smaller firms are likely to be limited in management capabilities and resources (Curran & Storey, 1993; Storey, 1994; Cameron, & Massey, 1999). Surveys also show that small business owners rank safety regulations amongst the most burdensome and the most difficult problems with which they must cope (Scott, et al 1989; Woolfson, 1995; Bell 1996; Lamm, 2000). Unlike large businesses, conforming to safety regulations often places a greater financial obligation on small businesses as they are unable to spread their compliance costs over a number of products, markets, or plants. The findings of the Ministerial Panel on Business Compliance Costs (2001) reveal that small business owners have a perception that fire safety regulations, in particular the fire suppression levy pursuant under the Forest and Rural Fires Act, pose a threat to their profitability, and ultimately their survival. However, this perception, to some degree, may be the result of their lack of understanding of the fire safety regulations.

There is also increasing evidence that many small businesses are turning to business advisory organisations and consultancies for advice on range of compliance matters (Cammeron 1993; Lamm, 1997, 2001; Mayhew, 1997; Gunningham, et al 1998). However, a profile of these stakeholder organisations, their effectiveness in providing fire safety assistance to small businesses and the level of competency of the consultant in fire safety matters, was unknown.

While it is acknowledged that studies concerning small businesses have different foci, the findings provided useful insights into fire safety in small tourist accommodation businesses. However, one of major drawbacks of small business research is that almost all studies have been conducted in urban areas and in

<sup>&</sup>lt;sup>1</sup> Small businesses in the tourist accommodation industry are defined as providing accommodation for more than two people and employing less than 20 employees.

industrial sites. This dominance of such studies meant that the unique characteristics of small tourist accommodation businesses in *rural and semi-rural areas* and the problems they face had not been documented until now.

# **Aims and Objectives**

In spite of recent initiatives by the New Zealand Fire Service to reduce the risk of fire in small businesses in the tourist accommodation industry, there was little or no research in this area. This lack of knowledge was particularly disturbing as the tourist accommodation industry has been identified as a high-risk industry.

Therefore it was imperative to document the key fire safety issues facing owners/managers in small accommodation businesses and to understand *why* and *how* small tourist accommodation businesses comply or do not comply with fire safety regulations. In addition, the literature tells us nothing of the relationship between the small business sector on one hand and on the other hand the New Zealand Fire Service and the territorial local authorities. There was also a lack of knowledge regarding the role played by technical advisory organisations and consultancies, such as fire safety consultants, "proxy" inspectors (referred to as "independent qualified persons" or IQP's), industry associations, insurance agents, etc., in raising the level of compliance within the tourist accommodation sector. There is a need, therefore, to increase our knowledge of fire safety practices and compliance of those operating in the small tourist accommodation businesses. There is a need, therefore, to increase our knowledge of fire safety practices and compliance of those operating in the small tourist accommodation businesses. *The primary objectives of this research are*:

- To contribute to the largely under-researched literature on the fire safety in the small business sector and to develop an improved analysis of fire safety practices in small businesses.
- To produce an in-depth qualitative analysis of the reasons why small businesses in the tourist accommodation industry comply or do not comply with fire safety regulations.
- To detail the relationship between the small business sector and the New Zealand Fire Service and territorial local authorities.
- To investigate the role that industry associations and fire safety consultants play in fire safety in the small business sector.
- To develop theoretical models of fire safety compliance behaviour and practices by owners of small accommodation businesses.
- To provide recommendations on fire safety in small business for the New Zealand Fire Service Commission.

Mindful of the New Zealand Fire Service Commission's research objectives and their objectives contained in the documents entitled `Towards 2000' (1998) and `Statement of Strategic Directions' (1999), *the outcomes of this project are*:

- To identify enforcement strategies that are most likely to promote an improvement in the fire safety standards among small accommodation businesses.
- To document the most effective way of communicating with the small accommodation business sector.
- To provide the basis for strategies that will enhance the relationship between all the stakeholders (i.e. small accommodation businesses, the New Zealand Fire Service, the territorial local authorities role industry associations and fire safety consultants.
- To assist industry associations and fire safety consultants in raising the level of fire safety compliance and practice among small businesses in the tourist accommodation industry.
- To provide a set of recommendations for the New Zealand Fire Service Commission on how to raise the level of awareness and the level of compliance of fire safety regulations among small operators in this sector.
- To provide a set of guidelines for small business owners/managers.

# Methodology

Given that there is a scarcity of empirical knowledge concerning fire safety in small businesses in the tourist accommodation industry, the central questions that underpin this research are:

- What are the key fire safety issues facing owners operating a small business in the accommodation industry, (for example, backpacker hostels, urban and rural homestays and bed and breakfast, hotels, motels etc)?
- What are the factors that enhance or inhibit compliance with fire safety regulations in the small tourist accommodation businesses?
- What are the key generic elements that make up best fire safety practices in small tourist accommodation businesses?
- What role does industry associations and fire safety consultancies play in raising the level of awareness and compliance of fire safety regulations in the small tourist accommodation industry?
- What is the relationship between those operating in small tourist accommodation businesses and the New Zealand Fire Service?
- What need is there for these roles to be further developed and how can this be achieved?
- What can be done to raise the level of awareness and the level of compliance of fire safety regulations among the small operators in this sector? And,
- What additional assistance can the New Zealand Fire Service provide to increase the levels of awareness and compliance in this sector?

The research design used the following data collection methods:

- self-administered survey questionnaire
- case study, and
- telephone interview.

This approach was chosen in order to: 1) combat the problems related to conducting research in the small tourist accommodation business sector; 2) ensure the validity and reliability of the research; and 3) ensure a more holistic understanding of the topic. The questionnaire frame was designed to be applied to the case studies, telephone interviews and mail-out survey. That is, the type questions, such as biographical details, fire safety measures applied, were consistent in order to be in keeping with a triangulated approach. In addition, the research design focused on the following groups within four regional districts:

- Small accommodation businesses
- Industry associations and fire safety consultants
- Territorial local authorities, and
- The New Zealand Fire Service.

The choice of regional districts was based on the criteria that each district contained the following characteristics: rural, urban and tourist regions as well as industrial/commercial regions. Based on these criteria, the following four geographical areas were chosen: Manukau, Franklin, North Shore and Rodney.

Thus, aside from the telephone interviews, interviews with the small accommodation businesses together with interviews with representatives of key stakeholder organisations in this study – the New Zealand Fire Service, the territorial local authorities and industry associations and fire safety consultants – were selected from these geographical areas.

# Small Business Data Collection

*Small business case studies* were incorporated as researchers have traditionally found quantitative methods, such as survey questionnaires difficult to apply to the small business sector because it is fragmented and often fails to deliver an adequate response rate (Miles and Huberman, 1984; Holmes, 1992; Holliday, 1995).

Fourteen case studies were chosen representing a cross-section of locations and business traits. A targeted approach was adopted – as opposed to a random approach – to generate the maximum information about specific types of cases (such as: regional differences, individual differences, safety practices, etc). The number of

case studies was increased from 10 to 14 in an effort to offset the low response rate from the survey questionnaire of the small businesses.

Selected from a database of all registered accommodation businesses, owners and operators were initially contacted by telephone and then visited. It should also be noted that a little over 70 per cent of the small businesses approached agreed to take part in this study. Although this is a standard response rate for personal interviews, it is much higher rate than for non-personal interviews, such as mail-out surveys.

A mail-out survey questionnaire was distributed to all small accommodation businesses in the Manukau and Franklin regions and the North Shore and Rodney regions. Mindful that using survey questionnaires to collect data on the small business sector can result in a low response rate, it was decided to email the questionnaire to 119 small accommodation businesses on the North Shore and Rodney regions and to mail-out the questionnaire to 141 small accommodation businesses in the Manukau and Franklin regions. It was hoped that by applying two delivery systems to the questionnaire, the response rate would be substantially higher than predicted. However, the emailed questionnaire elicited only 3 responses, even though a further email was sent out requesting that it be completed. This is in contrast to the 27 responses to the mailed questionnaire.

*Ten telephone interviews* were conducted with small backpacker accommodation businesses outside the chosen geographical areas, as seen in table 8. The interviewees were self-selected and requested to be part of this study. The same questionnaire used in collecting data in the case studies and the survey, was also used when interviewing the telephone interviewees, thus ensuring the validity of the study.

# Key Stakeholders Data Collection

*New Zealand Fire Service:* Multiple interviews with senior managers, operational officers and in particular, fire safety officers, were conducted throughout the study. This approach provided added insights into fire safety in small tourist accommodation businesses and the relationship between the New Zealand Fire Service and the tourist accommodation business sector. The interviews also provided useful information on the role played by the New Zealand Fire Service in raising the level of fire safety compliance and practice among small businesses in the tourist accommodation industry.

*Territorial Local Authorities:* Building technical advisors from Manukau, Franklin, North Shore and Rodney were interviewed at length. To ensure the validity and reliability of the interviews with the building technical advisors, we also interviewed the building technical advisors from Waitakere City Council. As the building technical advisors play a primary role in fire safety in small tourist accommodation businesses, the information gathered from these interviews is vital to the overall research and to the development of reforms in this area.

*Industry Associations and Fire Safety Consultants:* As stated, there is increasing evidence that small businesses use business and technical consultants for a range of compliance services. Therefore, in order to determine the characteristics of these key stakeholders and the role they play in assisting small tourist accommodation businesses, it was necessary to personally interview officials from the main industry associations as well as fire safety consultants.

# Results

The research findings from the case studies, mail-out questionnaire survey and telephone interviews are presented thematically in which repeated statements regarding fire safety in the small business sector are made known. In addition, the presentation of the findings follows the structure of the questionnaire. Underpinning these themes is the key consideration: "What are the factors that influence non-compliance and compliance fire safety regulations and what are the factors that impede and encourage fire safety practices?"

The findings revealed that there are a number factors that impact on the small business owner's compliance with fire safety regulations, such as their access to resources, their level of management skills, the influence of industry associations, the regulatory environment and their relationship with the regulatory agencies and small business advisors. Based on the findings it is also possible to construct models of compliance and non-compliance behaviour and present different types of compliant and non-compliant businesses. However, influential factors cannot be seen in isolation but must be viewed as being interconnected and part of the context of operating a small business in a highly competitive industry. Also, it is more useful to consider the type of small business and the management of the business rather than its occupancy rates when examining the level of fire safety compliance and practices.

The most predominate theme in this study was the *inadequacies of the fire safety legislation* and the *inconsistencies in regulatory enforcement and administration*. These weaknesses arise from a dual system of legislation in which fire safety regulations can be found in several Acts and enforced primarily by two agencies – each with different approaches. The enforcement of the fire safety legislation is further complicated by the *type of legislation*, namely the use of acceptable solutions, performance-based criteria and self-regulatory agents but also requires a high degree of competency by the regulatory agents but also requires consistency in its application and the delivery of public information. In addition, the use of acceptable solutions and performance-based criteria is predicated on *self-regulation* — an enforcement strategy that has been *discredited by empirical research*.

Moreover, as the findings clearly show these weaknesses in the legislation have resulted in extra costs for owners of small accommodation businesses and have created a great deal of frustration and animosity towards the regulatory agencies. The breakdown in the relationship between those operating a small business in the accommodation industry and the regulatory agencies has the potential to diminish the level of compliance as well as result in fire-related injures and fatalities.

The second theme is that fire safety compliance and practice in the small business sector *does not take place in a vacuum*. Fire safety is more than just the regulations governing smoke detectors and evacuation plans: it is an integral part of operating a small accommodation business. Variables such as the type of business, access to resources, the relationship with the regulatory agencies and other small business advisers, etc. are recognised as having an influence on the processes and outcomes of fire safety practice and compliance. Solutions and theories applied to fire safety in the small business sector are meaningless unless they incorporate a network of multiple factors. Therefore, when trying to research or implement enforcement or prevention strategies in the small business sector, it is more useful include external advisors, such as industry organisations, to achieve the desired outcome.

The third theme is that there is *not one factor* that influences fire safety compliance and practice in the small accommodation business sector, but a range of different factors that vary over time and rotate in their level of priority. Furthermore, fire safety and practice in small accommodation businesses can be interpreted and explained by applying a conceptual framework that links the legislation and the regulatory enforcement with the small business management and fire safety practices and compliance. Excellence in fire safety practice and compliance in a small business is reliant on excellence in management. Ideally there should be equilibrium between excellence in management and fire safety compliance and practices as a lacuna in one area has a compounding effect on the other. Conversely, poor management skills will often coincide with poor fire safety practice and non-compliant behaviour.

The fourth theme is that fire safety compliance and practice in the small business accommodation sector *is not static*. At a macro level, events both overseas and in New Zealand have impacted on the country's tourist numbers both negatively and positively. There have also been dramatic shifts in the economy and legislation during the last decade. New Zealanders have witnessed regulatory reforms concerning building and fire safety in which the legislation has shifted from one that was primarily prescriptive to one that relies more on the self-management of regulations and codes. As part of these reforms, TLA enforcement has changed from a public sector model to a private sector model with an emphasis on profit driven objectives and "farmed-out" enforcement. Reforms to the building legislation have also impacted on the way buildings are designed and constructed. Some would argue that these reforms have created a decline in the standards of design, construction

and town planning. The inference here is that these reforms have enormous implications for fire safety in general.

At the level of the small accommodation business, operations are conducted within a fluctuating tourist market, which typically sees owners of small businesses function on a "just-in-time" basis in all areas, from the provision of guest beds to installing fire safety measures. Small accommodation businesses are much more sensitive to changes in the local, national and global markets than are large, multi-national companies. These fluctuations have not only had a direct impact on business profits and subsequent effects on fire safety compliance and practice, but have also created ambiguities regarding the type of evacuation regulation to be implemented (i.e. providing less than 5 guest beds requires an evacuation procedure; providing more than 5 guest beds requires an evacuation scheme). In addition, the small business owner's vision of the world is that they operate on an uneven playing field, with financial and regulatory institutions constructed on a large business paradigm.

Finally, this study shows that implementing fire safety enforcement or preventative strategies in the small accommodation business sector would be better served by adopting a broad, more non-traditionalist approach to achieve the desired outcome. For example, using industry and business associations to disseminate information. Also, given that the small business sector comprises a substantial part of the business population, it is no longer acceptable for legislators and fire safety researchers to treat this sector the same as the large business sector – or worse, to ignore it.

# Recommendations

Based on the findings in this study, the following recommendations are proposed:

- It is recommended that the *legislation* covering fire safety be urgently reformed so that it is consistent with other safety legislation in terms of the structure (one act enforced by one authority covering all buildings) as well as powers of enforcement, such as the level of fines. It is advocated that the New Zealand Fire Service be the sole agency responsible for enforcing fire safety regulations and promoting fire safety practices. It is also recommended that areas of confusion in the legislation should be eliminated where possible, for example the confusion between an evacuation scheme and an evacuation procedure.
- It is recommended that the New Zealand Fire Service give priority to raising the level of fire safety awareness and the level of fire safety compliance amongst the *small business community*. It is also recommended that extra resources be targeted for this purpose. In addition, it is recommended that the New Zealand Fire Service continue to have formal and informal communications with the small business sector and continue to develop partnerships with industry associations

representing small businesses. The New Zealand Fire Service should also continue their strategy of advising and enforcing fire safety regulations through sector-specific and industry-based information. The dissemination of information could take various forms — regular site visits and the use of intermediaries to distribute audio-visual and written material, etc. The research shows that such a strategy will result in an increase in the level of long-term compliance, improve fire safety standards and promote a more constructive relationship with the small business sector.

• It is recommended that when creating fire safety regulatory policy and enforcement strategies, such as fire safety standards audits, consideration should be given to the *different types of small businesses* and *the factors affecting small business sector*. It is stressed that these factors cannot be looked at in isolation nor should they be treated as constant.

# 1. INTRODUCTION

It is evident that the New Zealand Fire Service is concerned about the lack of awareness and the low level of compliance with fire safety regulations among those operating in small tourist accommodation businesses. The Voluntary Code of Practice agreement between the New Zealand Fire Service and the Association for Farm and Home Hosts is a significant step towards addressing these issues and is line with the New Zealand Fire Service's general research and strategic direction objectives of: promoting fire safety and fire prevention; better work practices and best practice organisation; and effective rural fire management.

However, what has not been examined is "What are the key fire safety issues facing the owners/managers in small accommodation businesses?" In addition, what was missing in the literature is any discussion on why and how small tourist accommodation businesses comply or do not comply with fire safety regulations or fully understand the relationship between the small business sector on one hand and on the other hand the New Zealand Fire Service and the territorial local authorities. There was also a lack of knowledge regarding the role played by technical advisory organisations and consultancies, such as fire safety consultants, "proxy" inspectors (referred to as "independent qualified persons" or IQP's), industry associations, insurance agents, etc., in raising the level of compliance within the tourist accommodation sector. There is a need, therefore, to increase our knowledge of fire safety practices and compliance of those operating in the small tourist accommodation businesses. *The primary objectives of this research are*:

- To contribute to the largely under-researched literature on the fire safety in the small business sector and to develop an improved analysis of fire safety practices in small businesses.
- To produce an in-depth qualitative analysis of the reasons why small businesses in the tourist accommodation industry comply or do not comply with fire safety regulations.
- To detail the relationship between the small business sector and the New Zealand Fire Service and territorial local authorities.
- To investigate the role that industry associations and fire safety consultants play in fire safety in the small business sector.
- To develop theoretical models of fire safety compliance behaviour and practices by owners of small accommodation businesses.
- To provide recommendations on fire safety in small business for the New Zealand Fire Service Commission.

Mindful of the New Zealand Fire Service Commission's research objectives and their objectives contained in the documents entitled `Towards 2000' (1998) and `Statement of Strategic Directions' (1999), *the outcomes of this project are*:

- To identify enforcement strategies that are most likely to promote an improvement in the fire safety standards among small accommodation businesses.
- To document the most effective way of communicating with the small accommodation business sector.
- To provide the basis for strategies that will enhance the relationship between all the stakeholders (i.e. small accommodation businesses, the New Zealand Fire Service, the territorial local authorities role industry associations and fire safety consultants.
- To assist industry associations and fire safety consultants in raising the level of fire safety compliance and practice among small businesses in the tourist accommodation industry.
- To provide a set of recommendations for the New Zealand Fire Service Commission on how to raise the level of awareness and the level of compliance of fire safety regulations among small operators in this sector.
- To provide a set of guidelines for small business owners/managers<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> "owners/managers" will hitherto be abbreviated to "owners"

# 2. PROFILE OF THE NZ ACCOMMODATION INDUSTRY

# New Zealand Accommodation Businesses

According to Statistics New Zealand (2002), the tourism industry plays a key role in the growth of New Zealand's economy through employment, foreign exchange earnings, investment and regional development. Between the years 2000 and 2001, tourists spent an estimated \$13.2 billion in the New Zealand economy. An estimated 94,000 full-time equivalent employees were directly engaged in tourism over this period (Statistics New Zealand, 2002).

The accommodation industry represents approximately 2 per cent of the New Zealand's service industry population (Statistics New Zealand, 2002). It is also one of the most diverse sectors and includes six different industry classifications as seen table 1. The classification system used in this study is the New Zealand Accommodation Classification that categorises accommodation businesses as follows:

- Hotels: includes both hotels and resorts
- Motels: includes motor inns, apartments and motels
- Hosted: includes private hotels, guesthouses, bed and breakfasts and farmstay and homestay accommodation
- Caravan parks and camping grounds.

Type of Accommodation	Number of Businesses	Number of Full-time Equivalent Employees
Hotels	490	10,850
Motel and Motel Inns	1,552	6,201
Hosted Accommodation	667	1,440
Backpacker and Youth Hostel	299	980
Caravan Parks and Camping Grounds	416	1,350
Accommodation not elsewhere		
classified	376	1,790
Total	3,800	22,611

 Table 1: Profile of New Zealand Accommodation Businesses

(Source: Statistics New Zealand, February, 2002)

During the period between September 2001 and September 2002 guests spent 2 million nights in New Zealand accommodation (Statistics New Zealand, 2002). The Auckland region recorded the most significant increase in the occupancy rate, up 9

per cent. Although all accommodation types recorded higher guest nights in September 2002 compared to September 2001, backpackers and hostels recorded the highest increase with guest nights up 12 per cent in September 2002, compared to September 2001 (Statistics New Zealand, 2002). Motels had the largest share of the total guest nights in September 2002 with 38 per cent, followed by hotels with a share of 35 per cent. The trend in hotel guest nights has been increasing since February 1998 in which there has been a 15 per cent increase in occupancy rate over the past 24 months.

There is considerable fluctuation experienced by accommodation providers due to seasonal change and demand for services. There is greater variation experienced in regions that rely on single high seasons (such areas typically experience high demand in either summer or winter but not both). Other regions that experience less variation across seasons are more likely to attract local and international tourists throughout the year. Examples of such regions include Auckland, Rotorua/Taupo, Wellington, Nelson/Marlborough and Queenstown and its surrounding areas (Tourism, New Zealand, 2002). Seasonal variations have important implications for small accommodation businesses in terms of their financial resources and their ability to invest in maintenance and improvements, including fire safety (Statistics New Zealand, 2002).

However, one of the major drawbacks of official data, such as those collected by Statistics New Zealand and Tourism New Zealand, is that the emphasis is almost entirely on occupancy rate rather than businesses *per se* and the key characteristics of those employed in the industry. Rather than focusing on one feature of small accommodation businesses, the emphasis here is on a broader and deeper understanding of these businesses. Nevertheless, data on occupancy rates contribute to the overall profile of the tourist accommodation industry.

## **Defining Small Accommodation Businesses**

Businesses within the accommodation industry are traditionally categorised by the *type* of accommodation offered. (refer to Travelwise, 2001, Budget Backpacker Hostels, 2002; Tourism New Zealand, 2002). Basic definitions of the categories referred to in this study are as follows:

- "*Bed and breakfasts*" is a generic term for the variety of hosted accommodation that includes a bed for the night and a substantial breakfast in the morning.
- *"Homestay"* accommodation differs from bed and breakfast accommodation in that it offers a more intimate experience and where the host invites the guest into their private home. The emphasis is on providing the guest with a "home away

from home" experience. The host either provides meals or the guest is able to cook for him or herself using facilities provided by the host.

- *"Farmstay"* refers to farm accommodation in which the guests can experience daily life on a farm. Unlike bed and breakfast accommodation, all meals are frequently provided.
- *Motels* offer self-contained accommodation with self-catering, kitchen facilities. Although many motels are located near public transport, they cater more for those guests travelling by car.
- *Hotels* offer self-contained accommodation but unlike motels, offer no kitchen facilities. Usually, hotels provide only liquid refreshments and smacks.
- *Hostel and backpacker* accommodation offers basic shared accommodation with communal, self-catering kitchen facilitates. The average overnight tariff is \$16-\$20 and the type of accommodation ranges from dormitories with shared bathrooms to single rooms with private bathrooms.
- *Motor camps and campgrounds* offer a range of accommodation from selfcontained, self-catering cabins to areas where guests can park their caravan or campervan or pitch a tent. Typically, there will be communal, self-catering kitchen facilitates and communal bathrooms. Motor camps and campgrounds will also have areas where guests can barbecue their food.

Not only can accommodation businesses be categorised by the type of accommodation offered, but businesses can also be classified by the *standard* of accommodation (refer to Qualmark, 2002). The standards range from the most basic accommodation (one star) to five star accommodation that is the best accommodation available in New Zealand.

However, there are a number of definitions of "a *small* accommodation business". Arriving at a suitable definition is not a straightforward task as there are numerous ways of defining a small business, each with its own emphasis and a different approach to the study of the small business sector. What is certain, however, is the decline of the large worksites and the rise in the number of the small businesses in the past two decades. The enormous growth in the number of New Zealand small businesses accelerated by the end of the 1980s and through the 1990s.

There are also legislative distinctions concerning small accommodation businesses. For example, the Australian Commonwealth Department of Tourism (1995:4) treats backpacker and hostel accommodation separately from other small accommodation businesses. Under the New Zealand Fire Service Act, accommodation businesses with less than five beds are exempt from most of the fire safety regulations. In addition, "business" and "business owner" are defined under the Fire Service Act (Fire Service Amendment Act, section 47B) as:

"any real or personal *property* situated in New Zealand...[and] "owner of *property*" includes any company, corporation, partnership, or person who is entitled to legal or beneficial ownership of, or is entitled to any form of tenure, possession, or right to, any such property, and shall also include any company, corporation partnership, or person whether resident in New Zealand or not, who is entitled to any indemnity or benefit under any contract of fire insurance, whether or not such company, corporation partnership, or person is entitled to any form of legal or beneficial ownership or to any form of tenure, possession or right as aforesaid."

The conventional definition of "small business" derives from the Australian and New Zealand Standard Industry Classification in which small non-manufacturing businesses are defined as having fewer than 20 employees while small manufacturing businesses are defined as having fewer than 100 employees (Australian Bureau of Statistics and New Zealand Department of Statistics, 1993). In addition, "micro" small businesses are defined as small businesses that employ less than 5 people (Australian Bureau of Statistics and New Zealand Department of Statistics, 1993). These definitions are used consistently in Australian and New Zealand small business studies.

For the purposes of this report and to enable the replication of the study, small accommodation businesses are defined as:

"A business that employs less than 20 people and provides paid accommodation for more than one person and less than 50 people. This includes bed and breakfast establishments, homestays and farmstays, hosted accommodation, hotels, motels, caravan parks and camping grounds."

# Summary

The aim of this section has been to arrive at an acceptable definition and explanation of a "small accommodation business". In New Zealand, small businesses can be defined not only by the number of employees and beds but also by the functions carried out by the owners. However, using different definitions of "a small business" creates complications when endeavouring to compare or replicates small business studies and therefore, it is essential that an appropriate definition be applied in this study.

# 3. PREVIOUS RESEARCH ON FIRE SAFETY IN SMALL TOURIST ACCOMMODATION BUSINESSES

The New Zealand Fire Service's emergency incident statistics show that small firms experience a higher percentage of property damage caused by fire compared to larger businesses (Cropp, 1991). Moreover, high profile disasters, such as Queensland's Childers backpacker fire tragedy, have focused public and professional attention on fire safety in small budget accommodation premises. This is particularly disturbing for fire safety services and for those small businesses operating in the tourist accommodation industry, such as backpacker hostels, urban and rural homestays and bed and breakfast accommodation. However, there have been few empirical studies as to *why* this industry is a high risk as much of the research on fire safety compliance and practice relates to medium- and large-sized firms. This is in spite of the fact that small businesses make up approximately 98 per cent of New Zealand businesses (Statistics New Zealand, 2001). Nonetheless, there have been a number of relevant studies on small businesses as well as studies on health and safety compliance and practice and fire safety that can contribute to an understanding of the topic.

Key research areas to be examined in this section are:

- Fire risks in small accommodation businesses
- Capabilities of the small accommodation business
- Regulatory behaviour of small business owners
- The effectiveness of fire safety regulations
- The relationship between fire service agencies and the small business sector
- The relationship between the small business sector and the territorial local authorities
- The relationship between the small business sector and fire safety consultants.

## Fire Risks in Small Accommodation Businesses

In 2000-2001 the New Zealand Fire Service responded to 22,272 fires in which 40 fires resulted in death, as seen in table 2. Of the fire incidences responded to by the New Zealand Fire Service, 1,714 fires occurred in the commercial sector while 8,146 occurred in the domestic dwellings. There were 99 fires that occurred in the accommodation industry including 14 in the Auckland region (New Zealand Fire Service, 2003).

Description of Fires	All Types of Fires		Structure Fires	
	All NZ	Auckland <sup>1</sup>	All NZ	Auckland
All property fires	22,272	5,476	6,414	1,482
Fires in commercial buildings	1,714	447	769	188
Fires in residential buildings	8,146	1,944	4,023	805
Fires in the accommodation				
businesses <sup>2</sup>	99	14	60	10

Table 2: New Zealand Fire Statistics for 2000-2001

(Source: New Zealand Fire Service, 2003)

<sup>1</sup> Note: Auckland denotes the region from Wellsford in the North to Mercer in the South

<sup>2</sup> Note: Fires in the accommodation businesses include only figures for hotel, motel, lodge and timeshare.

Little attention has been given to fires in commercial buildings in New Zealand, even less attention on fires in tourist accommodation buildings and virtually no research on small accommodation businesses. The few overseas studies on fire safety in the tourist accommodation industry have focused primarily on single fire events that have occurred in large complexes, such as the 1980 MGM Grand Hotel in Las Vagas (Sherry, 1995; Graham and Roberts, 2000; Chow and Lui, 2002). This lack of analysis of fires in accommodation businesses is of concern to a growing number of researchers. Graham and Roberts (2000:79) argue that:

"Undoubtedly there exists a need to raise awareness of potential fire hazards and the results of fire occurrences amongst tourists and business travellers, whilst simultaneously persuading hospitality managers and investors that attention to fire prevention and protection will not only assist in deflecting bad publicity resulting from fire-related incidents, but may also serve as a valuable marketing tool as hotel guests develop their appreciation of health and safety issues and make choices on the basis of where they believe themselves to be most secure."

In spite of the absence of research on fire safety in small accommodation businesses, it is possible to draw on a number of studies on fire safety in residential dwellings in New Zealand (*refer to* Irwin, 1997; Lamm, Ritchie and Rutherford, 1998; BRANZ, 2000; Duncanson, 2001; Duncanson, Woodward and Reid, 2002; Roen and Lloyd, 2002). The rationale for drawing on these studies is that when investigating fire safety in many small accommodation establishments, *there is no difference between a domestic private dwelling and a domestic dwelling* in which the occupants take in two or three paying guests. The causes and effects of fire are the same.

The study most relevant to this topic investigated 10 years of residential fire-related fatality data and 2.5 years of fire call-outs in the Auckland region (Lamm, Richie and Campbell, 1998). The findings highlighted a number of key factors in domestic fires.

The time of day, the day of the week and time of year are key indicators in the occurrence of fires and fire-related fatalities. The data also highlights the fact that certain groups in the population are more at risk from fires than others. Children, the elderly, men and Maori and Pacific Islands people are particularly at risk, although not necessarily for the same reasons. One common factor, however, was the inability of the at-risk groups to escape the fire and highlights problems surrounding the lack of suitable egresses and the lack of awareness of the most expeditious egress in a time of emergency.

The results from the residential fire fatality study also indicated that type of dwelling and the level of household income were also important factors in preventing firerelated fatalities and injuries, (*also refer to* Duncanson, et al. 2002). The results show that that those individuals living in very low- and very high-income households are more likely to experience a fire than those living in middle-income households (Lamm, Richie and Campbell, 1998). However, the authors are unable to provide any conclusive reason for this particular finding. In addition, there is strong anecdotal evidence that there are rural and urban differences in fire safety, and this area requires more research.

Furthermore, when investigating the causes of fires, the findings from the study were unexpected. There was no statistically significant relationship between smoking and fire-related fatalities. Also, cooking with gas is marginally more dangerous than electricity – however, what is important is how the gas and electrical equipment is used.

Although this and other studies show that there is an increase in the level of public awareness of fire safety in the home, this level of awareness has not necessarily transferred to the design and construction of buildings There has been a great deal of criticism from those in the building industry who are deeply concerned about the lack of consideration given to fire safety when designing buildings (*refer to* the Building Industry Authority, 2001, 2002). In a recent survey of Auckland buildings, Gibson (cited in BIA News, 2002) notes that most fell well short of fire safety building regulations. He argues that there are number of key features that must be considered by designers of buildings, such as sleeping uses, the number of people in the building, the number of escape routes, vertical fire spread between properties or sleeping areas and radiation between proposed sub-divisions as well as active fire safety systems, such as smoke detectors and sprinkler systems.

While studies and debates on fire safety may offer some insights into the causes and effects of fires in certain accommodation businesses, such as bed and breakfasts and homestays, such findings tell us little or nothing of the unique features of a small business.

## **Capabilities of the Small Accommodation Business**

Studies reveal that management practices of small businesses differ from those of large businesses and that smaller businesses are likely to be limited in management capabilities and resources (Curran and Storey, 1993; Storey, 1994; Cameron, and Massey, 1999). Surveys also show that small business owners rank safety regulations amongst the most burdensome and the most difficult problems with which they must cope (Scott, et al. 1989; Woolfson, 1995; Bell 1996; Lamm, 1998). Unlike large businesses, complying with safety regulations often places a greater financial obligation on small businesses as they are unable to spread their compliance costs over a number of products, markets, or plants. The findings of the *Ministerial Panel on Business Compliance Costs* (2001) reveal that small business owners have a perception that fire safety regulations, in particular the fire suppression levy pursuant under the Forest and Rural Fires Act, pose a threat to their profitability, and ultimately the survival of the small business. However, this perception, to some degree, may be the result of their *lack of understanding* of the fire safety regulations.

# **Regulatory Behaviour of Small Business Owners**

In an attempt to understand why small businesses comply with safety and health regulations, a number of researchers have begun to examine the characteristics of a small business owner. Scott et al. (1989:91) describe the "typical" owner as having a "very positive evaluation of their own reasonableness" where the staff are concerned and that "the business is...an extension of their own ego...and the future of the firm relates to the owner/manager's personal life plan". Associated with this "self-creation" of the firm, the small business owner has a great desire to be independent (Homewood, 1982; Scott et al., 1989; MacMillan et al., 1989) which may sometimes operate against their own economic interests (Homewood, 1982). According to Eakin and Semchuk (1988:4), small business owners generally perceive their workplace as being low-risk and have a "tendency to discount and normalize the hazards at work".

The literature also highlights ideal types of regulatory non-compliant and compliant behaviour of small business owners (Kagan, and Scholz, 1984; Scholz, 1984; Hawkins, 1984; Kagan, 1989; Scholz and Gray 1990). Typically, a compliant small business owner will have relevant training and experience, in which healthy and safe practices were an integral part of the owner's training and work experience. The owner is competent at managing the business and is aware of current regulations as well as having sufficient resources to maintain a healthy and safe working

environment. The owner is encouraged by larger stakeholders to improve and maintain a healthy and safe workplace and to adopt products or systems that will enhance the health and safety of those occupying the premises. The owner's values are in accordance with the tenets of the business laws, including safety legislation. The owner will also have a positive relationship with the regulatory authorities and its staff and will have no hesitation in using consultants for health and safety matters (Scholz and Gray, 1990).

A non-compliant small business owner, on the other hand, can be described as having little or no relevant training and experience and will be operating in industries that have a high percentage of 'sweatshops' or subsistence businesses (Rainnie, 1989; Pyke and Sengenberger, 1992). The owner will be a negligent manager and will be unaware of, or ignore the regulations pertaining to his or her business. The owner will lack resources and the business will be under-capitalised. As a result, workers will be expected to use hazardous equipment and work in dangerous premises, often for long hours. It is likely that the small business owner will experience pressure from larger stakeholder companies to adopt non-compliant and poor health and safety practices. Employee welfare will be suppressed in favour of business profits and employees will have not participated in health and safety matters. Furthermore, the owner's values will be incongruous with the tenets of building, environmental, commercial and protective employment laws. The owner will have a negative view and a hostile relationship with the various regulatory authorities. In fact, it is unlikely that a non-compliant owner will use consultants at all for health and safety matters.

When developing best practice safety models for the small business sector, research also shows that there are a myriad of key interrelated factors that need to be considered, such as: the ability to access to resources, the level of training and industry experience, the influence of large businesses, the influence of quality management systems, the regulatory environment, the relationship between the small business owner and the regulatory authority and the role played by business and technical advisors/consultants (Lamm, 1998, 1999). In addition, unique management arrangements identified in the small business sector and the cultural and social norms of the individual owner are also found to be significant determinants in the way safety is viewed and practised in small workplaces (Lamm, 1998; Eakin, 1992; Eakin et al, 2000).

# The Efficacy of Fire Safety Regulations

There is growing interest in the effective application of fire safety regulations and particularly in increasing the knowledge of fire safety regulations amongst business managers and consultants (*see* Lloyd and Roen *Fire Safety as an Interactive Phenomenon*, 2001). There are, however, barriers that impede the effective application of fire safety regulations (de Gelder, 1997; Deakin, 1999). De Gelder

(1997:274) argues that the recurring compliance problems facing businesses in the Netherlands are:

- Fire regulations are voluminous and spread over different pieces of legislation. Because of the volume and spread, it is hard to build up sufficient knowledge in order to apply fire safety regulations.
- Provisions are hard to understand because of the complex juridical formulations that are directed towards specific goals and principles.
- The structure of fire regulations embedded in the building legislation is often not related to the activities of those involved in the building process. Fire regulations need to be drafted to take into account the building process which consists of different parties operating in different building phases.

In addition, Deakin (1999:118) notes that while standards play a significant role in fire safety, such standards are frequently ill-conceived and are inconsistent across fire safety and building legislation. As a result, any benefits fire safety standards may have will be limited. He adds that:

"It suggests that in order to arrive at a wholly compatible package of national fire safety standards, which will be a help to all and a hindrance to none, a framework for future standardisation activity is needed." (p103)

Furthermore, a number of authors have noted that fire safety regulations, in particular regulations that cover evacuation plans, have been developed without taking into account the research on human behaviour in fire-related incidents (Groner, 2001; Notake, et al., 2001). Groner (2001) argues that because most research on fire safety is on physical systems, there has been little or no investigation as to how individuals use *information* to provide a safe environment. He states that it is equally important to measure the reason *why* the business owner wants to provide a safe environment, *what* information they require to achieve their goal and the means or *how* to achieve it (Groner, 2001). Roen and Lloyd (2002:3) concur and state that fire safety knowledge is "created through human interactions…and that fire safety is about finding the right mixture of human and material elements, a mixture that needs to be flexibly applied across situations". They add that New Zealand Fire Service firefighters respond to requests from the public rather than taking a proactive stance and targeting at-risk groups (Roen and Lloyd, 2002:3).

The destruction of the World Trade Centre plaza in New York has also generated a number of preliminary studies investigating not only what people do in fires but also how their actions conform to the assumptions used in planning for fire safety as well as how effective were the fire safety regulations (Fahy and Proulx, 2002; Hershfield, 2002). The two key conclusions from these studies are that: 1) there was a lack of emergency training and information and 2) those in authority, such as managers and owners of businesses and fire wardens, require enough information to be able to make safe decisions in times of emergency.

# **Relationship Between the New Zealand Fire Service and the Small Business Sector**

The relationship between the fire service and the public has also come under increasing scrutiny. According to Barnes (2001:25) fire safety regulators and the public often have contrasting views on risk perception and the veracity of institutional estimates of risk and harm. Barnes (2002:25) argues that:

"Conflict and distrust between these groups is often a result of a lack of public involvement in decision making on safety related matters."

This is consistent with the empirical research and recent government submissions which documented widespread dissatisfaction among small business owners as they believe that, unlike large businesses, they have not been consulted by government legislators regarding laws (MacMillan, 1989; Woolfson, 1995; Bickerdyke and Lattimore, 1997; Gunningham and Johnstone, 1998; Lamm, 2002). Small business owners felt disempowered from the regulatory decision-making process and there was widespread dissatisfaction over the lack of consultation by government policy makers and legislators at the local and national levels (Lamm, 2002). According to the small business studies and submissions, small business owners felt that the legislation would be tailored more to their needs if there were powerful lobby groups representing the interests of the small business sector, such as those that operate in the interests of big business. The overriding issue for small business owners was that the regulations were conceived without any thought being given to whether or not small businesses could cope with the new or changed regulations.

Due in part to these criticisms from the small business sector and a desire to raise the standard of fire safety in this sector, New Zealand and overseas fire safety services together with local authorities have responded by developing closer, formalised links between the business community and the fire service (refer to the *Report Resulting from the Fire in the Palace Backpackers Hostel, Childers, Queensland* by the Queensland Fire and Rescue Authority). An illustration of this type of partnership is the Queensland Fire, Rescue Authority, Brisbane City Council and small accommodation businesses. As part of this co-operative arrangement, the Queensland Fire, Rescue Authority provides free assistance with the development of fire management plans for owners and managers of budget accommodation. The Brisbane City Council also provides grants to eligible boarding houses, and other similar accommodation, to implement and upgrade fire safety measures. Another example is the agreement between the New Zealand Fire Service and the Association for Farm and Home Hosts. In this agreement, the New Zealand Fire Service undertakes to assist the Association and its members "to enhance awareness of fire safety and to promote fire safety within homestay facilities" (p1). The Association agrees to encourage their industry to progress to a higher standard of fire safety awareness through an accreditation programme. However, as the voluntary code of practice is a recent development, there has been no evaluation of its success in terms of creating a higher standard of fire safety in the farm and home host facilities. Also, other associations representing homestay and farmstay businesses have not yet ratified the voluntary code of practice.

Barnes (2001:9) notes that this present focus on the small business sector by fire safety services is part of an emerging international theme of "enhancing community and personal capacity to survive major incidents and to have a positive influence on preventable events". He (2001:9) adds that preventative fire safety goals can be summarised as follows:

- increased community self-sufficiency
- increased prevention awareness
- increased knowledge about hazards
- increased likelihood that appropriate actions occur
- increased participation in programmes.

In the New Zealand context, research shows that it is essential for local fire safety services to advice and support their community, including small businesses, in order that the New Zealand Fire Service Commission can achieve their goal of building stronger relationships at a national level (Roen and Lloyd, 2002). Roen and Lloyd, (2002: 47) state that:

"The most efficient and thorough approach to improving fire safety in Aotearoa/New Zealand will involve the sharing of knowledge and useful practices across stations and across regions. This exchange would ideally occur at a variety of levels within the NZSF and involve employees who are at the planning, the management, and the delivery levels of fire safety promotions." (2002:47)

Thus, although the relationship between the small business sector and regulatory authorities has been described as frequently contentious, the staff of the New Zealand Fire Service have endeavoured to ameliorate this situation. However, fire safety regulations are not only enforced by the New Zealand Fire Service but are also overseen by the territorial local authorities.

# **Relationship Between the Small Business Sector and the Territorial Local Authorities**

The territorial local authorities (TLA's) play a critical role in administrating key fire safety regulations primarily through the building legislation. At present there are 74 territorial authorities consisting of 15 city councils, 58 district councils and the Chatham Islands Council. The boundaries of each of the TLA's are defined by size of the community, the capacity of the authority to function effectively and incorporate a city or a district (Statistics New Zealand, 2002). For example Maunkau City lies at the heart of the Manukau Territorial Authority and Pukekohe, Dury and Waiuku are within the Franklin District.

The TLA's have a wide range of functions including land use consents under the Resource Management Act, 1991, noise control, roading, water supply, sewage disposal, health inspection, etc. Although the Building Industry Authority has overall responsibility for the Building Regulations, 1992, including the New Zealand Building Code, 1992, the TLA's, administer the Building Act, 1991, Building Code 1992 and the Fire Safety and Evacuation of Buildings Regulations, 1992 by:

- Issuing project information memoranda;
- Approving or refusing Building Consent applications within a prescribed time limit;
- Granting or refusing waivers or modifications of the Building Code;
- Issuing code compliance certificates;
- Issuing compliance schedules and recording building warrants of fitness;
- Maintaining records of building information and making them available to the public.

There has been intense public debate in New Zealand over the frequent inconsistencies in the enforcement and application of regulations by TLA staff and the growing level of incompetence amongst TLA staff and their designated *"independent qualified persons"* (known as IQP's and who act as "proxy" inspectors). Many of the submissions by small businesses to the Building Act Review, 2002 were critical of the TLA's administration of the building legislation and in particular their lack of consistency, citing as an example, the disparity in the fees charged by the various TLA's for the same information or task. As noted in one of the submissions:

"The reason for this escapes us, as we know that the Building Act applies to all New Zealand equally and the charges for similar tasks should therefore also be similar or at least reasonably close to each other. Currently this is not the case" (Guardian Alarms, 2002:1).

While there is a great deal of public scrutiny of the relationship between the TLA's and the small business sector, there has been scant empirical research on this subject

and only one recent New Zealand study commissioned by the Local Government New Zealand entitled "Promoting Good Relationships between Local Authorities and their Business Communities" (Ffowcs-Williams and Koziarski, 2000). This is in contrast to the growing number of detailed studies on the relationship between the small business sector and central governments.

In a report prepared for the Local Government New Zealand, the authors surveyed both businesses and local authorities. They found that 51 per cent of the TLA's had established formal partnerships with business, tourism or trade groups in their region (Ffowcs-Williams and Koziarski, 2000). However, not surprisingly they also found that "many businesses have commented unfavourably on the frequent variations in policy and commitment by councils to business development," (Ffowcs-Williams and Koziarski, 2000:9). The authors (2000:22) conclude that:

"All territorial authorities must build relationships with their business communities. The only way our local communities will prosper with jobs, investment and growth is through a genuine partnership between local government and business."

Given the often fractious relationship between the TLA's and the business sector, it is understandable that an increasing number of small businesses are turning to technical and business consultants to assist them with regulatory compliance.

## **Relationship Between the Small Business Sector and Consultants**

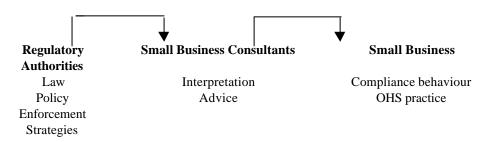
In spite of the efforts by national and local government authorities to forge closer links with the business sector, previous studies show that small business owners frequently use business and technical consultants as intermediaries between themselves and the regulatory authorities (Cammeron 1993; Lamm, 1997; Mayhew, 1997; Gunningham, et al., 1998).

The generic terms of "technical consultants", "industry consultants" and "fire safety consultants", used in this report apply to individuals from *private sector* organisations (as opposed to the territorial local authorities' building technical advisors) who advise owners and staff working in the small business sector. These consultants or advisors represent organisations as diverse as industry associations, consultancies from the building industry, the fire safety industry and insurance industry.

Surveys of New South Wales, Queensland and New Zealand small business owners reveal that are two main reasons why they tend to use consultants: 1) they fear they may be prosecuted if they approach a government authority with a compliance issue; and 2) they are unable to draw on compliance expertise within their own organisation and therefore seek compliance assistance from private sector consultants (Anderson, 1993; Cameron, 1993; Caple, 1996; Hopkins and Hogan 1997; Lamm 1997,1999). Interestingly, the studies show that an average of 86 per cent of the respondents rely on external accountants, particularly those from small accounting firms, for compliance advice.

These studies also highlight the inter-relationships between the small business sector and the government authorities and the intermediary role played by consultants. These sets of inter-relationships play a pivotal role in the compliance behaviour and contribute to the overall aim of a healthier and safer environment. The functions of these relationships are illustrated in figure 1.

## Figure 1: Inter-relationships and Roles in OHS compliance



However, a profile of these stakeholder organisations, their effectiveness in providing fire safety assistance to small businesses and the level of competency of the consultant in fire safety matters, had not specifically addressed in the literature.

#### Summary

The purpose of this section is to articulate the complexities and variety of factors that impact on fire safety regulations in the small accommodation business sector. However, previous studies on fire safety in the tourist accommodation industry tended to concentrate on dramatic fire events that have occurred in large hotel complexes.

There are, however, a number of key studies that provide a more in-depth analysis of safety and health in small businesses. Studies suggest that regulatory compliance and safe practices in small businesses is a set of complex and connected phenomena, not just rudimentary and disconnected activities and behaviours, so often historically portrayed. These studies have been used as a springboard to provide a more comprehensive examination of both fire safety practices *and* fire safety compliance in small accommodation businesses

Furthermore, there is a growing body of literature that gives attention to the relationship between the small business sector and the regulatory agency. There is

also some mention of the role of business and technical consultants play in achieving safety standards and compliance in the small business sector (Caple, 1996; Lamm, 1997; Hopkins and Hogan, 1998). It appears that the relationship between the small business owner and regulatory agency with the consultant acting as an intermediary is potentially significant in achieving and maintaining fire safety compliance in small businesses.

Yet the literature is still inadequate in its explanation of *why* and *how* owners, small accommodation businesses practise fire safety measures and comply with fire safety regulations. Further attention is required to integrate the activities of running a small accommodation business and fire safety practices and behaviour. In particular, empirical work conducted on the distinctive fire safety features of small businesses is absent and theory development in the general area of compliance and fire safety practices is incomplete.

# 4. LEGISLATION

Traditionally, New Zealand governments have accepted the need for intervention by the state in the area of fire safety. New Zealand has relied heavily on other countries, particularly the United Kingdom and Australia, to provide the basis for their fire safety legislative framework. As a consequence, they share many common fire safety issues, although they do so under different conditions. The purpose of this section is to outline the key points of the current fire safety legislation. However, given the limited scope of this section, it is impossible to give attention to the legal minutiae of New Zealand statutes.

The main legislation covering fire safety in accommodation businesses is as follows:

- Building Act, 1991 and Building Code 1992;
- Fire Service Act, 1975
- Fire Safety and Evacuation of Buildings Regulations, 1992;
- Forest and Rural Fires Act and Regulations 1977
- Health and Safety in Employment Act, 1992.

Recent public submissions made to government clearly show that the proliferation of fire safety legislation is one of the most contentious issues facing New Zealand businesses (Ministerial Panel on Business Compliance Costs, 2001). The debate surrounding fire safety in New Zealand is to a large extent concerned with the key differences between the Fire Service Act, 1975 (administered by the New Zealand Fire Service) and the Building Act, 1991 (administered by local territorial authorities).

# The Building Act, 1991 and Building Code, 1992

The Building Act is concerned with "the law relating to building and to provide for better regulation and control of building". The Act applies to the construction, alteration, demolition and maintenance of new and existing buildings in New Zealand and applies only to the physical aspects of a building.

The Act has three statutory purposes (Building Industry Authority, 2001, 2002):

- 1. To provide, together with the Building Code, necessary controls for building work and the use of buildings.
- 2. To ensure that buildings are safe and sanitary and have suitable means of escape from fire.
- 3. To co-ordinate building controls with other controls relating to building use and with the management of natural physical resources.

The Act also provides a legal framework within which the functions, authorities and duties of the various participants in the process of approving building projects are established (Building Industry Authority, 2002). It sets out the purposes and principles of the control process, and establishes the authority for the Regulations and National Building Code. The Act outlines legal proceedings, offences and sets fine limitations. As stated earlier, under the Act, the territorial local authorities' building technical advisors are responsible for overseeing the Act's fire safety requirements.

Pursuant under the Building Act is *the Building Code*, *1992*, which sets out the mandatory construction requirements for all building work in New Zealand. Similar to other overseas building codes, such as those in the UK and Canada, the format of the New Zealand Building Code is performance-based although it has maintained its prescriptive requirements, such as the calculations required for any occupancy with fire loads exceeding 1500 MJ/m (Bukowski, 1996). The emphasis is on how the building must be designed and constructed (Building Industry Authority, 2002).

However, the legislative emphasis on building codes rather than fire safety implies that:

- 1. Fire safety is not of intrinsic concern under the building legislation, except insofar as fire safety may have a direct bearing on the purpose of the building;
- 2. Fire safety is not given equal weighting with building restrictions (such as height to boundary, etc.);
- 3. There are fundamental differences in the legal test of compliance in the Fire Service Act and the Building Act that is, the latter applies a more lenient legal test of safety, taking to account mitigating factors and where punishment is in the nature of fines;
- 4. Those who administer the building legislation are only required to have technical knowledge in the area of building planning and construction rather than the highly specialised knowledge of fire safety.

In addition, recent submissions to the review of the Building Act were critical of the additional bureaucracy and costs of compliance. The following comments by representatives from AMI Insurance Ltd (2002:1) are typical:

"[The costs associated with compliance] will discourage people seeking TA advice and in fact encourage works requiring Building Consent being carried out without proper consents being obtained. TA's have a vested interest in using the consent process as a revenue gathering exercise. When the charges made by different TA's are compared there is significant evidence to suggest that some are doing this. Whilst the Act should clearly retain the "purposes and principals" espoused in it, any changes should attempt to reduce the level of bureaucracy and cost associated with administering it. I would much prefer the Act and its exemptions were written sufficiently clearly that any person proposing to undertake building work (including lay persons) could easily decide by themselves whether a building consent is required in the particular situation." (Submission Number: 13)

# The Fire Service Act, 1975, the Fire Safety and Evacuation of Buildings Regulations, 1992 and the Forest and Rural Fires Act, 1977

In contrast to the Building Act, the core purpose of the Fire Service Act is "the protection of life and property from fire and to certain other emergency services" (Fire Service Act, 1975). The Act also mandates the provision of a National Fire Service and a levy to pay for it. It sets out the functions, duties and powers of enforcement of the New Zealand Fire Service and the Commission. In promoting fire safety, the New Zealand Fire Service Commission is required to:

- "(a) Reduce continually the incidence of fire and attendant risk to like and property:
- (b) Achieve unity and completeness of fire safety law and practice" (S20).

While there are fundamental differences between the Fire Service Act and the Building Act, both make reference to the *Fire Safety and Evacuation of Buildings Regulations, 1992.* The Fire Safety and Evacuation of Buildings Regulations outline specific requirements for buildings, building material and product standards, fire safety and evacuation procedures in buildings. It is divided into three parts:

- Part I outlines: fire safety provisions such as the categories of buildings, management of means of escape, evacuation procedure, use of appliances in premises, control of open flames, packing and unpacking goods, storage of goods and materials inside and outside buildings, firefighting equipment for use by building occupants and offences and penalties.
- Part II outlines: the owner's requirement to submit a draft evacuation scheme; the contents of a draft evacuation scheme, grounds for determining if an automatic sprinkler system is inadequate and evacuation scheme to be put into effect and maintained.
- Part III outlines: the Fire Service to maintain and supply information on evacuation schemes, no limitation of normal access or activities for persons with disabilities and training of staff of institutions of care places of lawful detention or custody.

As stated, the Fire Service Act and Fire Safety and Evacuation of Buildings Regulations make a distinction between evacuation schemes and evacuation procedures. However, the common purpose underpinning their implementation is to provide "procedures for the safe, expeditious, and efficient evacuation in the event of fire' (S5 and S14a, FSEBR, 1992).

Under the Fire Service Act and the Fire Safety and Evacuation of Buildings Regulations, all buildings that contain *more than 5 guest bed spaces* such as hotels, motels, boarding houses, tramping huts, bed and breakfast's, homestays and farmstays, etc., must have *an evacuation scheme*. Section 21A of the Fire Service Act stipulates that: "an evacuation scheme must ensure that:

- a) The appointment of building wardens and floor wardens be reviewed at intervals of not more than 6 months; and
- b) The duties of the building wardens and floor wardens should be provided for in the scheme; and
- c) There be trial evacuations at prescribed intervals; and
- d) The means of escape from fire shall be monitored by the owner and properly maintained; and
- e) Special provision is made for the avoidance of panic on the part of members of the public who are lawfully in the building at the time the building is required to be evacuated; and
- f) Special provision is made for:
  - i) Young children, the elderly, the sick and persons with disabilities, where the building or part of it is for their care; and
  - ii) Those in lawful detention, where the building or part of it is for their detention."

If a tourist accommodation business has *less than 5 guest beds*, then the owner must ensure that *an evacuation procedure* is in place. The Fire Safety and Evacuation of Buildings Regulations 1992, Regulation 5 describes the requirements of an evacuation procedure as being:

"A procedure for the evacuation of the occupants of the building from the scene of a fire, or other emergency, to a predetermined assembly point/s so that all building occupants can be accounted for." (New Zealand Fire Service, 2002:1)

The owner of the building must ensure that:

"All occupants of the building are made aware of the evacuation procedure by the use of signs and notices placed in appropriate places. All staff employed in hotels, motels, hostel etc. are trained to assist other occupants to evacuate the building according to the evacuation procedure."

While the Building Act and the Fire Service Act are concerned with fire safety of buildings, the emphasis in *Forest and Rural Fires Act, 1977*, is the control of vegetation fires. There are three authorities under the Forest and Rural Fires Act, 1977, which control fire safety in rural areas. They are:

- Territorial Local Authorities
- Rural Fire District
- Conservation Department.

As part of their duty to control vegetation fires, the authorities are required to carry out fire prevention measures by monitoring fire danger, declaring fire seasons and issuing fire permits. The work of these authorities is co-ordinated by the National Rural Fire Authority, which is part of the New Zealand Fire Service Commission. The Authority sets national standards; monitors fire danger and administers the Rural Fire Fighting Fund.

However, as previously noted, there has been growing number of criticisms regarding the Forest and Rural Fires Act as well as the Fire Service Act and associated legislation (refer to the *Ministerial Panel on Business Compliance Costs*, 2001). The key criticisms are that the fire safety legislation is archaic, it is confusing and applied inconsistently.

In the briefings to the Minister, the Department of Internal Affairs argued for reforms in this area and stated that:

"The Fire Service Act does not fit well with public sector reform legislation of the 1980s such as the Public Finance Act 1989 and newer codes such as the performance-oriented Building Code 1992." (2002:3)

They add:

"The Forest and Rural Fires Act 1977 is similarly outdated. The Department is working on proposals for a Forest and Rural Fires Amendment Bill. Government decisions about Fire Service Commission funding could result in a Fire Service Amendment Bill. This would be an opportunity to remedy problems with the Fire Service Act." (2002:3)

Furthermore, confusion over the differences between an evacuation procedure and evacuation scheme and the way in which the Fire Safety Act and Building Act are administered are subject to public complaint. The comments below epitomise these complaints:

"What experiences with approval of Evacuation Schemes? We have had several experiences where additional Alarms and especially many additional signs have been required before approval was granted to an Evacuation Scheme. This is despite the buildings in question holding current Compliance Certificates. The Fire Service appears to be continuously applying pressure to increase the Fire safety measures installed in commercial buildings. This is in spite of commercial buildings, complying with the building code, having exemplary safety records. The only commercial buildings in recent times where loss of life has occurred through fire have been those where the building code was being flouted to a major degree. This suggests that the building code, when complied with, is entirely adequate for the protection of life." (AMI Insurance Ltd, Submission Number: 13, 2002:2)

The other controversial aspect of the Fire Service Act is the collection of the Fire Service levies as part of costs of insurance. Under the Act "every insurance company with which any property is insured against fire under any contract of fire insurance made in New Zealand" must collect the levy (Fire Service Amendment Act, Section 48). However, businesses have been opposed to this indirect taxation as it increases the level of overhead costs (Rasmussen and Lamm, 2002). In the late 1980s and 1990s business pressure groups began to agitate to reduce or do away with the fire service levy. A case was taken by representatives of New Zealand's large businesses to the Privy Council in 1990 in which members of the Privy Council decided that all insured businesses had to pay the indirect Fire Service levy instead of opting out of it by insuring off-shore. Failure to obtain a favourable Privy Council decision has not diminished businesses' general hostility to the fire safety levy (Rasmussen and Lamm, 2002).

It is evident, therefore, that there is growing pressure to reform the administration and enforcement of the fire safety legislation. Many of the criticisms focus on the lack of consistency in enforcing the legislation and the diversity of agencies with responsibilities for fire safety.

# Shared Responsibilities Between the New Zealand Fire Service and the Local Territorial Authorities

Because the New Zealand Fire Service and the territorial authorities have shared regulatory duties, there is an assumption that their administrative duties are interrelated. Officers of the New Zealand Fire Service have an obligation to send any recommendations on fire safety to the territorial authorities when:

"A territorial authority has made a decision in respect of the fire safety of a proposed or exiting building which, in the opinion of the Commission, is contrary to good fire safety practice, the Commission shall consult with the territorial authority and may make such recommendations to [the Minister of Local Government] in relation to that decision as it considers desirable." (S22)

Functions and duties of the territorial authorities are:

"... to receive and consider applications for building consents: to approve or refuse any application for a building consent within the prescribed time limits: to determine whether an application for a waiver or modification of the building code, or any document for use in establishing compliance with the provisions of the building code, should be granted for refused: to enforce the provisions of the building code and regulations: to issue, project information memoranda, code compliance certificates, and compliance schedules: any other function specified in this Act." (S24)

However, as noted above, this situation of shared responsibilities between the New Zealand Fire Service and the TLA's is problematic. According to many of the submissions to Building Act Review (Building Act Review, 2002), the public are frequently bewildered by the duplication of the fire safety legislation, the multiple administrative authorities and the complexities of the regulations.

#### Health and Safety in Employment Act, 1992

Fire safety provisions can also be found under Sections 12 and 14 of the Health and Safety in Employment Act, 1992. Under Sections 12 and 14 of the Act, the employer must inform the employee what to do in the case of an emergency or imminent dangers and to involve the employees in the development of health and safety procedures.

The principal aims of the Health and Safety in Employment Act (HSE) are not only to prevent harm to workers while at work but also to promote excellence in the management of health and safety. It sets out general duties for employers and workers and is supported by regulations and codes of practices, which relate to specific hazards. The responsibility and accountability for occupational health and safety (OHS) rest primarily with the employer who must establish systems and:

- Systematically identify exiting hazards, new hazards and regularly assess each hazard and determine whether or not it is significant. This requires the employer not only to set objectives and co-ordinate responsibilities for how this will be carried out, but he/she must plan and establish procedures for constant hazard identification.
- If the hazard is significant the employer must take all practicable steps to eliminate it, isolate it or minimise the likelihood that the hazard will cause or be a source of harm to employees.

Other key duties under the Act are:

- Training and supervision are the cornerstones of the Act and require the employer to identify the health and safety training needs on both a group and individual basis.
- It is also the employer's responsibility to ensure that a register is kept of all accidents that occur as well as notifying the OSH Service of any serious accidents. The Act outlines the procedures surrounding the investigation of accidents.
- Monitoring employee health is to be carried out if there is a possibility that a hazard(s) may cause immediate or long-term harm to the health of the workers.
- The employer must also give the results of any health monitoring to the employees.
- Furthermore, penalties for beaches under the HSE Act are considerably more severe than was the case under the previous legislation (ie the Factories and Commercial Premises Act).

## **One Act and One Authority Approach**

It is evident that the public submissions and reports on fire safety in New Zealand are dominated by criticisms regarding the piecemeal and unwieldy approach to fire safety legislation – creating a major obstacle to compliance.

In this regard, the principle of one Act, one authority that underpins New Zealand's occupational health and safety is a clear example of lessening the burden of compliance for businesses. Not only does such an approach reduce the duplications in the administration of health and safety regulations but it also provides a measure of consistency in both interpreting the legislation and its enforcement.

Unlike the fire safety legislation, occupational health and safety legislation in New Zealand and overseas has been the subject of major reforms. The process of rationalising occupational health and safety began in the UK with Lord Roben's report (1972) entitled *Report of the Committee on Safety and Health at Work* which advocated creating one Act administered by one enforcement authority. In 1992 the New Zealand government adopted in part the Roben's model whereby the numerous Acts and regulations that once covered occupational health and safety were subsumed under the Health and Safety in Employment Act and state-imposed standards were developed into performance standards. The Act covers most employees and is administered by the Department of Labour's OSH Service.

Furthermore, there are overseas examples where fire safety legislation covering the tourist accommodation industry has been rationalised into one Act, covering all

accommodation businesses, enforced by one authority. Countries, such as the USA have enacted laws that deal specifically with fire safety in hotels and motels. The Federal *Hotel and Motel Fire Safety Act, 1990*, is applicable to all places of public accommodation and requires such properties to be equipped with hardwired, single station smoke detectors and automatic sprinkler systems, with a sprinkler head in each guest room. More recently, the US National Fire Prevention Association's Standards Council issued the Building Construction and Safety Code, 2002, which is intended to extend the Fire Prevention Code as well as providing comprehensive provisions for building safety.

#### Summary

Efforts to control fire safety by law in New Zealand have become piecemeal, complex and unwieldy. The legislation suffers from a number of limitations. First, much of the legislation has been introduced in an ad hoc manner. For example, as new hazards arise, regulations have been passed with no attempt to obtain consistency or overall coherence in the law or connecting policy. Second, not only is there a "legislative overload" but the administration of the law is fragmented. For example, the fire safety regulations and codes of practice are located in at least four Acts and administered by at least three government authorities. Third, while the fire safety legislation incorporates a performance-based approach, the legislation has prescriptive elements that deal with specific hazards, activities, and businesses. As a consequence, prescriptive elements are not only complicated but have the potential to be outdated by changes in technology and changes within the industry. Fourth, the emergence of performance-based standards in fire safety has required a paradigm shift whereby the focus is now on identifying flaws in management systems, which may or may not be practicable or relevant for small accommodation businesses. Finally, the enforcement of the regulations pertaining to evacuation schemes and evacuation procedures is problematic as it rests on occupancy rates. That is, there are inevitable fluctuations in occupancy rates and as such it is difficult for owners of small businesses to ascertain which type of evacuation system to implement at a given time. In addition, the regulations have the potential to be abused, as compliance is reliant on the verification of the owner as to the number of beds they offer at any given time.

The questions that need to be addressed are: how effective is the fire safety legislation, how it is viewed, how is it applied and what are the barriers to compliance? However, before such issues can be addressed it is necessary to outline the methodological approach applied to this study.

# 5. METHODOLOGY

Given that there is a scarcity of empirical knowledge concerning fire safety in small businesses in the tourist accommodation industry, the central questions that underpin this research are:

- What are the key fire safety issues facing owners operating a small business in the accommodation industry, (for example, backpacker hostels, urban and rural homestays and bed and breakfast, hotels, motels etc)?
- What are the factors that enhance or inhibit compliance with fire safety regulations in the small tourist accommodation businesses?
- What are the key generic elements that make up best fire safety practices in small tourist accommodation businesses?
- What role does industry associations and fire safety consultancies play in raising the level of awareness and compliance of fire safety regulations in the small tourist accommodation industry?
- What is the relationship between those operating in small tourist accommodation businesses and the New Zealand Fire Service?
- What need is there for these roles to be further developed and how can this be achieved?
- What can be done to raise the level of awareness and the level of compliance of fire safety regulations among the small operators in this sector? And,
- What additional assistance can the New Zealand Fire Service provide to increase the levels of awareness and compliance in this sector?

## **Research Approach**

Undertaking exploratory, descriptive research on the small business sector is demanding because the sector is heterogeneous, geographically scattered and has few subjects in each setting. Therefore, in order to ensure that the aims and the objectives of the study are achieved and that the findings are valid and reliable, a triangulated approach was used as it incorporated multiple sources of evidence converging on the same set of facts or findings, which is important in exploratory research (Eisenhardt, 1989; Yin, 1993; Neuman, 1994). The specific type of triangulated approach used in this research is known as "the developmental systems approach" in which the unit of analysis is the small accommodation business in its relationship to the New Zealand Fire Service, industry associations, fire safety consultants etc. (Engestrom, 1996; Hill et al; 1998a, Hill et al, 1998b; Worthen, 2002). The systems approach not only provides the framework for this research but it is also in keeping with other similar studies currently being undertaken by the Department of Labour (eg Adams et al, 2002) and the Ministry of Economic Development (eg Knuckey, et al. 2002) - thus providing policy makers with continuity in its qualitative research.

Undertaking research also requires the utmost confidentiality. Therefore, every effort was made to protect the anonymity of the interviewees as well as ensuring that the interviewees did not feel threatened or intimidated by the interviewer in accordance with the ethical directives of the University of Auckland.

## **Research Design**

The research design used the following data collection methods: self-administered survey questionnaire, case study and telephone interview. This approach was chosen in order to: 1) combat the problems related to conducting research in the small tourist accommodation business sector; 2) ensure the validity and reliability of the research; and 3) ensure a more holistic understanding of the topic. The questionnaire frame was designed to be applied to the case studies, telephone interviews and mail-out survey (refer appendix 1). That is, the type questions, such as biographical details, fire safety measures applied, were consistent in order to be in keeping with a triangulated approach. In addition, the research design focused on the following groups within four regional districts:

- Small accommodation businesses
- Industry associations and fire safety consultants
- Territorial local authorities, and
- The New Zealand Fire Service.

The choice of regional districts was based on the criteria that each district contained the following characteristics: rural, urban and tourist regions as well as industrial/commercial regions. Based on these criteria, the following four geographical areas were chosen:

- Manukau
- Franklin
- North Shore, and
- Rodney.

Table 3 outlines the basic demographic profile of the four geographical areas in comparison to the overall New Zealand demographic profile. Unfortunately, Statistics New Zealand is unable to provide regional figures on accommodation businesses.

Thus, aside from the telephone interviews, interviews with the small accommodation businesses and the representatives of key stakeholder organisations in this study (that is, the New Zealand Fire Service, the territorial local authorities and industry associations and fire safety consultants) were selected from these geographical areas.

	Franklin District	Manukau City	North Shore City	Rodney District	New Zealand
Residential					
Population	51,669	283,197	184,821	72,185	3,737,277
Employees aged					
15 & over	24,891	117,084	93,807	35,403	1,886,000
Occupied					
dwellings	17,727	83,826	66,609	28,668	1,368,207
Number of					
businesses	4,020	17,118	18,424	7,049	306,263

 Table 3: Demographic Profile of the Four Geographical Areas

(Statistics New Zealand, 7th February, 2002)

## Small Business Case Studies

Case studies were incorporated as researchers have traditionally found quantitative methods, such as survey questionnaires difficult to apply to the small business sector because it is fragmented and often fails to deliver an adequate response rate (Miles and Huberman, 1984; Holmes and Kelly, 1989; Holliday, 1995).

*Fourteen case* studies were chosen representing a cross-section of locations and business traits. A targeted approach was adopted – as opposed to a random approach – to generate the maximum information about specific types of cases (such as: regional differences, individual differences, safety practices, etc). The number of case studies was increased from 10 to 14 in an effort to offset the low response rate from the survey questionnaire of the small businesses.

Selected from a database of all registered accommodation businesses, owners and operators were initially contacted by telephone and then visited. It should also be noted that a little over 70 per cent of the small businesses approached agreed to take part in this study. Although this is a standard response rate for personal interviews, it is much higher rate than for non-personal interviews, such as mail-out surveys.

Using the data analysis tool NU\*DIST (non-numerical unstructured data indexing searching and theorising), data analysis identified dominant and reoccurring themes which are presented in more detail below. However, multiple-case study method

with a sample of 14 case studies restricts somewhat the applicability of the findings to the larger small business population in that the findings are not necessarily definitive. Nonetheless, descriptive statements can provide broad *guidelines* about the larger small accommodation business population in terms of fire safety compliance and practice.

## • A Profile of the Case Studies

The sample for the case studies represented the diversity of small accommodation businesses in terms of types of accommodation (hotels, motels, hostels, backpackers, hosted, bed and breakfasts), as seen in table 4.

	Franklin District	Manukau City	North Shore City	Rodney District
Bed & Breakfasts			2	1
Homestays	2	1		
Motels		1	1	
Budget Motel		1		
Motor camps/Campgrounds		1		1
Backpackers			1	1
Conference/corporate <sup>1</sup>	1			
Total (14)	3	4	3	4

#### Table 4: Type of Small Accommodation Business Case Studies

<sup>1</sup> Note: Conference/corporate accommodation is defined as accommodation catering solely for a corporate clientele and clients wanting both accommodation and conference facilities.

A number of key characteristics were identified from the case study data, as outlined in table 5, which are consistent with other small business studies (Curran and Storey, 1993; Storey, 1994; Lamm, 1998).

The first characteristic is that almost all the businesses were run jointly by husband and wife partnerships. In addition, in most of the business case studies, the owners ran the business, with only two businesses employing managers, one of which was a husband-and-wife partnership.

The second characteristic of the case studies is that most of the owners had no industry qualifications. Only two owners obtained any formal qualification associated with the industry — one interviewee held a "Kiwi Host" certificate and the second interviewee had a food preparation qualification. However, most of the interviewees regularly attended industry conferences and seminars in which fire safety

presentations were part of the proceedings. The interviewees from the motels belonged to the Motel Association of New Zealand, and one of the owners was on the Auckland executive.

The third characteristic was that all but one of the businesses offered some form of refreshment facilities for their guests. Thirteen of the businesses offered tea and coffee making facilities, while half of the case studies provided kitchen facilities.

Case Study	Type of Business	Age of Business	Number of guest beds	Refreshment Facilities Offered	Number of Employees
Case Study # 1	homestay	6 years	8 beds	only tea and coffee making	none
Case Study # 2	homestay	9 years	4 beds	access to kitchen	none
Case Study # 3	motor camps/ camp-grounds	15+ years	6 cabins, plus 4 caravans	full kitchen facilities	husband & wife managers
Case Study # 4	lodge	9 years	12 beds	only tea and coffee making	3 full-time, 3 casual
Case Study # 5	homestay	5 years	4 beds	none	none
Case Study # 6	lodge	8 years	30 beds	tea and coffee making, 8 have kitchen facilities	1 part-time
Case Study # 7	motel	1 year	122 beds	only tea and coffee making	4 full-time, 2 part-time
Case Study # 8	bed & breakfast	2 years	7 beds	only tea and coffee making	2 casual
Case Study # 9	bed & breakfast	6 years	5 beds	only tea and coffee making	none
Case Study # 10	motel	18 months	21 beds	rooms have full kitchen facilities	2-3 casual staff
Case Study # 11	backpacker	6 years	9 beds	shared kitchen facilities	none
Case Study # 12	motor camp	7years	45 beds	full kitchen facilities	1 part-time
Case Study # 13	backpacker	2 weeks	37 beds	shared kitchen facilities	none
Case Study # 14	backpacker	18 months	350 beds	shared kitchen facilities	5 full-time, 2 part-time

Table 5: Characteristics of the Case Studies

The findings also show that there were *several types of businesses*. In the first type of business, profits from the business were the main source of income for the owner and is best illustrated by the bed and breakfast case studies that offered exclusive accommodation. Those who operated bed and breakfasts businesses were all intent on running efficient and profitable businesses with full occupancy rates. All the owners stated that compliance was an integral part of operating an effective business and had spent substantial amounts of money on fire safety compliance, particularly

when establishing the business. One of the interviewees also noted that after purchasing the business they were unable to open it until they had satisfactorily complied with all the fire safety regulations.

In the second type of business, profits were not substantial but did provide the owner with a basic living. Businesses in this category were more often than not backpacker hostels and camping grounds situated in rural or semi-rural areas. According to these owners, having paid employment that complimented their relaxed lifestyle was their primary reason for operating the business. The owner's attitude in many of these types of businesses was "no-one is going to tell me how to run my business". Because these businesses were often situated in rural or semi-rural areas, obtaining compliance advice was difficult for the owner because of the isolation or as a result of the poor relationship between the owner and the regulatory agencies. Thus, the owner had to rely on their common sense in matters of fire safety compliance and practice.

In the third type of business, any profits made by the owners were supplementary to their existing primary income The homestay case studies best represent this type of business. The data shows that the homestay businesses were operated to supplement the superannuation pension. Typically, the businesses consisted of rooms being let on periodic basis within an existing domestic dwelling. According to the interviewees, the motivation for operating the business was not only to earn a little extra money but to also host a variety of people from overseas and New Zealand. For these mostly retired interviewees the simulation of meeting new people was equally if not more important than "earning enough to pay the rates" (Case study # 7). However, owners in this type of business had little detailed knowledge of the fire safety laws and minimal fire safety measures were implemented, for example, the installation of the obligatory smoke detector.

## Mail-out Questionnaire

Using lists containing contact details of accommodation businesses from local governments, New Zealand Fire Service and industry associations, a survey questionnaire was distributed to all small accommodation businesses in the Manukau and Franklin regions and the North Shore and Rodney regions. Mindful that using survey questionnaires to collect data on the small business sector can result in a low response rate, it was decided to email the questionnaire to 119 small accommodation businesses on the North Shore and Rodney regions and to mail-out the questionnaire to 141 small accommodation businesses in the Manukau and Franklin regions. It was hoped that by applying two delivery systems to the questionnaire, the response rate would be substantially higher than predicted. However, the emailed questionnaire elicited only 3 responses, even though a further email was sent out requesting that it be completed. This is in contrast to the 27 responses to the mailed questionnaire.

## • A Profile of the Businesses and Respondents Investigated by Mail-out Questionnaire

The survey captured a range of types of accommodation: hotels, motels, backpackers, holiday parks, bed and breakfast establishments, etc., as seen in table 6. Interestingly, a number of businesses offered a variety of types of accommodation on the same site, for example, self-catering cabins and hostel accommodation.

	Franklin District	Manukau City	North Shore City	Rodney District
Bed & Breakfasts	1	2		
Homestays	3	6		
Motels	2	3	1	
Budget Motel	1	2	1	
Motor camps/Campgrounds	1	1		1
Backpackers	3	1		
Hotel		1		
Total (30)	11	16	2	1

 Table 6:
 Type of the Small Accommodation Business Surveyed by Mail

Over 55 per cent of businesses surveyed had less than 50 beds and less than 10 rooms, with 74 per cent of respondents reporting that they had less than 20 rooms. Almost 70 per cent provided their guests with full or partial kitchen facilities.

In addition, just over two-thirds of the respondents were owner/operators, with the remainder stating that they were managers or directors. Over half of all respondents were in charge of the business on a day-to-day basis.

As seen in table 7, although the majority of respondents (62%) reported having more than five years experience operating the business, 92 per cent reported as having no qualifications relevant to the accommodation industry. Many recognised, however, that the absence of formal qualifications was common among those operating in the small business sector.

## Table 7: Responses from the Mail-out Questionnaire

Questions	Less than one year	One to three years	Three to five years	More than five years	No response
Length of current					
business operation	3	4	4	18	1
Number of years					
experience	1	7	8	10	1
			Yes	No	No
					response
"Have you owned another small accommodation businesses prior to this one?"			5	21	1
"Do you have any formal qualifications that are directly related to the small accommodation industry?"			2	26	2

# **Telephone Interviews**

Ten telephone interviews were conducted with small backpacker accommodation businesses outside the chosen geographical areas, as seen in table 8. The interviewees were self-selected and requested to be part of this study. The same questionnaire used in collecting data in the case studies and the survey, was also used when interviewing the telephone interviewees, thus ensuring the validity of the study.

## • Profile of the Telephone Interviews

As stated earlier, the telephone interviewees were self-selected and belonged to the Budget Backpacker Hostels NZ Ltd (BBHNZ). Typically, the accommodation provided is basic with the emphasis on providing a congenial environment. The table below shows the geographical spread of the interviews.

 Table 8: The Location of the Small Accommodation Businesses

 Outside the Four Geographical Areas

Local Authorities	Number of Accommodation Businesses
	(n=10)
Thames Coromandel District	1
Wanganui City	1
Tasman District	1
Wairoa District	1
Nelson City	1
Far North District	1
Napier City	1
Marlborough District	1
Christchurch City	1

|--|

# Key Stakeholders

# • New Zealand Fire Service

Multiple interviews with senior managers, operational officers and in particular, fire safety officers, were conducted throughout the study. This approach provided added insights into fire safety in small tourist accommodation businesses and the relationship between the New Zealand Fire Service and the tourist accommodation business sector. The interviews also provided useful information on the role played by the New Zealand Fire Service in raising the level of fire safety compliance and practice among small businesses in the tourist accommodation industry.

• Territorial Local Authorities

Building technical advisors from Manukau, Franklin, North Shore and Rodney were interviewed at length. To ensure the validity and reliability of the interviews with the building technical advisors, we also interviewed the building technical advisors from Waitakere City Council. As the building technical advisors play a primary role in fire safety in small tourist accommodation businesses, the information gathered from these interviews is vital to the overall research and to the development of reforms in this area.

## • Industry Associations and Fire Safety Consultants

As stated, there is increasing evidence that small businesses use business and technical consultants for a range of compliance services. Therefore, in order to determine the characteristics of these key stakeholders and the role they play in assisting small tourist accommodation businesses, it was necessary to personally interview officials from the main industry associations as well as fire safety consultants. Most of the government and non-government tourist advisory organisations declined to be interviewed stating that they provided no specific assistance to small accommodation businesses in terms of fire safety. However, representatives from the following organisations and sectors were interviewed:

- Industry Associations: Backpackers Accommodation Council (BAC); Budget Backpacker Hostels NZ Ltd (BBH); Holiday Accommodation Parks of NZ (HAPNZ); Youth Hostels Association (YHA); Association for Farm and Home Hosts; Kiwi Host; Host Link New Zealand; Home Care Services; Homestay Services as well as Qualmark and the Tourism Industry Association.
- *Fire Safety Consultants*: Half a dozen fire-engineering consultants were interviewed from small-, medium- and large-sized organisations together with representatives from the insurance industry who collect levies on behalf of the

New Zealand Fire Safety Commission, such as the Insurance Council of New Zealand, the Corporation of Insurance Brokers of New Zealand.

#### Summary

There is a significant body of literature that shows that the chosen research design succeeds in producing a deeper understanding of fire safety in small accommodation business. Case studies provide a rich data set while the survey method allows for a broad understanding of the characteristics of the small accommodation business and the key issues facing those in this sector. Also by interviewing key individuals from the industry associations, fire safety consultancies, the TLA's and the New Zealand Fire Service, reliability and validity of the findings will be enhanced.

## 6. **RESULTS**

## Overview

Compliance with fire safety regulations and fire safety practices within the small accommodation business sector encompasses two important areas of decisionmaking: the decision to *comply* with the law and the decision to *apply* fire safety practices. Those operating a small business make judgements and, ultimately, decisions about the consequences of applying safe practices and the impact of compliance with the fire safety law. The project's results indicate that there are not only various complex reasons why small accommodation businesses comply or not comply with the fire safety law, but also that there are key factors that can influence and determine fire safety practices within small accommodation businesses.

The research findings from the case studies, mail-out questionnaire survey and telephone interviews are presented *thematically* in which repeated statements regarding fire safety in the small business sector are made known (*refer* Yin, 1993; Neuman 1994). In addition, the presentation of the findings follows the structure of the questionnaire. Direct quotations have also been used to re-enforce general themes. It must be stressed, however, that by adopting a mainly qualitative research design, general statements can only be made about the surveyed and interviewed sample, in which these statements may or may not be true for the wider small business population in New Zealand.

This section has been divided into the groups represented in this study. They are as follows:

- Small accommodation businesses
- Industry associations and fire safety consultancies
- Territorial local authorities
- New Zealand Fire Service.

#### **Small Accommodation Businesses**

As stated above, in the process of analysing the data, a number of predominate themes and associated sub-themes emerged which will be used as the framework for the presentation of the findings. Underpinning these themes is the key consideration: "what are the factors that influence non-compliance and compliance with fire safety regulations and what are the factors that impede and encourage fire safety practices?" However, such factors cannot be seen in isolation but must be viewed as being interconnected and part of the context of operating a small business in a highly competitive industry.

## Key Factors Influencing Non-compliance

There were several reoccurring themes regarding the key factors influencing noncompliance that emerged from the data analysis. They are:

- Issues surrounding operating a small business
- The regulations required to operate a small accommodation business
- Lack of detailed knowledge of fire safety regulations
- The complexity of the fire safety legislation spread across dual agencies
- Difficulties in understanding the fire safety regulations
- Inappropriate and unnecessary fire safety regulations
- The costs associated with regulatory compliance
- The lack of consistency by the agencies; and
- The poor relationship between certain sectors of the accommodation industry and the regulatory agencies.

The very nature of *operating a small business* presents a number of problems that will impinge on fire safety compliance and practice. The analysis of the data clearly shows that there are fundamental issues that plague the small accommodation business sector and influence the way in which fire safety is practised and the level of compliance. Interviewees continually merged statements about fire safety with problems associated with running their business. According to the interviewees the key issues associated with managing a small business are:

- Obtaining and managing resources: such as finance, time and staff;
- Having the relevant training and industry experience; and
- The ability to make strategic decisions regarding improvements to the business and the systems, for example the decision to introduce a fire safety system.

Interviewees were adamant that problems associated with managing a small business should not be ignored by legislators, New Zealand Fire Service, the TLA'S or policy makers – or, for that matter, researchers.

Related to the management of a small business is the owner's requirement to know all *the regulations associated with running their business*. The interviewees listed 18 different laws with which they had to comply. According to the interviewees, the laws that most affected their business were: the Health and Safety in Employment Act (46%), followed by fire safety regulations (31%) and building regulations (19%).

Two points are worthy of comment with regard to the above result. Firstly, occupational safety and health (OHS) is clearly major concern, particularly amongst

the interviewees who completed the mail-out questionnaire. According to these respondents, the OHS legislation not only had the most wide-ranging affect on their business but it was also the most difficult law to comply with or understand. Secondly, there are inextricable links between the three regulatory laws in that each stipulates emergency procedures and contains duties of care to provide safe environments. A summary of the comments related to the imposition of regulations is listed below in table 9.

Comments	Number of times the comments were mentioned
Time consuming	27
Compliance cost	26
An increase in paperwork	22
Difficult to administer	19
Reduces profit	11
Need policies and procedures	9
Not able to get consent	9
Hard to keep ahead of minima standards	8
Need more people involved	4
Highly regulated	3
Obligations of voluntary organisations not clear	1

 Table 9: Comments associated with the question "What impacts have regulations had on your business?"

The data also reveals that in general, the interviewees *lacked detailed knowledge* of the fire safety regulations, although over 66 per cent had a generalised knowledge of the Fire Safety and Evacuation of Buildings Regulations. This finding is consistent with other small business studies. That is, small businesses owners often have difficulties in comprehending and implementing the numerous regulations pertaining to their business. In addition, they frequently experience problems associated with balancing the need to produce goods or provide services with undertaking the administration of the business.

Many of the complaints from the interviewees concerned *the complexity of the fire safety legislation spread across two agencies* and the associated problems. This theme is evident in the lack of detailed knowledge of the fire safety regulations by the owners of small accommodation businesses and the frequent reliance on expensive consultants to interpret and implement the regulations. The typical comments by the interviewees were:

"It was a nightmare getting it all sorted out" (SB Interview #8)

"The [fire safety] regulations are a bit of a headache and extremely difficult to understand." (SB Interview #15) And

"It's very confusing knowing which department to go to - is it the Fire Service or my council?" (SB Interview #1)

Interviewees also complained that the *regulations were difficult to understand* and therefore hard to implement. There was also a great deal of confusion over difference between an evacuation *scheme* and an evacuation *procedure* pursuant under the Fire Safety and Evacuation of Buildings Regulations. As several of the interviewees commented:

"We would like to see something that is simple to understand on what is necessary for small accommodation businesses, we're unsure of what our obligations are." (SB Interview #6)

"I would like to have easier documentation to understand and some form of consulting services without a dollar tag, compliance issues are so difficult to understand." (SB Interview #7)

"The regulations should be clearly spelt out by the Fire Service for people wanting to start a businesses, people should know exactly what the rules are." (SB Interview #9)

There was general consensus among the interviewees that in order to overcome the difficulties in understanding and implementing the fire safety regulations the regulatory agencies should provide them with more assistance. As one interviewee stated:

"We would like to see more assistance in complying with legal obligations. For example, the Fire Service could provide a fire safety officer with industry experience who could go around and visit and give us good common sense advice — someone who can relate to my business rather than a large city business." (SB Interview #1)

Statements regarding *inappropriate and unnecessary fire safety regulations* were generally confined to those interviewees who offered accommodation in their home, such as the those operating homestays and bed and breakfast establishments, or those who offered single cabin accommodation. These interviewees argued that as their businesses were on such as small scale and in their own homes, they should be exempt from the strict fire safety regulations. Below is a representative sample of their comments:

"...we're only a private house and shouldn't be subject to them [the regulations]." (SB Interview #5)

"...we don't have an evacuation procedure, it's so easy to get out." (SB Interview #14)

One of the more disturbing revelations was the practice by some individuals in the accommodation industry to understate the number of beds offered (that is, less than 5 beds) in order to circumvent the regulations. According to several interviewees, this practice was particularly widespread amongst those operating homestay accommodation. As one interviewee explained:

"Officially we only have 5 guests, more than that it's an entirely different set of rules." (SB Interview #14)

Another interviewee revealed that:

"... we know of a lot of places that say they've only got accommodation for 5 guests to get around the rules when they actually accommodate more." (SB Interview #1)

However, according to the interviewees, it is common for many of the small businesses to have an occupancy rate of less than 5 beds at some time during the year. They argued that as occupancy rates vary considerably, they should not be required to comply with the more stringent fire safety regulations that cover mediumand large-sized businesses. Instead, it was suggested that the regulations covering evacuation schemes and procedures should be replaced by a general regulation covering emergency evacuations, such as the one pursuant under the Health and Safety in Employment Act, 1992.

Another major impediment to compliance with fire safety regulations is the costs involved. Moreover, *the cost of compliance* was one of the most contentious issues in this study. Because of the complexity of the regulations and the conflicting requirements by the TLA and the New Zealand Fire Service, owners were forced to pay large amounts on consultancy fees, particularly at the construction stage. As interviewees complained:

"I spent \$15,000 getting the building to comply." (SB Interview #8)

"... the fire regulations that we had to apply cost us an estimated \$50 - 60k." (SB Interview #9)

"I spent a lot of money in getting compliance with the regulations, \$1k on a fire report!" (SB Interview #14)

"You don't make decent money until you have 60 plus beds, it has to be related to people's ability to pay. Every year they come up with more stuff to justify their existence." (SB Interview #17)

"I spent \$2-5k on wiring in smoke alarms [and then] my IQP rang me up and said that I don't have to do it. I then spoke to the head of the Fire Service who said he would sort it out, never heard anything for 4 years. I've done everything I have to — the guy who gives me the WOF is happy." (SB Interview #18)

Moreover, the following comment from one of the respondents who completed a mail-out survey encapsulates the intense frustration felt by many of the owners of small accommodation businesses:

"I am frustrated by the "one-size-fits-all" method that the regulators set for building compliance. Although we have a fully integrated smoke alarm system which is of course specifically designed for the earliest warning possible yet we are still supposed to install a sprinkler system to be fully compliant because we have two floors....COST \$25,000. If we had three floors it would be the same but it is obvious to me that safety issues are much magnified with each additional floor. Focusing on the number of people sleeping on the second floor is also an issue because the fire regs require a sprinkler system which seems absurd [when] I am complying with our TLA's regulations concerning overcrowding. How is five people or fifteen people any different in getting them all out provided we are geared for it physically." (Survey Interview #28)

The other contentious issue highlighted in the interviews was the *lack of consistency by the regulatory agencies* when applying fire safety regulations. According to the interviewees, this inconsistency occurred on several levels:

- regional level;
- agency level; and
- individual level.

Interviewees complained of regional differences in the enforcement of the fire safety regulations and different interpretations of the law between the TLA's and the New Zealand Fire Service and conflicting advice given by individuals working for the same organisation. As interviewees stated:

"Rules change from area to area throughout New Zealand — even in Parnell." (SB Interview #8)

"It's not uniform. I've been in other backpackers and some of them are hopeless compared to mine." (SB Interview #16)

"They [New Zealand Fire Service] have messed us around. Everyone who comes in here has a different viewpoint.... We had 3 different fire officers

who gave us 3 different opinions.... They're shockers, they keep ordering us to do new things all the time... and even the same officer keeps changing his mind." (SB Interview #15)

Most of the disputes were over the contradictory interpretations of the fire safety regulations pertaining to smoke detector alarms and fire evacuation schemes and procedures. For example:

"Two years ago a fire safety officer told me the smoke alarms I had don't comply. I can't see why I have to have a higher standard, here is the Fire Service advertising for smoke alarms and they come here and tell me they're not good enough — what's the difference?" (SB Interview #11).

"We considered a fully wired system [smoke alarm] but it was too impractical." (SB Interview #1)

"There is a lack of consistency in applying the regulations for evacuations schemes throughout the country." (SB Interview #10)

"I am very involved in the industry, we have 350 members. My concern is that there seems to be no uniform and logical standard across the country, it seems to depend on the whims on who has the authority in each area, there are different responses to what seems to be the same problem... The average hosted size is 30 beds, in physical terms many are not much bigger than an ordinary domestic dwelling [yet] they're applying requirements for 20 storey hotels." (SB Interview #19)

When discussing the lack of consistency by the regulatory agencies, interviewees invariably commented on their *poor relationship with the regulatory agencies*. Some of the most vehement statements from the interviewees concerned their relationship with the New Zealand Fire Service. However, it would be misleading to state that the comments below represent of the views of the all the interviewees. Instead, the heated comments regarding the poor relationship with the New Zealand Fire were made almost entirely by the self-selecting telephone interviewees. Nonetheless, it is important to acknowledge such opinions as it highlights a critical breakdown in the relationship between a particular group of small accommodation business owners and the New Zealand Fire Service. A sample of the comments is as follows:

"They [New Zealand Fire Service] are not going to approve my evacuation procedure because we haven't got the type of alarm they want. They are blackmailing me, blatant blackmail... These guys steam in and think they are god's gift. They come here and wave the big stick... They are threatening my livelihood with bluff, bravado and bullshit." (SB Interview #16)

"They [New Zealand Fire Service] are very officious and paramilitary. They just turn up without any prior warning and expect me to stop everything. I find it really rude. I've got a copy of their manual and it says that they are supposed to ring and make an appointment... The evacuation scheme reg's are being used as an unfair lever to get what they want... The Fire Service keeps saying that I need a scheme, but I've got a procedure. People don't know the difference between a procedure and a scheme. I did a lot of research on this and I don't have to do this [provide a scheme]. The building regulations override the Fire Service regulations... The Fire Service needs to be more honest by saying "we recommend...". It's virtually lying if my understanding of the legislation is correct...In general, there is a lot of ill-will towards the Fire Service... They [Fire Service] have a PR problem that can be fixed with a more co-operative approach rather than being authoritarian." (SB Interview #17)

"The Fire Service seems to be full of dictatorial little Hitler's who waltz in and demand what they want... The Fire Service should work with people rather than against them... In my 12 years there has never been a death in our industry, there is instead a knee-jerk reaction to whatever happens in Australia." (SB Interview #18)

In summary, the key factors that influence non-compliance with fire safety regulations are consistent with other studies on fire safety. It is interesting to note that many of the criticisms highlighted here, such as inconsistent application of the regulations, were also common complaints made to the government submissions on compliance and building codes.

The poor relationship between the regulatory agencies and those operating in the accommodation industry is also a critical factor when investigating the barriers to compliance. Finally, difficulties of running a small business appear to compound the problems surrounding fire safety compliance and practice.

## Key Factors Influencing Compliance:

Analysis of the interview data reveals a number of reoccurring key factors that influence compliance. They are:

- Rationalisation of the regulations and the regulatory agencies
- The rigorous enforcement of the regulations
- The relationship with the regulatory agencies
- The role played by industry associations
- The owner's commitment to fire safety, and
- Access to information sources and advice.

One of the main themes throughout the interviews was the desire to see a *rationalisation of the fire safety regulations and the regulatory agencies*. The interviewees insisted that an urgent reform of the fire safety regulations should take place and that the outcome should be *one set of comprehensible fire safety guidelines, enforced by one agency, covering all accommodation businesses*.

There was also a repeated request to see the simplification of the fire safety regulations, clearly outlining the requirements for their industry. Most interviewees also wanted to see the establishment of a "one-stop-shop" providing a range of compliance advice for small businesses (refer also to Lamm, 1998; 2000; 2002). Below are some of the comments made by the interviewees:

"We need to see some sort of "one-stop-shop" for compliance issues for our business." (SB Interview #12)

"We want a clearer definition as to what category we fit into, we're still not sure." (SB Interview #1)

"The regulations should be clearly spelt out by the Fire Service for people wanting to enter the business. People should know exactly what the rules are." (SB Interview #9)

"I would like to see it [fire safety] put on a sensible risk management approach...We need to take a fresh look at the whole thing, like what are the real dangers, what are the most cost effective ways of dealing with this...I believe our industry is being treated as inherently dangerous rather than starting at the point that we are inherently safe." (SB Interview #19)

For many of the interviewees, *the enforcement of the regulations* by either the TLA's or the New Zealand Fire Service was a key factor in achieving compliance with the fire safety regulations. However, the interviewees insisted that enforcement of the fire regulations *should take place at the time of constructing the new building or renovating an existing building, not after construction has been completed*, as so frequently occurs. A number of small business interviewees complained that a fire safety officer had visited their new or renovated premises after completion and had directed the owner to put in place remedial fire safety measures before they were allowed to operate their business.

While there was consensus regarding the early involvement of fire safety officers in the building process, there some debate over the *level of enforcement* amongst the interviewees. Some interviewees wanted regulatory agencies to become more involved in controlling the industry. In particular, several of the interviewees wanted local authorities to become a licensing agency for all their district's accommodation businesses. Still others wanted the same strict fire safety criteria that govern the rest home industry to be extended to the accommodation industry, for example:

"The same criteria should be written up as was done for the rest homes. I want to see a joint approach by the Fire Service and the local authorities on a standard for [accommodation] businesses. We need a best practice document." (SB Interview #9)

Irrespective of their views on the level of enforcement, most interviewees argued that compliance would be best achieved and maintained if the regulations were *enforced in an equitable way*. As two interviewees stated:

"If I have to do it, well fine, then everyone should have to comply." (SB Interview #16)

"None of the members in my association mind complying but what we want is a level playing field. If I am told to comply with "x" regulation then believe me I would want to know that the guy down the road is also complying with the same regulations. If he isn't, then he's not passing on the cost of compliance and therefore he can afford to charge cheaper rates than me. In effect he is undercutting me. All we're asking is for goodness sake, give us a level playing field." (SB Interview #11)

The data also revealed that the *relationship between the small business owner and the regulatory agencies* was crucial. As one interviewee explained:

"It worked out great. We worked closely with the Fire Safety Officer to get it exactly right." (SB Interview #8)

Over 70 per cent of the interviewees stated that better liaison between the regulatory agencies and those in the accommodation industry would enhance fire safety in their business. As one interviewee commented:

"Let's work together...they should treat it as a partnership between them and us for the best outcome ... There's a culture thing that they [New Zealand Fire Service] need to change." (SB Interview #17)

However, not all the respondents' comments were negative. Those interviewees who were aware of the Voluntary Code of Practice agreement between the New Zealand Fire Service and the Association for Farm and Home Hosts were highly enthusiastic about its development, with most stating that it should be expanded to cover all the industry. Most of these interviewees commented that the Code of Practice had done a great deal to enhance the relationship between the New Zealand Fire Service and the members of the Association for Farm and Home Hosts. It should be noted that *almost 70 per cent of farm and home hosts interviewed were aware of the Code of Practice*.

*The role played by industry associations* was also highlighted as a paramount factor in achieving and maintaining compliance with fire safety regulations. In order to be listed in one of the prominent accommodation guidebooks and websites (and thus achieving high levels of public exposure), accommodation businesses must maintain high standards of hygiene and safety, including fire safety. In addition, most of the industry associations conducted peer reviews; for example,

"The NZ Homestay Association keeps a fairly tight reign on things, we are listed in their annual book and they soon weed out the unsatisfactory operators." (SB Interview #2)

Thus, those industry associations that require a their members to adhere to certain standards, have created a *powerful enforcement tool*.

Interviewees generally had a *commitment to provide fire safety measures*. This was in spite of the pressure to conform to fire safety regulations as part of an association with an industry group, the complaints regarding the complexity of the fire safety regulations and frustration over the inconsistent enforcement of the fire safety regulations. Nearly all the businesses investigated had a smoke detector of some sort or another. However, *the placement and quantity of smoke detectors varied considerably from business to business*. As the comments below illustrate, this commitment was often as a result of either personal experience of a fire incident or having previously stayed in high-fire risk accommodation. Examples of the comments are as follows:

"People staying here should be safe. Owners have a huge responsibility to those staying in their premises." (SB Interview #8)

"We are obliged to make sure everything is safe for our customers." (SB Interview #6)

"I have stayed in huge hotels in Manila with nothing [fire protection]." (SB Interview #9)

In addition, most of the businesses had some rules concerning fire safety, the most common being non-smoking inside the premises. Table 10 identifies the most common type of guest rules found in the businesses studied.

# Table 10: A Summary of Fire-related Rules in the Small Accommodation Businesses

No smoking inside buildings, particularly	No use of candles
in the sleeping quarters	

No consumption of alcohol on the	No use or restricted use of open flames
premises	(e.g. fire places)
No consumption of illicit drugs on the	Restricted use of heating (e.g. gas,
premises	electric, oil column heaters)

In essence, there was a high level of commitment to the *notion* of fire safety by all the interviewees; however, there were differing opinions on how this should be best achieved.

Finally, the other important factor in achieving fire safety regulatory compliance and practice is the *availability of quality information*. When asked to list a number measures that would enhance fire safety regulatory compliance and practice, the availability of quality of information was paramount. Below is a summary of the replies in response to:

- 1. "What would assist you to provide better fire safety measures?":
  - Information readily available;
  - Interest-free, monetary assistance for small businesses' compliance needs;
  - More individual assistance from New Zealand Fire Service and the TLA's regarding procedures and equipment;
  - Compliance costs waived for voluntary organisations;
  - The introduction of an accreditation system for all fire safety consultants.
- 1. "What would assist your understanding of fire safety regulation?":
  - The provision of free seminars when changes occur to the regulations or when starting up a new business;
  - To receive information about new requirements by mail;
  - To have a "one-stop-shop" staffed by either the New Zealand Fire Service or the TLA's.
- 1. "What would assist you to meet your legal obligations to fire safety?":
  - Support and information readily available;
  - Rationalisation of the regulations and regulatory agencies;
  - A shift in emphasis from enforcer to advisor by the NZ Fire Service;
  - The knowledge that everyone else was complying.

In spite of the fact that a number of small accommodation owners interviewed had a fractious relationship with the New Zealand Fire Service, it did not prevent the majority of interviewees using the information provided by the Service. Indeed, the New Zealand Fire Service was their main source of obtaining information, followed by the TLA's, fire safety consultants and accountants. In particular, interviewees

valued the New Zealand Fire Service's web site in that it provided a continuous source of useful information. As one interviewee commented:

"When I need information on fire safety it's usually outside of normal working hours. I'd say that would be the same for most small business operators. That's why the Fire Service's page is such a lifesaver. I can just sit down and download the stuff when I need it. Yeah, it's great." (SB Interview #28)

## Summary

The analysis of the small business data indicates that the interviewees have a high regard for fire safety but differ on their response to fire safety compliance and practice. However, there was universal agreement amongst the interviewees that the regulatory framework and the relationship between the small accommodation business sector and the regulatory agencies, both at national and local levels, are in desperate need of reform. The interviewees were also vocal on what constituted key factors that enhance fire safety. The major factors identified were national and local government relief for small businesses' compliance costs, availability of quality information and the establishment of a "one-stop-shop" for the compliance needs for small businesses. There was also general agreement that industry associations and expert technical and business consultants can play a significant role in assisting small accommodation businesses with fire safety compliance and practice.

#### **Industry Associations and Fire Safety Consultants**

The analysis revealed that most interviewees operating a small accommodation business used advisors and consultants for a range of compliance services. Therefore, in order to determine the role industry associations and fire safety consultancies play in assisting those in this sector, officials from the main industry associations were interviewed as well as a representative sample of fire safety consultants. As stated earlier, government and a most of the non-government advisors from the tourist industry declined to be interviewed stating that they provided *no* specific assistance to small accommodation businesses.

The key feature of industry associations and fire safety consultancies is the diversity in terms of the range of services, the level of support, level competency and quality of service. While such a variety of services ensures that the needs of the small business community are catered for, interviewees noted that the different levels of competency and quality of services undermined fire safety compliance and practice.

#### Accommodation Industry Associations

The industry associations representing the accommodation industry do not follow a uniform structure or purpose. Instead, they range from ones that are a loose coalition providing minimal services to others that actively lobby on behalf of their members and provide a range of services from advertising to assisting with compliance matters. For example, the Motel Association is only a referral organisation, which maintains a database of motels, while associations such as Budget Backpacker Hostels and the Association for Farm and Home Hosts not only lobby on behalf of their members but also provide extensive advertising of individual businesses. However, there are a few over-arching organisations that encompass all businesses in the accommodation industry, for example, Tourism Industry Association (refer to www.tianz.org.nz) and Qualmark (refer to www.qualmark.co.nz). The purposes of these organisations are either to establish an industry confederation and/or to provide an industry quality framework.

The other feature of industry associations is the fractious relationship between the different groups and sub-groups. Groups are often divided by regional and seasonal differences, geographical characteristics as well as business type. This feature, together with the variety of forms of organisations, creates (and has created) barriers for those wishing to interact with the industry, for example, the New Zealand Fire Service.

Nonetheless, the analysis of the industry association interviews reveals a high degree of consistency over the issues concerning fire safety compliance and practice — issues that are also consistent with small businesses. They are:

- The burden of compliance
- Complexity of the fire safety regulations
- Certain inappropriate fire safety regulations
- Inconsistent enforcement and interpretation of fire safety regulations
- Problems associated with geographical isolation, and
- Varying standards within the fire safety consultancy industry.

The interviewees noted that the requirement to comply with the "vast array of regulations", including fire safety, was particularly *burdensome* for those operating small businesses. The laws cited as the most difficult to comply with were: Resource Management Act, Health and Safety in Employment Act, Employment Relations Act and in particular, the fire safety regulations.

Most of the interviewees complained that the TLA's and to a lesser extent, the New Zealand Fire Service, had little or no understanding of the diversity within the accommodation industry. They stated that planning and fire safety regulations were being applied without any consideration of the differences between the various sectors which resulted in *"complex, unclear and often inappropriate requirements* for fire safety" in small tourist accommodation businesses (IA

Interview #3). There were also complaints regarding the inconsistent enforcement and interpretation of the fire safety regulations by both the TLA's and the New Zealand Fire Service.

They argued that many of their members spent a great deal of time and money in an effort to comply with fire safety regulations that are often *inappropriate for their businesses* resulting in "resources being diverted from the core business" (IA Interview #2). As one interviewee commented:

"This lack of clarity is having direct and indirect financial repercussions for small to medium-sized businesses throughout the country." (IA Interview #2)

The interviewees also noted that for many of their members based in rural districts, the *geographical isolation* presented a number of problems, such as difficulties in obtaining information on the regulations and purchasing insurance coverage. Although it was anticipated that those operating businesses in rural areas would have problems obtaining accurate information, it was not expected that *insurance companies were reluctant or even refused to provide these business owners with fire insurance*.

Furthermore, interviewees expressed concern over the *variable standards within fire safety consultancy industry*. Although most of the interviewees recognised that there were a number of proficient fire safety consultants offering a high standard of service, they did note that there were some that provided expensive, questionable and often inappropriate fire safety advice to small business owners. As a couple of the interviewees stated:

"Some of these guys are real cowboys. They scare the living daylights out of the small business bloke to such an extent that they end up paying for products and advice they really didn't need." (IA Interview #1)

"The way the [fire safety consultancy] industry is set up - well it's a license to print money." (IA Interview #2)

Of those industry associations officials interviewed, halt stated that they regularly warned their members to be careful about the quality of the advice not only from consultants but also from their local councils and fire stations. Instead, these interviewees suggested that their members should "shop around" and find a fire safety solution that is practical and meets the specific needs of the business while still complying with the legislation. They also stated that they advised their members to be cautious about installing brigade-connected alarms as the costs of false call-outs are borne by the business owner. In an effort to counteract the problems concerning fire safety compliance and practice, some of industry associations have begun to *introduce a number of initiatives* designed to encourage their members to comply with fire safety standards. The initiatives range from pressure to comply with the regulations pertaining to evacuation procedures and schemes to establishing formalised links between an association and the New Zealand Fire Service. When questioned about developing a code of practice, such as the one for the Association for Farm and Home Hosts, interviewees were very supportive and were keen to see the initiative be applied throughout the accommodation industry. The interviewees stated that it was also vital for an industry association to have an effective communication network whereby "disseminating information should occur regularly" (IA Interview #4).

## Fire Safety Consultants

As outlined earlier, the six fire safety consultants interviewed for this project were selected from a range of fire safety engineering consultancies. The relationship between fire safety consultants and the small accommodation business could be best described as "symbiotic". That is, both parties were reliant on each other for mutual benefit.

There are two types of fire safety consultants: the first type will have trade qualifications and have industry experience, for example experience gained as a building inspector or as a site supervisor. The second type of consultant will have at least an undergraduate degree, more often than not in engineering. Professional fire safety engineering consultants will have completed a Masters in Fire Safety Engineering. Typically, they will be involved in large complex building projects.

Fire safety consultants fulfil three major roles: 1) to assist their clients to comply with the fire safety regulation; 2) to liaise between the regulatory agencies and their small business clients; and 3) to act as an independent advisor for both the regulatory agencies and the small business owner. Some of the consultancies that took part in this study also sell a range of fire safety equipment, such as fire extinguishers, smoke detectors and sprinkler systems.

While the consultants acknowledged that there have been incidences where individual consultants may not have offered the highest standard of services, they also stated that the industry was fast becoming "professionalised". Degree courses, high levels of proficiency in fire safety engineering and the fire safety regulations as well as the establishment of professional societies (eg Society of Fire Protection Engineers) were all part of creating a more professional group. The interviewees also noted that the fire safety engineering was now recognised as a distinct engineering discipline both in New Zealand and overseas. For the fire safety consultants, the key fire safety issues were:

- A decline in the level of regulatory enforcement and the increase in the level of non-compliance.
- The lack of communication between the key parties (New Zealand Fire Service, the TLA's and the accommodation industry); and
- Weak fire safety regulations and the lenient enforcement compared to other countries, such as the USA.

The reoccurring observation by all the consultants interviewed was the *decline in the level of regulatory enforcement*. Although the interviewees had a great deal of regard for the New Zealand Fire Service's fire safety officers and the TLA's building technical advisors, they noted that fire safety regulations were not being regularly enforced. In the opinion of the interviewees, the primary reason for this decline was the tremendous growth in the building industry without the parallel increase in resources within the regulatory agencies. Below are examples of the statements made by the consultants:

"The building permits have increased tremendously, by 30 per cent since 2001 and workload has just mushroomed but the Fire Service and local authorities haven't increased their staff. So I reckon that only about 10 per cent of building WOF's are being checked off...." (TC Interview #2)

"We have a situation now where those law abiding businesses are being penalised for complying while those who aren't letting on to the authorities are getting away with not paying the compliance costs. It's just not equitable - there's no level playing field which makes it hard to do business in this kind of environment." (TC Interview #3)

"Having so many accommodation establishments not compliant is a huge problem. You see, most fatal fires occur in sleeping quarters, which means that those B&B's and homestays, backpackers etc. are lethal. I think the Fire Service have a huge problem on their hands." (TC Interview #4)

"Those guys (fire safety officers and building technical advisors) just don't have the time any more to get through all the applications and to do the rechecks. They're so flat out that they can only scratch the surface." (TC Interview #6)

The lack of resources was also cited as one of the main reasons for the *lack of communication* between the New Zealand Fire Service, the TLA's and the accommodation industry. A couple of the interviewees noted that a decade ago regular communication frequently occurred on an informal basis and as such there was no need to provide a formal communication forum. However, according to the interviewees, the fire safety officers and the building technical advisors had little time

these days to communicate with each other or others in the building and accommodation industries. The interviewees also stated that they were now providing information and advice previously done by the regulatory agencies and were also liaising between the different parties. As one interviewee stated:

"Some of the work we are doing now, like giving basic fire safety advice, the Fire Service or the local authorities used to do. They just don't have time anymore." (TC Interview #2)

While there appears to be little communication occurring between front-line regulatory staff, interviewees drew attention to the fact that there was frequent tripartite communication at regional and national levels, particularly over the drafting of specific fire safety regulations and codes of practice. As one interviewee noted:

"Yeah, it works well. I've been in this business for over 25 years and have a really good relationship with my counterparts in this industry and can speak my mind. We often get together whenever there is another draft to go over like the sprinkler standards." (TC Interview #1)

All the fire safety engineers interviewed were adamant that *weak fire safety regulations and the lenient enforcement fostered non-compliance*. They frequently mentioned that New Zealand had far weaker fire safety laws compared with the USA and Australia. In particular, it was frequently advocated that the fire safety regulations should cover all accommodation businesses irrespective of the size of the business and that not doing so was creating fire risks. As one interviewee argued:

"Firstly, the cut-off point of 5 beds and less under the fire safety reg's is open to abuse. I personally know so many accommodation places that officially say that they only cater for 5 and less people when they frequently cater for six to eight. Secondly, whether you have 5 people or 6 people, you still have a dangerous situation. There is a huge potential for visitors to cause fires through smoking or cooking and when a fire does occur the visitors are disorientated and may not even speak English... I believe that we should get tougher like the US. They have always been ahead of us in fire safety." (TC Interview #3)

Another interviewee stated:

"Sometimes I think that the introduction of acceptable solutions has the potential to water down fire safety. These so-called solutions are open to interpretation that can therefore be ineffectual. But on the other hand, acceptable solutions can be very useful. For example, we use disasters such as the World Trade Centre to see what worked and what didn't and then apply the solutions." (TC Interview #1)

There was also debate surrounding the effectiveness of some of the regulatory requirements. For example, while some of the interviewees wanted to see the compulsory installation of hard-wired smoke detectors and sprinkler systems for every accommodation business irrespective of its size, others stated that smoke detectors and sprinkler systems only worked if the electricity and water supplies were functioning and if the equipment was working. As one of the interviewees explained:

"At the World Trade Centre the problem wasn't that there weren't sprinkler systems, the problem was that there was no water supply. It is all very well insisting that you have these systems in place but at the time of the fire they may not even be working, because they haven't been maintained or the water supply is cut off." (TC Interviewee #6)

#### Summary

It is evident that issues raised by the fire safety engineers were similar to those identified by other previous interviewees, for example, insufficient communication between the various parties. However, while many of the small business interviewees complained that the some of the fire safety regulations were onerous and that small businesses should be treated more leniently, fire safety engineers interviewees argued that fire safety regulations should be more stringent, cover all businesses and that there should be more rigorous enforcement.

In addition, half of those interviewed from the accommodation industry perceived the services offered by the majority of fire safety consultants as expensive, poor quality and of little value. There were equally as many interviewees who stated the opposite and were reliant on professional fire safety consultants to ensure that their premises complied with all the building and fire safety regulations and codes. However, issue of poor quality service may be overcome or at least compensated for by way of a refund as the industry becomes more professionalised and with it the introduction of an indemnity insurance.

## **Territorial Local Authorities**

Although the primarily focus in this research is on small accommodation businesses, the interviews with the building technical advisors who administer the fire safety building regulations provide a crucial perspective on the issues surrounding this topic.

The analysis of the data reveals that the enforcement of building codes and regulations, including fire safety, suffers from a number of inherent problems

consistent with applying a "market forces" model onto local governments that had traditionally operated under a "regulatory" model. These failures in the New Zealand system have enormous consequences not only for building safety but also for fire safety. Furthermore, the expected formal and informal contacts between the New Zealand Fire Service and the TLA's borne out of their shared regulatory duties, on the whole, does not exist, thus compounding the current weaknesses.

## System Failures

Currently there is a great deal of public dissatisfaction surrounding the durability and safety of new buildings. At the heart of the public controversy is the way in which the TLA's have managed the administration and the enforcement of the building regulations and codes. The building technical advisors interviewed argued that the problems surrounding the building industry and in particular, the TLA's role in these problems, can be traced back to the reforms of the 1990s. According to the interviewees, at the centre of these reforms was a *shift in approaches* from one that emphasised a service to the public (e.g. "in the public's interest" and "public good") and a high standard of competency to one that is competitive and profit driven. As one building technical advisor stated:

"I'm telling you it's all about money now. Everything we do is driven by profit. This means that quality and competency have decreased considerably... It is a real worry not only for rotting buildings but also for fire safety...There are some real death traps out there." (TLA Interview #1)

As part of the reforms, competition was introduced by allowing independent qualified persons (IQP's) from the private sector to assist in administrating the building regulations and codes, although the TLA's have the overall responsibility for the enforcement of the building legislation. Allowing those in the private sector to administer some of the building legislation has had a number of consequences. They are:

- 1. The TLA's are more often than not unable to monitor or control the actions of the IQP's.
- 2. Decisions made by the IQP's are, in the main, predicated on financial gain. That is, unlike the public servants, those operating in the private sector are reliant on business profits for remuneration and as such decisions are likely to be based on economic interests rather than the "public good" (TLA Interview #2).
- 3. The inability of the industry to regulate substandard services by certain IQP's.

The building reforms have resulted in significant changes to the way building consents are processed and fire regulation enforced. In some cases the reforms have resulted in major re-structuring, as witnessed in three of the five TLA's. The

interviewees stated that prior to the reforms, individuals wanting to obtain advice on compliance with building regulations and secure council approval for building plans would be dealt with by one department staffed with people who had expertise in the building industry and its regulations. Typically, the building inspectors and advisors were allowed more time to ensure that the building complied with the fire regulations as well as time to call for assistance from the New Zealand Fire Service's fire safety officers (see below).

However, according to the interviewees, the current system with its emphasis on competition, profit and time constraints, fails on a number of levels. The précis below is a composite description of the process involved in obtaining a final "warrant of fitness" for a new building or building alterations in a number of TLA's throughout New Zealand and is based on the interviews with TLA staff.

- *Step one*: An individual seeking initial advice from the local council is directed to the advisory desk. However, in an effort by the TLA's to keep labour costs down, people with no practical experience or knowledge of the building industry or the building and fire safety regulations typically staff the advisory desk. Thus, there is a chance that such advice will be incorrect.
- Step two: After incorporating the advice from the council advisory staff, the • individual submits the building plans to the council for approval. It is at this stage that the building technical advisers have a statutory duty to oversee the process and ensure that the regulations are complied with. The plans are checked and approval is given or sent back to the individual if further alterations are required. Prior to the reforms, it was common practice to allow two-three weeks for the building technical advisors to thoroughly check the plans and to involve the fire safety officers from the New Zealand Fire Service particularly when dealing with commercial buildings. However, in line with the private sector practices, most TLA's undertake to check and process the plans and give approval within four working days. Most of the interviewees from the TLA's complained that it is impossible for them to thoroughly scrutinise every plan within four days and that such a system created enormous professional and personal conflicts. To matters worse, while the workload of the building technical advisors (which includes administering the liquor licensing regulations) has substantially increased, staffing levels have either remained the same or declined. As one interviewee stated:

"My manager wants me to process the plans as fast as I can which means that I may unintentionally overlook breaches of the regulations. Now I consider myself a professional and I take pride in what I do so this attitude is killing me. It's not just about the bottom line, it's also about increasing our building consents and therefore increasing the growth of our district... I am constantly fighting here with my manager and with the staff, who don't know any better because they're so inexperienced... Most of the professional guys [building technical advisors and inspectors] that I started with 15 years ago have gone within the last five years. They just couldn't take the pressure any more. Most of them resigned because of ill-health, heart attacks, high blood pressure, depression - all stress related." (TLA #1)

- *Step three*: Once construction has begun, independent inspections are carried out at intervals to ensure that the building is being constructed according to the plans. At this final stage major alterations are difficult, if not impossible, to carry out. Therefore, there is a great deal of pressure on the building inspector(s) to overlook defects that should have been picked up at an earlier stage. In addition, most interviewees noted that although random inspections ("spotchecks") were common practice before the reforms, such practices had ceased as "there was no money to be made" (TLA Interview #2).
- *Step four:* When construction has been completed, the building is to be issued with a building "warrant of fitness" (WOF), in which fire safety regulations are a major part of its criteria. Regular inspections are required to be carried out to ensure that compliance with the building and fire safety regulations are maintained. The Building Act makes provision for these inspections to carried out by an independent qualified person" (IQP's), many of whom are fire safety engineering consultants. Most of those interviewed stated that in reality the regulatory agencies rarely undertook these inspections and that the onus was on the business owner to engage an IQP. According to many interviewees, this situation was open to abuse and "encouraged non-compliance on a grand scale" (TLA #1).

While the above system may not be applied *in toto* in every TLA, most TLA's have incorporated some of the elements. There was unanimous agreement by interviewees from all the groups that the reforms in the building industry had disastrous consequences for fire safety in the accommodation industry. According to the interviewees, building industry reforms had not only complicated an already complex fire safety regulatory system, but had also created potentially lethal fire hazards. As one interviewee stated: "There are a lot of ticking time bombs out there" (TLA #4).

## Lack of Formalised Contact with the New Zealand Fire Service

As noted above, the TLA's and the New Zealand Fire Service share regulatory duties. Therefore, it was surprising how little formal or informal contact the two agencies had in the course of their duties. Only one of the building technical advisors stated that he had regular contact with the Fire Safety Officers in which he and the Fire Safety Officers would frequently discuss fire safety matters. According to the interviewee, it was not unusual to go to sites together and discuss the relevant problems (TLA Interview #2). The reason given for this lack of contact by the

interviewees was that building technical advisors were under extreme pressure to process building plans and had little or no time to go into any detail or to contact the Fire Safety Officers. It must be said that the Fire Safety Officers also complained of frequently not having enough time to contact the building technical advisors.

In summary, the building technical advisors, supported by comments from the fire safety officers recommended the following changes to enhance fire safety in small accommodation businesses:

- Re-establish one regulatory authority/department staffed by experienced and professionally trained staff to handle all building matters.
- Create an efficient and effective communication process, allowing correct, standardised information to be reported as part of the building warrant of fitness process and to be distributed to all other relevant council department and government agencies.
- Ensure that communication at all levels between the New Zealand Fire Service and the TLA's occurs regularly.
- Carry out random "spot-checks" on a regular basis and enforce fines where beaches of the regulations have occurred.

## Summary

The interviews conducted with the TLA staff were the most disturbing undertaken in the study and clearly show that there are systemic problems inherent in the building industry that not only impinge on building safety but also greatly affect the safety of building's occupants in times of fire. Therefore, any preventative fire safety initiatives will be severely undermined if the problems with the current building legislation, its enforcement and its administration are still present.

### New Zealand Fire Service's Fire Safety Officers

Within the New Zealand Fire Service there are approximately 65 fire safety officers in which there are 22 fire safety officers in the Auckland region. The fire safety officers interviewed for this study dealt primarily with "in-built environments", including commercial buildings, places of assembly of more than 100 people, such as hospitals, and buildings in the education sector. A great deal of their time is spent assisting the public with evacuation schemes and procedures as well as ensuring that occupiers of buildings comply with the fire safety regulations prior to obtaining a certificate of approval issued by the New Zealand Fire Service.

As with previous interviews with the TLA's, most of the comments made by the fire safety officers concerned the inadequacies of the current legislation, their increased

workload and the difficulties in enforcing fire safety regulations in the small business sector.

# Legislation and Enforcement

It is not surprising that comments regarding the current legislation elicited the most responses from the fire safety officers. The fire safety officers interviewed stated that the key issues surrounding the fire safety legislation and its enforcement were that:

- The fire safety legislation is outdated and the proposed amendments do little to redress this problem.
- The fines are insubstantial and the regulations are weak.
- The inadequate enforcement of the fire safety regulations by the TLA's.
- Enforcement and compliance advice on fire safety regulations is contradictory and inconsistent.
- There is a systemic lack of involvement in the building process by fire safety officers.

There was widespread concern that the fire safety legislation is *outdated* and that the *amendments do little or nothing to address this problem*. In particular, the interviewees argued that the amendments had the potential to reduce the standard of fire safety. The comments below illustrate some of these concerns:

"The fire safety legislation was never designed to cover the type of building designs and construction we see these days and as consequence there are a hell of a lot of unforeseen fire risks. I'll give you an example; one of the greatest fire risks is someone who is sleeping on the top floor of a terrace house. You know the type of buildings that are very popular these days. You drive your car into the garage and the lounge and kitchen is on the next floor and the sleeping quarters are on the top floor. If a fire starts in the garage the open plan-stairs act as a perfect funnel - a chimney, and the fire will just race through there. If you don't have any prior warning system, quite frankly you don't stand a chance. Now what happens if you are running a home-stay or a bed and breakfast from that place? Under the changes [to the fire safety regulations], your business is not going to be covered by the more stringent fire safety provisions anymore. Chances are you won't need to have hard-wired smoke alarm system. It would be interesting to get UK fire stat's on fire safety in terrace houses to see just how dangerous these types of buildings are." (FSO #3)

The fire safety officer also noted:

"We're really concerned about the proposed changes to the fire safety regulations because it appears that some buildings and small businesses will not get the same fire safety protection as before. They have deemed that these types of buildings and businesses are at the lowest end of the risk. Quite frankly I don't agree that these buildings are low risk and I don't agree that if the changes go through, this will free us up to other things...We haven't had a substantial increase in resources for decades and yet the number of new buildings and the new businesses have just grown enormously." (FSO #3)

The repeated complaint amongst those interviewed in the New Zealand Fire Service was that the fire safety legislation is *weak* and the *penalties are insubstantial*. For example,

"We have had our legislation in place since 1993 but recently there has been a lot of successful lobbying to water down the regulations and the enforcement. The legislation has never given us strong teeth in the first place when it comes to enforcing the regulations. But over time it has got a lot worse and the changes made have in effect extracted the few teeth we had." (FSO #2)

The interviewee continued:

"When we take a case, our lawyer is pretty confident that the judgement will go in our favour. We can't just take all breaches to court because of huge costs and time involved. And the shocking thing is that when there is a prosecution the fines are so meagre that it's the equivalent of getting slapped over the wrist with a wet bus ticket. If the fines were increased, like they have been in the Health and Safety [in Employment] Act, well then we would see a lot more people complying, I'm sure of that." (FSO #2)

Interviewees often compared the fire safety legislation with the Health and Safety in Employment Act, 1992. They noted that the previous health and safety legislation had not only been rationalised into one Act, enforced by one agency but also the penalties had been increased considerably. As one of interviewees stated:

"The requirement for commercial businesses to have evacuation schemes is also a requirement under the Health and Safety [in Employment] Act, 1992. It is interesting that the NZ Fire Service has very weak enforcement provisions and the [fire safety] regulations are weaker compared to the OSH Service and the Health and Safety [in Employment] Act. Instead of being the same level of penalties as the Health and Safety [in Employment] Act, the fire safety legislation has much weaker penalties. It's the OSH Service that brings cases to court and all we can do is sit back and wish that we had that power when dealing with repeated offenders." (FSO #1) Some of the interviewees also commented that there were problems associated with enforcing acceptable solutions pursuant under the fire safety legislation, as illustrated by the comments below:

Acceptable solutions sets out what you have to do in the way of fire protection. Any commercial buildings that share a common egress and is more than 2 stories high must have smoke alarms. If however, the sleeping accommodation is on a single level and where the exits can directly go outside, like you see in motel units or backpackers then there is no compulsion to install smoke alarms. We need to take a test case as it's a grey area of compliance." (FSO#3)

Several of the interviewees also noted that a high level of expertise in fire safety practice and law was essential when enforcing or complying with regulations that comprised of acceptable solutions and performance based criteria. The interviewees, however, doubted that most people in the field of fire safety, particularly in private sector and in the TLA's had the necessary level of competency.

The interviewees argued that many of the problems associated with the fire safety legislation stemmed from the regulations being spread over several Acts, with a different emphasis in each Act. That is, the emphasis in the Building Act and the Building Code is on building safety and durability while the emphasis in Fire Safety and Evacuation of Buildings Regulations is on fire safety prevention and means of escape. As one of the interviewees explained:

"One of the greatest frustrating aspects of the job is the conflict that arises out of trying to enforce fire safety reg's in both the Building Act and the Fire Safety and Evacuation of Buildings Regulations. When we ask for remedies under the Fire Safety and Evacuation of Buildings Regulations we are constantly told that we cannot ask for that under the Building regulations. We reply that we are asking for these remedies under the Fire Safety and Evacuation of Buildings Regulations *not* the Building Act." (FSO # 2)

The fire safety officers were also extremely disturbed *about the inadequate enforcement of the fire safety regulations by the TLA's*. As with previous interviewees, the fire safety officers were also concerned about the low level of enforcement and lack of knowledge of fire safety regulations amongst TLA staff. The comments below highlight these concerns:

"The councils are just not doing their job in terms of enforcing the legislation. For example, there are over 300 sprinkler systems in our district that don't comply. Now, one has to ask, "What are the council doing about it?" (FSO #4) "The councils on the whole are just not hiring anyone with fire safety expertise or if these guys to have expertise they are just so overloaded with work that they can't function effectively. Things get left or overlooked. It's a terrible situation... Under the previous regime, there used to be a clerk of the works who normally had a handle on what was going on the construction site and made sure that everyone knew what they were doing. Well, they've gone and now there are huge problems in the building industry and with fire safety. Now the planning and resources people don't talk to the building consent people and none of them talk to us." (FSO #3)

In addition, the way in which the fire safety regulations were being enforced by the TLA's and the New Zealand Fire Service were *contradictory and inconsistent*, thus making it difficult for the fire safety officers to carry out their enforcement duties. They complained that they were constantly fighting to reverse or change fire safety advice given by staff from the TLA's or fire safety consultants to the general public. Interviewees gave examples where members of the public had been given incorrect compliance advice regarding fire safety regulations by either TLA staff or a fire safety consultant, only to be told later by the fire safety officer that the advice did not comply with the fire safety regulations. As one interviewee stated:

"Say an individual wants to convert a building into a bed and breakfast, they go off and seek the expertise of a fire engineer. In this instance, the engineer designs the building to the barest minimum fire safety standards under the Building Act. We come along and tell the owner that in fact they need more smoke alarms or that they need a sprinkler system. Well, they turn around and say, "No we don't, the fire safety engineer tells us we only need to do this much under the Building Act". A small minority of fire safety engineers believe that we are wrong to insist that the owner needs more fire safety protection. These fire safety engineers have also been very successful in lobbying the Government to make changes to the regulations that will inevitably have a detrimental impact of fire safety." (FO #2)

Another interviewee added:

"Someone running a small business is less likely to want to pay a lot of money for an expert who is quite likely going to tell them to spend more money than they have. They just want something that is quick and easy and something that is not going to cost a lot of dollars. Also you will get a huge variation in the quality of consultants, some are great and some are shocking. There are a lot of so-called experts who have very little expertise in fire safety. There is no accountability in the (fire safety consultancy) industry." (FSO #1)

Those interviewed stated that one of the major defects of the present legislation was *the systemic lack of involvement in the building process by fire safety officers.* 

According to the interviewees, they were routinely excluded from the construction process. As a result, any remedies required under the fire safety legislation often occurred *after* the building had been constructed or the renovations had been completed, creating unnecessary costs for the small business owner. The fire safety officers also stated that because they frequently required business owners to implement remedial fire safety measures, their public image was being tarnished. As one of the interviewees explained:

"The way the situation is set up now is that we only get involved when the occupier takes possession of the building. This means that if there is anything that has been overlooked during construction, (and the chances are there have been), we then have to get the occupier to somehow fix it up after the event. Just imagine if you had spent thousands of dollars on an architect and an engineer and neither of them told you that you had to put in a sprinkler system or proper fire doors. Then I come along and start pointing out all the defects and telling you that you have to do all this remedial work. I can tell you, you certainly wouldn't be happy with me... The situation is just crazy that we can't be part of the process right from the beginning. We should be there all the way through just like the building inspectors. It sure would save a lot of hassles." (FSO #1)

In essence, their duties as fire safety officers were becoming increasingly complicated by the fire safety legislation that is largely outdated and ineffective. The fire safety officers concurred with previous interviewees in that the New Zealand fire safety legislation required urgent reform.

## Achieving Compliance in Small Accommodation Businesses

The fire safety officers interviewed noted that achieving a high level of compliance was difficult in the small business sector for reasons that were related to both operating a small business (eg lack of resources etc) and enforcing regulations in small business sector (eg small business units scattered over a wide area). Nonetheless, they outlined a number of initiatives that they believed would raise the level of compliance with fire safety regulations. The initiatives are:

- Providing advisory services that range from central information bureaux to roaming advisory field staff.
- Continue to develop partnerships with industry associations to raise the standard of fire safety in small accommodation businesses.
- Provide a clear and comprehensive enforcement strategy.

There was some debate amongst the fire safety officers as to what preventative and enforcement role they and the New Zealand Service should play in the future. Some argued that the New Zealand Fire Service should create a stand-alone enforcement agency allowing the fire safety officers to concentrate more on providing fire safety advice for the public. Other interviewees suggested that the New Zealand Fire Service should still provide fire safety advice as well as enforcing the fire safety legislation. Nonetheless, the consensus was that the New Zealand Fire Service should continue to *provide fire safety advice for the public*. In particular, the New Zealand Fire Service should be the sole, designated fire safety information agency, thus alleviating the problems associated with multiple sources of information (eg inconsistent advice). It was suggested that the New Zealand Fire Service review the different ways of delivering advice; for example, posting information on their web site or providing on site one-on-one advice.

In addition, interviewees throughout this study, including fire safety officers, believed that the New Zealand Fire Service *should continue to develop partnerships with industry associations* as a way of raising the standard of fire safety in small accommodation businesses. However, they were aware that not all industry associations would be willing or able to adopt a code of practice for fire safety; as one interviewee pointed out:

"Industry associations can be very useful if they have an approach that is "what can we do to lift the standard of fire safety among our members". But a lot of the younger industry associations started off a bit gung-ho and don't want to know about us but as they've gone on their attitude towards us and fire safety changes for the better." (FSO #4)

As stated, one of the ways in which the New Zealand Fire Service can raise the level of compliance is to provide a clear and comprehensive enforcement strategy. The fire safety officers argued that such a strategy is essential as it provides an equitable commercial environment for all businesses. In particular, it was suggested that minor breaches of the fire safety regulations could incur instant fines — a tactic that is already employed in Queensland. It was also suggested that certain industries that were high risk and/or that had a high level of non-compliance should be targeted and gross and repeated offenders be prosecuted. As one interviewee explained:

"If you start targeting the real bad businesses this not only sends a message out to all the other businesses that they better comply or else they could end up in court but it also provides a level playing field for all the ones that do comply. All you need to do is take a couple of these rouges to court and you would soon see all the rest falling in line." (FSO #4)

The fire safety officers also realised that the success of an enforcement strategy is measured by "the high rate of compliance and the low level of infringements and not the other way around" (FSO #1) and is underpinned by an effective legislative framework.

## Summary

It is clear that the fire safety officers play a pivotal role in fire safety in small accommodation businesses. It is also evident that any preventative fire safety strategy cannot operate successfully unless the fire safety officers are involved at the beginning of the planning stage. However, there are a number of constraining factors that inhibit their effectiveness, such as the problematic legislation and their heavy workload. Unless the legislation is reformed, fire safety officers will continue to be seen by many small business owners as the "bad guys" rather than "professional prevention officers" who assist the public in fire safety matters.

## SUMMARY

The findings presented in this section provide important insights into key fire safety issues facing owners of small accommodation businesses, how they practice fire safety and why they comply or do not comply with fire safety regulations. In particular, the findings show that there are common themes shared by all the groups in this study, which are:

- The dysfunctional fire safety legislation;
- Factors that inhibit or enhance compliance behaviour and fire safety practice; and
- The symbiotic relationships between each of the groups.

However, it would be misleading to assume that each of the themes stand alone, disconnected from the rest. Also the themes must be viewed *across a wider regulatory and commercial environment* and *at different levels of analysis* — *namely, national, local and business levels.* That is, the research topic of fire safety compliance and practice in small accommodation businesses is an equation of small accommodation businesses *plus* industry associations and fire safety consultants *plus* TLA's *plus* the New Zealand Fire Service.

In addition, by adopting a triangulated approach, it is possible to make important the links between the various groups involved in fire safety in New Zealand. For example, the findings show that technical and industry consultants are a conduit between the regulatory agencies and the small accommodation businesses and that the quality of advice given by technical and industry consultants varies considerably which in turn has ramifications for fire safety in the accommodation industry.

Finally, there was a high level of consensus amongst all the interviews regarding the type of fire safety preventative measures that would aid fire safety compliance and

practice in small accommodation businesses. The key preventative measures identified in this study are: national and local government relief for small businesses' compliance costs, the availability of quality information and the establishment of a "one-stop-shop" for the compliance needs for small businesses. There was also general agreement that industry associations and expert technical and businesse consultants can play a significant role in assisting small accommodation businesses with fire safety compliance and practice.

# 7. DISCUSSION

While the results section provides crucial insights into **h**e main fire safety issues facing the owners in small accommodation businesses, a deeper analysis of the data is required. In particular, a number of key themes have emerged from the results section — each theme representing a list of issues identified by the interviewees. The key themes to be discussed in this section are:

- Characteristics of the small accommodation business sector
- Regulatory behaviour in the small accommodation business sector
- Regulatory framework and its enforcement agencies
- Interrelationships between the various groups.

The themes are also more useful to organise the data into conceptualised models. It is envisaged that such models will provide the regulatory agencies and policy makers with a set of matrices that combine fire safety with the functions of managing a small accommodation business with fire safety practices and the compliance behaviour of the business owner.

## The Characteristics of the Small Accommodation Business Sector

The findings support the literature in that fire safety compliance and practice in the small accommodation business sector is a complex set of interrelated factors which in turn can influence the behaviour and actions of the owner. The findings also reveal that the characteristics of a small accommodation business as well as the compliance behaviour of its owner are key influential factors in fire safety.

However, articulating and understanding the complexities that surround fire safety in the small business sector is problematic and frequently raises more questions than answers. For example, do the numerous studies on fire safety in large hotel/motel complexes tell us anything about fire safety in small accommodation businesses? The tentative answer is probably "no" because the typical small accommodation business is more likely to operate out of *converted domestic dwelling*, which is substantially different from a commercial building.

In addition, studies on businesses in the accommodation industry focus almost entirely on the type of accommodation offered, rather than the *characteristics* of the business. As stated earlier, accommodation businesses can be classified by either type of accommodation provided (bed and breakfast, motel etc.) and/or the quality of accommodation offered, ranging from basic one star accommodation to five star luxury accommodation. However, in terms of the findings of this study, it may be more useful to look: 1) the type of the small business and 2) managing a small business. While it is acknowledged that the following *ideal types of businesses* require more refinement, they do provide an alternative perspective of small accommodation businesses in the context of fire safety regulations (refer page 31). The categories are as follows:

- "Best practice" accommodation businesses: these businesses range from luxury to budget accommodation. In these businesses, the emphasis is on quality and high standards and safety is paramount in these establishments. The owners strive for peak performance and the reputation of the business is critical for its survival. Typically, the owner derives their primary income from the accommodation business. In addition, the owner will have had industry experience and training and will utilizse outside expertise. The business will be registered with an industry association and/or be part of a larger organisational structure, such as the Youth Hostel Association. Membership of such industry associations and organisations will be reliant on the adherence of high standards set down by such organisations.
- "*Minimum practice*" accommodation businesses: Businesses in this category will typically be offering standard or budget accommodation. In this type of business, profits will be marginal and/or fluctuate. The emphasis here is "doing just enough to get by". As a result, the owner will tend to comply with only the legal minimum requirements and there will be little investment in the maintenance or improvements of the premises. Fire safety will not be a high priority and only the minimal fire safety measures will be implemented. Although the owner may have industry experience, he/she may have poor management skills.
- *"Worst practice" accommodation businesses*: Although there is anecdotal evidence that businesses in this category make up a sizeable portion of the accommodation sector, they tend to operate at the margins of the industry. Typically, the owner operates on a micro basis and the business offers only a subsistence living. As result, the owner will be reluctant to spend any money on the business and safety is not a priority. In these businesses, costs of compliance outweighs the chance of being prosecuted and therefore, implementing fire safety regulations will be minimal or non-existent.

What is missing from these categories is any mention of the size and age of the business. Previous studies and policies have also focused on the size and age of a small business as indicators of good levels of fire safety practice and compliance — this appears to be misplaced. Instead, the focus should be on such factors as the owner's commitment to fire safety and access and the level of resources, such as finance and time.

There are also other factors that have not been included in the categories, as they still require *further investigation*. They are as follows:

- 1. It is still unclear how the high demise rates of small businesses tie into the failures in fire safety practice and compliance.
- 2. The relationship between the level of fire safety compliance and practice and the business ownership configuration (that is, husband and wife ownership, sole male or female proprietor, family business, business partnerships etc.) is ambiguous. Since most owners interviewed were husband and wife teams, it may be worthwhile to investigate this further.
- 3. It is unclear what role, if any, women play in achieving and maintaining compliance with fire safety regulations. Previous research shows that women in business partnerships with men are more likely to insist on compliance with safety laws compared with their male counterparts (refer to Mayhew, 1999, Lamm, 2000).
- 4. Although almost 5 per cent of the small accommodation business interviewees were new migrants, little is known about the problems this cohort faces when starting a new accommodation business or complying with fire safety regulations.

Not only are the characteristics of the small accommodation business important when discussing fire safety in this sector, but it is also argued that it is impossible to separate fire safety from the other small business functions, such as finance and planning etc. It is evident from the findings that solutions and strategies applied to fire safety in the small business sector are meaningless unless consideration is given to all aspects of *managing a small business*.

Analysis of the data clearly shows that there are also fundamental commercial issues that plague the small accommodation business sector and influence the way fire safety is practised and the level of compliance. Because small accommodation businesses are more susceptible to a fluctuating economic environment than larger accommodation businesses, they typically function on a "just-in-time" basis in all areas including fire safety. Also the owner's compliance behaviour and fire safety practices may vary considerably as a result of single or multiple changes. Therefore, small business problems are associated with: access to resources; attainment of relevant industry and business skills and experience; decisions concerning the expansion of the business, and the fluctuations of the market. These problems and factors cannot be ignored by legislators, fire safety regulators or policy makers – or, for that matter, researchers.

## **Regulatory Behaviour in the Small Accommodation Business Sector**

Although it is possible to identify the business factors that influence fire safety, ultimately it is how the individual owner responds or *behaves* that determines the standard of fire safety in the small accommodation business. The level of response

by the owner to the range of critical factors outlined in this research establishes patterns of fire safety practice and compliance. That is, by setting out response criteria it is possible to: 1) present ideal types of behaviour and 2) construct models of compliance and practice and thus predict the compliance outcomes and the standard of health and safety practices within a small business.

Based on the findings it is possible to adapt the ideal types of non-compliant and compliant behaviour of small business owners begun by Kagan and Scholz (1984); Scholz (1984); Scholz and Gray (1990). Typically, *a compliant small accommodation business owner* will have relevant industry training and experience, in which fire safety practices are an integral part of his/her management expertise. The owner is competent at managing the business and is aware of current regulations as well as having sufficient resources to maintain a safe environment. The owner is encouraged by stakeholders, such as industry associations, to improve and maintain a safe environment and to install fire safety measures and practices.

In addition, fire safety is given the same high priority as other aspects of the business and the owner's values are in accordance with the tenets of the fire regulations. The staff are also actively involved in fire safety matters. The owner will also have a positive relationship with the regulatory agencies and its staff and will have no hesitation in using non-government advisors for fire safety matters.

A non-compliant small accommodation business owner, on the other hand, can be described as having little or no relevant training and experience in the accommodation industry. The owner will be a negligent manager and will be unaware of or ignore the regulations pertaining to his or her business. The owner will lack resources and the business will be under-capitalised. As a result, fire safety measures, such as the installation of smoke detectors and sprinkler systems, will be either partially implemented or not at all.

It is likely that the owner will experience pressure to adopt non-compliant and poor fire safety practices as a result of other competitors adopting a non-compliant approach. The safety of the guests will be overlooked or discounted in favour of business profits. Furthermore, the owner's values will be incongruous with the tenets of New Zealand's fire safety laws. The owner will have a negative view and a hostile relationship with the regulatory agencies. Also, it is unlikely that a non-compliant owner will use non-government advisors for fire safety matters.

However, within the broad ideal types of non-compliance and compliance behaviour, it is necessary to construct more detailed reasons for non-compliance with fire safety regulations. They are:

- Economic;
- Dissident; and
- Incompetence.

Non-compliance for *economic reasons* is motivated entirely by profit seeking to the detriment of fire safety. If the probability of being caught is small and the anticipated fine is negligible, it is almost certain that the fire safety regulations will be disobeyed. Under the current building regulatory structure, enforcement is also motivated by profit, thus perpetuating this behaviour.

On the other hand, non-compliance based on an expressive (rather than instrumental) *dissidence* against the fire safety regulations or enforcement actions occurs when the laws or their enforcement are perceived to be illegitimate or unreasonable. The owner in this instance will adopt a strategy of selective non-compliance when regulations impose unreasonable burdens and/or fire safety enforcement agents treat them arbitrarily.

*Incompetence*, however, occurs when the small business owner is either unaware of the fire safety regulations or is unable to understand his or her obligations or implement the legal requirements. Typically, the small accommodation business owner will have started the business as an adjunct to their other employment and/or income activities or to supplement their pension.

In contrast to the existing descriptions of non-compliant behaviour there are *compliant behaviours* that can be arranged around the following three headings:

- Social responsibility;
- Strict conformity; and
- Professionalism.

Compliance based primarily on *social responsibility* is one that favours an equal mix of safety and profit concerns. A small accommodation business owner that takes such an approach is mindful of the effects that his or her business may have on the immediate and wider 'stakeholders' or community. Being socially responsible involves the notions of charity and stewardship whereby the welfare of the present and future guests and the industry as a whole is not jeopardised. The well-being of the client is as important as the well-being of the business, since one is reliant on the other.

Investing in fire safety is seen as investing in the company's future. The owner implements short, medium and long term fire safety preventative systems that correspond to similar systems within the business and industry, such as those ensuring quality and occupational health and safety. This typically requires the owner to call upon the aid of the officers from the regulatory agencies and other outside technical consultants. The business's reputation and its survival are reliant on compliance with the fire safety law.

Compliance that is based on strict conformity with the fire safety legislation rests

on the belief that fire safety standards can only be achieved and maintained if rules are implemented and obeyed. The twin concerns, namely that the law is designed to protect the people from fire-related injury or death and that lapses in compliance could result in prosecution or worse a fatality, motivates the owner to digest the rules and regulations pertaining to his or her small accommodation business.

There is a sense that being law-abiding creates a better business environment and provides a 'level-playing field' in which businesses must operate. Strict compliance with fire safety regulations necessitates adjusting, codifying and implementing fire safety measures.

In order for this compliance strategy to work, the owner is reliant on the guest's acceptance of and obedience to the fire safety rules that underpin the fire safety regulations. The owner seeks compliance advice, particularly from outside consultants when the law becomes difficult to interpret and implement.

The compliance approach based on *professionalism* is one that extols competency and intellect. The owner's expertise governs how he or she operates the business and how he or she applies fire safety regulations. For the small accommodation business owner, owning a successful business goes hand-and-in-hand with being proficient in how the business is run, being knowledgeable about the various regulations and having the ability to implement them.

Typically, the owner will be a member of industry associations that govern the standards within the accommodation industry as well as providing their members with fire safety codes of practice. The owner will also call upon technical consultants and the fire safety regulatory agencies to assist him or her, from time to time, with fire safety compliance problems.

Although each of the above descriptive traits have been set out separately, it is probable that an individual could display a mixture of both compliant and noncompliant traits, sometimes at different times or even simultaneously. For example, a person may portray both dissident and professionalism traits when managing the business, dealing with the fire safety or building regulations.

However, it is more likely that when faced with decisions regarding fire safety compliance, the owner will display one particular trait more than the others. More importantly, compliant and non-compliant traits must be been seen in conjunction with other small business functions, as seen in figures 2 and 3.

By integrating small business management, fire safety practices and regulatory practices and the different types of compliant and non-compliant behaviour, a more complete picture of fire safety in the small accommodation business sector can be achieved. Moreover, by developing the above taxonomies, the descriptive data of fire safety practice and compliance is elevated to a more theoretical level.

	Economic Owner	Dissident Owner	Incompetent Owner
Management Practices	Generates profits by any means	Operates autonomously	Lacks relevant training and experience
Fire Safety Practices	Provides minimal investment	Is self-reliance and wants non- interference	Lacks knowledge of fire safety
Compliance Practices	Wealth is reliant on non-compliance	Non-compliance based on a rebellious disregard for the law	Non-compliance based on ignorance of regulatory duties

Figure 1	: ]	<b>Faxonomy</b>	of	non-com	pliant	behaviour
	•		~-		P	

# Figure 2: Taxonomy of compliant behaviour

	Socially Responsible Owner	Conforming Owner	Professional Owner
Management Practices	Applies charitable and stewardship principles	Adherence to regulations is a high priority	High level of relevant training and experience
Fire Safety Practices	Invests in fire safety	Stipulates that fire safety rules are to be followed	High level of knowledge of fire safety
Compliance Practices	Company's reputation and its survival are reliant on compliance with the fire safety regulations	Compliance based on conforming with the fire safety regulations	Compliance based on knowledge of regulatory duties

Conceptually, the taxonomies define patterns of individual responses to fire safety that are not wholly static but reflect both individual circumstances and wider social, political and economic considerations. There is also a normative aspect that underpins the taxonomies in that they provide a set of rules for fire safety practice and compliance that have an application in the enforcement of fire safety regulations and standards. However, theory relating to fire safety in the small accommodation business sector is in its infancy and requires further refinement.

## **Regulatory Framework and its Enforcement Agencies**

The third theme of this study is the impact of the regulatory framework and its enforcement agencies. Questions that elicited the most forthright responses from the small business interviewees were: the role of the government agencies, the delivery of government policies and services and how these impact on the small business sector.

As noted, the fire safety regulations and in particular, those pertaining to the accommodation industry, are to be found across various Acts and enforced by a number of authorities. As a result, enforcement and compliance has become unduly complex and unwieldy. The consequences of this situation are:

- Incompatible government policies
- Inconsistent application and enforcement of the regulations by different agencies
- A lack of integration of the regulations and their enforcement agencies
- Public confusion, and
- A low rate of compliance.

However, these issues are not confined to fire safety regulations but are part of the wider problems with the building legislation and its enforcement. There was a great deal of frustration expressed by almost all the participants over the ill-conceived reforms in the building industry, which have also had a detrimental impact on fire safety in the accommodation industry. The reoccurring complaint in this study and others was that small business owners felt disempowered from the regulatory decision-making process. There was also widespread dissatisfaction over the lack of consultation by regulatory agencies at both local and national levels.

The negative responses by the interviewees regarding the regulatory framework and its enforcement agencies can be condensed into four main points:

- 1. *Confusion over which agency to ask:* The small accommodation business owner is frequently confused about which regulatory agency to contact for assistance with a particular fire safety problem.
- 2. *Inconvenience of making inquiries:* Normally the business owner will contact a regulatory agency either by telephone or by travelling to the nearest office. In doing so, the business owner runs the risk of not being available for customers. In addition, convenient times for a small business owner to make inquires are

frequently outside normal working hours. Therefore, customer inquiry systems, such as Internet or 24-hour telephone answering services are more suitable for the small businesses.

- 3. *Quality of information*: One of the most contentious issues in this study was the lack of quality of information. Those operating in the accommodation industry require consistent and accurate information given by either regulatory agencies or business advisors. In particular, small accommodation business owners require industry- and workplace-specific advice.
- 4. *Obtaining non-judgemental, free advice:* There was a genuine concern among the business owners interviewed that if they contacted a regulatory agency over a compliance matter, they also ran the risk of being prosecuted by the agency. There was an overwhelming desire by those working in the small accommodation business sector to have easy access to free, non-judgemental compliance advice specifically for the small business sector. The common request from small business owners was to have a "one-stop-shop" for all business compliance advice.

However, regulating the small business sector presents certain problems for the fire safety regulatory agencies. The heterogeneous nature of the small accommodation business sector requires more effort and resources to achieve compliance than in medium-sized and large businesses. One can understand, therefore, why the New Zealand Fire Service has developed strategies that encourage a closer relationship between themselves and the small accommodation business sector as a way of ameliorating some of these problems.

There is, of course, an inherent relationship between the regulatory agencies and the small accommodation business sector as fire safety officers and building inspectors interact directly with the public in the course of their job and have substantial discretion in the execution of their work. Classic enforcement tools used by regulatory inspectors range from prosecution to education, advice and persuasion. Achieving regulatory compliance is more often than not contingent upon informal negotiation between the regulatory inspector and the employer rather than having punitive laws enforced in a formalised manner. However, this autonomy is accompanied by the dilemma of working at the sharp end of resource allocation, in a situation where demand far exceeds supply and where fewer small accommodation businesses are being inspected.

What makes the findings concerning the regulatory framework and its enforcement agencies interesting is that although the New Zealand fire-related fatality and injury rates are comparable to those in other similar countries, their regulatory responses have been different. The inference here is that the nature of the political and regulatory environment (i.e. unitarist versus pluralist), the type of law (i.e. non-interventionist versus interventionist), the level of industry involvement, and the ability

of the enforcement agents to carry out their duties provide a powerful backdrop to individual compliance behaviour.

In particular, the *type of fire safety law* has had an enormous impact on the compliance levels of the small accommodation businesses. International researchers argue that legislation, such as the New Zealand fire safety legislation, that is made up of numerous Acts, underpinned by a self-regulatory approach and enforced by multiple agencies is the worst possible combination (Brooks, 1988; Lamm, 1989; Gun, 1992; Woolfson, 1995; Gunningham, and Johnstone, 1998; Bohle and Quinlan, 2000).

Given the overwhelming empirical evidence, it is argued that the current fire safety legislation be reviewed with the intention of rationalising the legislation by *creating one Act, administered by one enforcement authority, covering all buildings.* The new law should set out broad fire safety standards, with more detailed building/industry specific requirements contained in the appending regulations. More importantly, there should be only one regulatory agency with sufficient resources to enforce the regulations effectively.

The same empirical evidence also shows that the application of a self-regulatory approach is a disastrous enforcement strategy (Brooks, 1988; Gun, 1992; Woolfson, 1995; Gunningham, and Johnstone, 1998; Bohle and Quinlan, 2000). Self-regulation requires fewer inspectors as the onus is entirely on the business owner to ensure that they have created a safe environment. The question is: "Will the owner know how or what is required to achieve compliance with fire safety regulations and will self-regulation actually encourage or even increase compliance with the fire safety regulations?" The point is nicely made by Brooks:

"But knowing that one has such an obligation (under the legislation) is one thing. Knowing how to comply is quite another." (1988:353).

Self-regulation is dependant on the notion of voluntary compliance by the business owner. This is particularly so when complying with codes of practice. Studies in both New Zealand and Australia have shown that voluntary compliance by owners, particularly those of small organisations, has been low (Toombs, 1988; Lamm, 1992). An example of this was the introduction of the New Zealand *Voluntary Code of Practice for Health and Safety Representatives and Health and Safety Committees* (1987). Studies showed that, on average, less than 20 percent of firms surveyed adopted the code on a voluntary basis and only a small proportion of those firms were prepared to institute all the provisions under the code (Moir, 1989; Mullen, 1990; Lamm, 1989, 1992).

To summarise, one of the most critical factors to influence fire safety compliance and practice amongst the small accommodation business sector is the problematic regulatory framework and its enforcement agencies. The findings expose a number of key issues that the New Zealand Fire Service and the TLA's will need to address.

## **Interrelationships Between the Various Groups**

The fourth theme of this study is that the relationship between the small accommodation business sector and the regulatory agencies is a key factor in fire safety compliance and practice. However, the suggestion that there is a simple binary relationship between the small accommodation business sector and the regulatory agencies does not portray the true situation. As noted previously, there are two primary regulatory agencies, proxy inspectors (or independent qualified consultants), accommodation business owners, technical consultants and industry associations providing advice to the business community. This complicated arrangement is not only a significant factor in fire safety compliance and practice, but it is also dogged by a number of problems.

First, the dynamics of these interrelationships will inevitably *create tensions*, which are apparent in findings. It is important, therefore, to recognise that each of the groups will often have *different interests*. That is, the small business owner will want regulations that do not detrimentally impact on their business, the New Zealand Fire Service will require compliance with regulations that will reduce the level of fire-related injuries and fatalities, the TLA's will require compliance with the building codes and fire safety consultants desire an environment which will sustain and grow their business. Although it is difficult to accommodate these different interests without compromising fire safety, formal tripartite structures, such as those that have evolved in employment relations, can be used to alleviate some of the tensions.

Second, the very nature of the fire safety *legislation fosters contradictions* in the way it is interpreted, administered, enforced and applied. Each of the various players (New Zealand Fire Service, the TLA's, consultants and the small business owners) hold differing perspectives and therefore will apply different solutions to fire safety problems. Each of the players have different reasons for being involved, different goals, different 'stakes' in the outcomes, and importantly, different forms of and access to resources. To a fire safety officer, a sprinkler system represents a *solution* to a fire safety problem; to an owner, the sprinkler system *is* the problem (eg cost, time consumption). What to the owner is a cost and inconvenience is a matter of personal protection to the visiting guest.

Third, in spite of the tensions between the different parties, the notion of being *partners*' in a common endeavour is a powerful discourse within fire safety. At a certain level important synergies emerge out of fundamentally divergent interests and as such there are significant implications for preventative fire safety strategies.

Also, because of the disperse nature of the fire safety regulations, there is a necessity to create and sustain complex partnerships around particular fire safety issues. Even with different agendas, the various partners can find common ground on which to stand, such as implementing smoke detectors in homes, or raising awareness of fire safety amongst farm and home hosts. However, it only takes one change in the operating environment of one or more of the 'partners' (e.g. downsizing of the New Zealand Fire Service or introducing IQP's) and the benefits of participation can evaporate. The basis for collaboration is also constantly changing, making it difficult to sustain a fire safety program that is driven by a objectives external to the interests of the voluntary participants.

Fourth, so much of the available energy has to be put into creating and sustaining the collaboration between the different groups and between individuals within each of the groups. The ability of each of the parties to *communicate effectively* with each other and their own members will rest on formal and informal communication structures and networks. Communication is dependent upon careful, time-consuming crafting of 'trust' between the regulatory agencies, fire safety consultants and small business owners and as we have seen, it can be easily undermined by a general culture that is characterised by a lack of communication, aggression, frustration and mistrust. Nonetheless, there is an overwhelming desire by nearly all the interviewees to instigate and develope communication between the different parties.

The interrelationships outlined in this study, therefore, can be seen as complex networks that are not necessary harmonious. While such conflicts experienced by the groups are not unusual, the situation is made more complicated by the fragmentation experienced between and within the different groups and the problematic fire safety legislation. As noted, the accommodation sector is made up of separate groups and sub-groups each with its own voice. The regulatory agencies also have diametrically opposing approaches — the New Zealand Fire Service still operates as a public sector department while many of the TLA's activities are more inline with private sector practices. Finally, the lack of resources, particularly the lack of time, experienced by all the parties not only inhibits compliance; it also inhibits effective and regular communication.

#### Summary

The focus in this section has been on *what actually takes place when applying fire safety regulations in small accommodation businesses*. That is, articulating the unique management and fire safety practices and eventual compliance of those operating a small accommodation business. There has also been a deliberate attempt to place fire safety in the context of a wider commercial framework while at the same time recognising the subjective reactions of individuals. In doing so it has been possible to identify the types of small accommodation businesses and the compliance behaviour of their owners.

The investigation of enforcement and compliance behaviour is also the study of interpretation — interpretation of the regulations by the small business owners, the regulatory agencies, the fire safety officers and the fire safety consultants. Although the act of interpretation is inherently inconsistent, the situation is further complicated by the inadequate fire safety legislation and the lack of dialogue and frequent tension between and within each of the various groups.

## 8. CONCLUSIONS AND RECOMMENDATIONS

The fundamental research question driving this study is "What are the key fire safety issues facing the owners/managers in small accommodation businesses?" The evidence in study shows that most of the issues stem from the inadequacies of the fire safety legislation and the inconsistencies in regulatory enforcement and administration. These weaknesses arise from a complex legislative system in which fire safety regulations can be found in several Acts and enforced primarily by two agencies - each with different approaches. The type of legislation – namely the use of acceptable solutions, performance-based criteria and self-regulation, further complicates the enforcement of the fire safety legislation (refer to Cramer and White, 1997). This type of legislation not only requires a high degree of competency by the regulatory agents but also requires consistency in its application and the delivery of public information. In addition, the use of acceptable solutions and performance-based criteria is predicated on *self-regulation* — an enforcement strategy that has been *discredited by empirical research*.

Moreover, as the findings clearly show, these weaknesses in the legislation have resulted in extra costs for owners of small accommodation businesses and have created a great deal of frustration and animosity towards the regulatory agencies. The breakdown in the relationship between those operating a small business in the accommodation industry and the regulatory agencies has the potential to diminish the level of compliance as well as result in fire-related injures and fatalities.

The purposes of this study have also been to document the key factors that influence compliance and non-compliance in small accommodation businesses, relationship between the major stakeholders as well as their roles. It is also the intention of this study to provide a comprehensive picture of fire safety in small accommodation businesses in the tourist sector *that can be applied to small businesses in other sectors*. Thus, based on the findings it is possible to draw a number of conclusions.

The first conclusion is that fire safety compliance and practice in the small business sector *does not take place in a vacuum*. Fire safety is more than just the regulations governing smoke detectors and evacuation plans: it is an integral part of operating a small accommodation business. Variables such as the type of business, access to resources, the relationship with the regulatory agencies and other small business advisers, etc. are recognised as having an influence on the processes and outcomes of fire safety practice and compliance. Solutions and theories applied to fire safety in the small business sector are meaningless unless they incorporate a network of multiple factors. Therefore, when trying to research or implement enforcement or prevention strategies in the small business sector, it is more useful to include external advisors, such as industry organisations, to achieve the desired outcome.

The second conclusion is that there is *not one factor* that influences fire safety compliance and practice in the small accommodation business sector, but a range of different factors that vary over time and rotate in their level of priority. Fire safety and practice in small accommodation businesses can be interpreted and explained by applying a conceptual framework that links the legislation and the regulatory enforcement with the small business management and fire safety practices and compliance. Excellence in fire safety practice and compliance in a small business is reliant on excellence in management. Ideally, there should be equilibrium between excellence in management and fire safety compliance and practices as a lacuna in one area has a compounding effect on the other. Conversely, poor management skills will often coincide with poor fire safety practice and non-compliant behaviour.

The third conclusion is that fire safety compliance and practice in the small business accommodation sector *is not static*. At a macro level, events both overseas and in New Zealand have impacted on the country's tourist numbers both negatively and positively. There have also been dramatic shifts in the economy and legislation during the last decade. New Zealanders have witnessed regulatory reforms concerning building and fire safety in which the legislation has shifted from one that was primarily prescriptive to one that relies more on the self-management of regulations and codes. As part of these reforms, TLA enforcement has changed from a public sector model to a private sector model with an emphasis on profit driven objectives and "farmed-out" enforcement. Reforms to the building legislation have not only impacted on the quality of building design and construction, but also have enormous implications for fire safety in general.

At the level of the small accommodation business, operations are conducted within a fluctuating tourist market, which typically sees owners of small businesses function on a "just-in-time" basis in all areas, from the provision of guest beds to installing fire safety measures. Small accommodation businesses are much more sensitive to changes in the local, national and global markets than are large, multi-national companies. These fluctuations have not only had a direct impact on business profits and subsequent effects on fire safety compliance and practice, but have also created ambiguities regarding the type of evacuation regulation to be implemented (i.e. providing less than 5 guest beds requires an evacuation procedure; providing more than 5 guest beds requires an evacuation scheme). In addition, the small business owner's vision of the world is that they operate on an uneven playing field, with financial and regulatory institutions constructed on a large business paradigm.

Furthermore, this study shows that implementing fire safety enforcement or preventative strategies in the small accommodation business sector would be better served by adopting a broad, more non-traditionalist approach to achieve the desired outcome. For example, using industry and business associations to disseminate information. Also, when conducting research in the small business sector, it is more useful to adopt data collection methods, such as face-to-face interviews, that will elicit a good response rate and rich, contextual data compared to conventional methods, such as survey questionnaires. Finally, given that the small business sector comprises a substantial part of the business population, it is no longer acceptable for legislators and fire safety researchers to treat this sector the same as the large business sector – or worse, to ignore it.

## Recommendations

Based on the findings in this study, the following recommendations are proposed:

- It is recommended that the *legislation* covering fire safety be urgently reformed so that it is consistent with other safety legislation in terms of the structure (one act enforced by one authority covering all buildings) as well as powers of enforcement, such as the level of fines. It is advocated that the New Zealand Fire Service be the sole agency responsible for enforcing fire safety regulations and promoting fire safety practices. It is also recommended that areas of confusion in the legislation should be eliminated where possible, for example the confusion between an evacuation scheme and an evacuation procedure.
- It is recommended that the New Zealand Fire Service give priority to raising the level of fire safety awareness and the level of fire safety compliance amongst *the small business community*. It is also recommended that extra resources be targeted for this purpose. In addition, it is recommended that the New Zealand Fire Service continue to have formal and informal communications with the small business sector and continue to develop partnerships with industry associations representing small businesses. The New Zealand Fire Service should also continue their strategy of advising and enforcing fire safety regulations through sector-specific and industry-based information. The dissemination of information could take various forms regular site visits and the use of intermediaries to distribute audio-visual and written material, etc. The research shows that such a strategy will result in an increase in the level of long-term compliance, improve fire safety standards and promote a more constructive relationship with the small business sector.
- It is recommended that when creating fire safety regulatory policy and enforcement strategies, such as fire safety standards audits, consideration should be given to the *different types of small businesses* and *the factors affecting small business sector*. It is stressed that these factors cannot be looked at in isolation nor should they be treated as constant.

## References

Adams, M.; Burton, J.; Butcher, F.; Graham, S.; McLeod, A.; Rajan, R.; Whatman, R.; Bridge, M.; Hill, R. and Johri, R (2002) *Aftermath: The Social and Economic Consequences of Workplace Injury and Illness*, Department of Labour and Accident Compensation Corporation.

AMI (2002) `Submission to the Building Act Review' Department of Internal Affairs, Submission No. 13, Wellington.

Anderson, A. (1991) *New Business Financing Survey*. A report for the Ministry of Commerce. Government Printer, Wellington.

Australian Bureau of Statistics and New Zealand Department of Statistics (1993) *Australian and New Zealand Standard Industrial Classification*. Australian Government Publishing Service, Canberra.

Australian Commonwealth Department of Tourism (1995) *Building for Backpackers – Guidelines for Backpacker Accommodation*, Commonwealth of Australia, Canberra.

Barnes, P. (2001) "Regulating safety in an unsafe world (risk reduction *for* and *with* communities)" in *Journal of Hazardous Materials* 86(1-3):25-37.

Bell, C. (1996) (Chair) *Time for Business*. Report of the Small Business Deregulation Task Force, Department of Industry, Science and Technology. Australian Government Publishing Service, Canberra.

Bentley, T.; Meyer, D.; Page, S.; Chalmers, D. (2001) `Recreational tourism injuries among visitors to New Zealand: an exploratory analysis using hospital discharge data' in *Tourism Management*, 22(4): 373-381.

Bickerdyke, I. and Lattimore, R. (1997) *Reducing the Regulatory Burden: Does Firm Size Matter?*, Staff Research Paper, Industry Commission, Melbourne.

Bohle, P. and Quinlan, M. (2000) *Managing Occupational Health and Safety: A Multidisciplinary Approach*, eds, , Macmillan, Sydney.

BRANZ (2002) *Cost Effective Domestic Fire Sprinkler Systems*, Fire Research Report, New Zealand Fire Service Commission, Wellington.

Brooks, A. (1988) 'Rethinking Occupational Health and Safety Legislation', *Journal of Industrial Relations (Society of Australia)* 30: 347–362.

Budget Backpacker Hostels (NZ) http://www.backpack.co.nz.

Building Industry Authority `2000/01 Financial Review of the Building Industry Authority' Report of the Government Administration Committee, Wellington.

Building Industry Authority (2002) 'Fire Safety Systems in Building Design' www.bia.govt.nz.

Bukowski, R.W. (1996) 'Risk and Performance Standards' in the Proceedings of *Fire and Risk Hazard Assessment Symposium*, San Francisco.

Cameron, A. F. (1993) 'Are Chartered Accountants the Main Advisers to Small Business?' *Accountants' Journal*, 72(1):59–61.

Cameron, A. F. and Massey, C. (1999) *Small and Medium–sized Enterprises: A New Zealand Perspective*, Longman, Auckland.

Caple, D. (1996) Identification of the Most Effective Methods for Disseminating Know Solutions Across Industries Report. Sydney, WorkSafe Australia.

Chow, W. and Lui, G. (2002) "A proposed fire safety ranking system for karaoke establishments and its comparison with NFPA - fire safety evaluation system" in *Building and Environment*, 37(6): 647-656.

Cramer, S. and White, R.H. (1997) 'Fire Performance Issues' paper presented at Civil and Environmental Engineering, University of Wisconsin-Madison, Wisconsin.

Cropp, D. (1991) *Fatal Fires in New Zealand: Where When and Why they Occur* New Zealand Fire Service Commission, Wellington.

Curran, J. and Storey, D. (1993) (eds) *Small Firms in Urban and Rural Locations*. Routledge, London.

Deakin, G. (1999) "Fire Safety Standards - help or hindrance" in *Fire Safety Journal*, 32:103-118.

Department of Internal Affairs (2002) 'Ministerial Briefings, 2002', www.beehive.govt.nz

Duncanson, M.; Woodward, A.; and Papaarangi, R. (2002) Socioeconomic deprivation and fatal unintentional domestic fire incidents in New Zealand 1993-1998' in *Fire Safety Journal*, March, Vol 37(2):165-179.

Eakin, J. (1992) 'Leaving It Up To The Workers: Sociological perspective on the management of health and safety in small workplaces', *International Journal of Health Services*, 22(4):689–704.

Eakin, J. and Semchuk, K. (1988) *Occupational Health and Safety in Small Businesses*. Occupational Health and Safety Heritage Grant Program. University of Toronto, Toronto.

Eakin, J., Lamm, F. & Limborg, H.J. "International Perspective on the Promotion of Health and Safety in Small Workplaces" in *Systematic Occupational Health and Safety Management: Perspectives on an International Development*, eds K. Frick, P.L. Jensen, M. Quinlan, & T. Wilthagen, Pergamon, Oxford, 2000.

Eisenhardt, K.M. (1989) 'Building Theories from Case Study Research', *Academy* of Management Review 14(4):532–550.

Engestrom, Y. (1996) 'Innovative Learning in Work Teams: Analyzing Cycles of Knowledge Creation in Practice.' Paper presented at the Conference entitled 'Work and Learning in Transition: Toward a Research Agenda' San Diego, Jan. 22-23.

Fahy, R. F. and Proulx, G. (2002) "A study of human behaviour during the World Trade Centre Evacuation" in *National Fire Safety Prevention Journal*. March/April: 59-67.

Ffowcs-Williams, I. and Koziarski, A. (2000) 'Promoting Good Relationships Between Local Authorities and their Business Communities' A report prepared for Local Government New Zealand, Cluster Navigators, Wellington.

de Gelder, J. A. (1997) "Conceptual modelling of building regulation knowledge" in *Artificial Intelligence in Engineering*, 11:273-284.

Graham, T. L. and Roberts, D. J. (2000) "Qualitative overview of some important factors affecting the egress of people in hotel fires" in *International Journal of Hospitality Management* 19(1):79-87.

Groner, N. E. (2001) 'Intentional systems representations are useful alternatives to physical systems representations of fire-related human behaviour' in *Journal of Safety Science*, 38(2): 85-94.

Guardian Alarms (2002) 'Submission to the Building Act Review' Department of Internal Affairs, Submission No. 9., Wellington.

Gun, R.T. (1992) 'Regulation or Self-regulation: Is Robens-style legislation a formula for success?' *Australian and New Zealand Journal of Occupational Health and Safety*, 8(5):383–388.

Gunningham, N. and Johnstone, R. (1998) *The Legal Construction of OHS Management Systems*, International Workshop, Policies for Occupational Health and Safety Management Systems and Workplace Change, Amsterdam.

Gunningham, N.; Sinclair, D. and Burritt, P. (1998) *On-the-spot Fines and the Prevention of Injury and Disease: The experience in Australian Workplace.* National Occupational Health and Safety Commission. Australian Government Publishing Service, Canberra.

Hawkins, K. (1989) "Fatcats" and Prosecution of Regulatory Agency: A Footnote on the Social Construction of Risk', *Law and Policy*, July, 11(3):370:391.

Hershfield, V. (2002) "The worst part was the fear of the unknown" in *National Fire Safety Prevention Journal*. March/April: 64-67.

Hill, R.; Capper, P.; Hawes, K.; Wilson, K. and Bullard, T. (1998a) `Activity Theory and the Study of Work and Organisations: Challenges and Insights from New Zealand Research.' Paper presented at the Panel Discussion on `Activity Theory and the Study of Work and Organisations', ISCRAT Conference, Denmark, 5-11, 1998.

Hill, R.; Capper, P.; Hawes, K. and Wilson, K. (1998b) `A Developmental Work Research (DWR) Study of Team and Organisational Learning at DHL Worldwide Express.' Paper presented at the 8<sup>th</sup> Labour Employment and Work Conference, Victoria University, Wellington, 26-27 November.

Holliday, R. (1995) *Investigating Small Business Firms: Nice Work?* Routledge, London.

Holmes, S. and Kelly, G. (1989) 'Methodological Weaknesses of Australian Small Business Research', *Accounting and Finance*, 29(1): 21–31.

Homewood, J. (1982) 'OH Services to Small Businesses', *Occupational Health*, 34(4):180–187.

Hopkins, A. and Hogan, L. (1998) 'Influencing Small Business to Attend to Occupational Health and Safety', *Journal of Health Safety – Australia New Zealand*, 14(3):237–244.

Hotel and Motel Fire Safety Act of 1990 (PL 101-391), www.usfa.fema.gov.

Irwin, K. (1997) 'Domestic Fire Hazard in New Zealand' Fire Engineering Report 97/5, University of Canterbury.

Kagan, R. (1989) 'Editor's Introduction: Understanding Regulatory Enforcement', *Law and Policy*, 11(2): 89–119.

Kagan, R. and Scholz, J. (1984) 'The criminology of the corporation', *Enforcing Regulation*, eds. K. Hawkins and J. M. Thomas, Kluwer–Nijhoff, Amsterdam:67–95.

Knuckey, S. and Johnston, H. (2002) *Firm Foundations*, Ministry of Economic Development, Wellington.

Lamm, F. (1989) Persuasion or Coercion – Enforcement Strategies in Occupational Safety and Health. MPhil Thesis. University of Auckland, Auckland.

Lamm, F. (1992) 'Persuasion or Coercion – Enforcement Strategies in Occupational Safety and Health', J. Deeks and N. Perry, (eds) *Controlling Interests: Business, the State and Society in New Zealand*. Auckland University Press, Auckland:56–176.

Lamm, F. (1997) 'Small Businesses and OSH Advisors', *British Journal of Safety Science*, 25(1):153–161.

Lamm, F. (1998) Occupational Health and Safety in New South Wales and Queensland Small Businesses: What can be done to reduce the lack of awareness and raise the level of compliance in Australian small businesses? Project funded by the National Institute of Occupational Safety and Health, Centre of Industrial Relations, University of New South Wales.

Lamm, F. (2002) 'Occupational Health and Safety in Small Businesses' in *Occupational Health and Safety in New Zealand: Contemporary social research*, ed. M. Lloyd, Dunmore Press, Wellington.

Lamm, F., Ritchie, M., Rutherford, C. (1998), A Study of New Zealand Residential Fires, New Zealand Fire Service, Wellington.

Lloyd, M. and Roen, K. (2001) *Fire Safety as an Interactive Phenomenon*", Research Report Number 9, New Zealand Fire Service Commission, Wellington.

MacMillan, K.; Curran, J.; Downing, S. and Turner, I. (1989) *Consultation with Small Business*, Research Paper No. 66 Department of Employment, London.

Mayhew, C. (1997) Barriers To Implementation of Known Occupational Health and Safety Solutions in Small Businesses. Division of Workplace Health

and Safety and National Occupational Health and Safety Commission, Sydney.

Mayhew, C. (1999) 'Identifying Patterns of Injury in Small Businesses: Piecing together the data jigsaw', in C. Mayhew and C. Peterson (eds) *Occupational Health and Safety in Australia*. Allen and Unwin, Sydney.

Mayhew, C.; Young, C.; Ferris, R. and Harnett, C. (1997) An Evaluation of the Impact of Targeted Interventions on the OH&S Behaviours of Small Building Industry Owners/Managers/Contractors. Division of Workplace Health and Safety and National Occupational Health and Safety Commission, Canberra.

Miles, M. and Huberman, A. 1984) *Analyzing Qualitative Data: A Source Book for New Methods.* Sage, California.

Ministerial Panel on Business Compliance Costs, 2001, Wellington.

Moir, R. (1989) 'Safety Reps Code Not Well Known', *Journal of Occupational Safety and Health*, 2:20–21.

Mullen, Elizabeth, A. (1990) 'Voluntarism in occupational health and safety: a New Zealand response', *NZ Journal of Industrial Relations*, 15(2):129–143.

New Zealand Fire Service Commission (1998) 'Towards 2000', New Zealand Fire Service Commission, Wellington.

New Zealand Fire Service Commission (1999) 'Statement of Strategic Directions', New Zealand Fire Service Commission, Wellington.

New Zealand Fire Service Commission, (2001) `Memorandum of Understanding with the New Zealand Association for Farm and Home Hosts', New Zealand Fire Service Commission, Wellington.

New Zealand Fire Service Commission, (2002) `Code of Practice for the New Zealand Association for Farm and Home Hosts', New Zealand Fire Service Commission, Wellington.

New Zealand Fire Service Commission, (2003) `Fire Statistics 2000-2001', New Zealand Fire Service Commission, Wellington.

Neuman, W. L. (1994) *Social Research Methods: Qualitative and Quantitative Approaches*, Allyn & Bacon, Massachusetts.

Notake, H.; Ebihara, M. and Yashiro, Y. (2001) `Assessment of legibility of egress route in a building from the viewpoint of evacuation behaviour' in *Safety Science*, 38(2): 127-138.

Pyke, F. and Sengenberger, W. (1992) *Industrial districts and local economic regeneration*. International Institute for Labour Studies, Geneva.

Qualmark (2002) `Star Grade Definitions' http://www.qualmark.co.nz/

Queensland Fire and Rescue Authority (2000) 'Building Fire Safety in Queensland Budget Accommodation' Ministry for Emergency Services, Parliament House, Brisbane.

Queensland Fire and Rescue Authority (2000) *Report Resulting from the Fire in the Palace Backpackers Hostel, Childers,* Queensland Fire and Rescue Authority, Queensland.

Rainnie, A. (1989) Industrial Relations in Small Firms: Small Isn't Beautiful. Routledge, London.

Rasmussen, E. and Lamm, F. Rasmussen, E. & Lamm, F. (2001) An Introduction to New Zealand Employment Relations, Longman Paul, Auckland.

Robens, Lord (1972) *Report of the Committee on Safety and Health at Work*. HMSO, London.

Roen, K. and Lloyd, M. (2002) *Domestic Fire Prevention: Vulnerability and the Translation of Safety Knowledge*, Research Report, New Zealand Fire Service Commission, Wellington.

Scholz, John T. (1984) 'Regulatory Enforcement', *Law and Society Review* 18(2):179–224.

Scholz, J. and Gray, W. (1990) 'OSHA Enforcement and Workplace Injuries: A Behaviour Approach to Risk Assessment', *Journal of Risk and Uncertainty*, 3:283–305.

Scott, M.; Roberts, I.; Holroyd, G. and Sawbridge, D. (1989) *Management and Industrial Relations in Small Firms*, Research Paper No.70, Department of Employment, London.

Sherry, J. (1995) 'Innkeepers May Still Lose Liability Suits' *Cornell Hotel and Restaurant Administration Quarterly*, April:18-19.

Statistics New Zealand (2001) *Business Activity Statistics*, Catalogue Number 01–406. Government Printer, Wellington.

Statistics New Zealand (2002) "Accommodation Survey, April 2002" *www.stats.govt.nz.* 

Storey, D. J. (1994) Understanding the Small Business Sector. Routledge, London.

Toombs, S. (1988) 'Causes of Coal Mines Accidents – Worker Autonomy and the Myth of the Small Firm', *Industrial Relations Journal* 19(3): 248–251.

Tourism New Zealand (2002) 'Visitor Arrivals: 2002'. www.tourisminfo.govt.

Travelwise (2001) `Travelwise Magazine', www.travelwise.co.nz.

Woolfson, C. (1995) *Deregulation: The Politics of Health and Safety*. Computer Publishing Unit of the University of Glasgow, Glasgow.

Worthen, H. (2002) `Studying the workplace: considering the usefulness of activity theory' University of Illinois, Chicago Labour Education Program, Chicago.

Yin, R. K. (1993) *Case Study Research – Design and Methods*. Applied Social Research Methods Series vol. 5. Sage, Newbury Park.

# Appendix 1

# **Fire Safety Enterprise Questionnaire.**

## Dear Respondent,

We are a research team from the University of Auckland endeavouring to identify issues surrounding fire safety compliance and practice. We would be most grateful if you would take a few minutes of your time to complete this questionnaire and email/post it back to us at NZFSresearch@auckland.ac.nz. Please use a "v" to indicate your answer. If you have any queries, please do not hesitate to contact the project leader, Dr F. Lamm by either return email or on 3737-599, extension 87201.

Thank you

## Section 1. Background Information

What is your position/designation?

What type of business do you operate or manage? For example, bed and breakfast, homestay, backpacker hostel, motel, hotel, etc.

## Section 2. Business operation.

1.	How long have you been operating this business?			
	Less than one year	One to three years		
	Three to five years	More than five years		

- 2. Have you owned another small accommodation business prior to this one? Yes No
- In total, how many years experience do you have in the small accommodation industry? Less than one year
   One to five years

Less than one year	One to rive years
Five to ten years	More than ten years

4. Do you have any formal qualifications that are directly related to the small accommodation?

Yes

No

## Section 3: Occupancy rate and services offered

- How many beds do you have? Less than five beds Five to ten beds Eleven to twenty beds Twenty to thirty beds Thirty one to fifty beds More than fifty beds
   How many rooms do you have? Less than five rooms Five to ten rooms Eleven to twenty rooms More than twenty rooms
- 3. Do any of your rooms have any of the following?
  - Yes –all Yes-some No-none
  - Tea/coffee making facilities
  - Full kitchen facilities
- 4. Do you provide shared kitchen facilities? Yes No

## Section 3: Employees

- How many full time staff do you employ? (Full time = working more than 30 hours per week)
   None One or two Three to five More than five
- 2. How many part time or casual staff do you employ? None One or two Three to five More than five

# Section 4: Legal Obligations.

- 1. What are the laws or regulations that most affect you and your business?
- 1. Which ones are the most difficult to understand and to deal with?
- 2. What impact have they had on your business?

3. Are you aware of your responsibilities under the Fire Service Act 1975 (section 21A) and The Fire Safety and Evacuation of Building Regulations 1992?

Yes-I am very aware Yes-I am somewhat aware No-I am not aware

- Are you required under the Fire Safety and Evacuation of Building Regulations 1992, to have an evacuation procedure?
   Yes No please go to question 7
- 6. Which of the following requirements does your building(s) comply with? (Please mark with an "x").
  - We have a procedure for the safe, expeditious and efficient evacuation of occupants from each building on our premises.
  - This evacuation information is readily available to all occupants of the buildings.
  - Information about fire exit routes is readily available.
  - Information about fire alarms is readily available.
  - Where appropriate, information about firefighting equipment is readily available.
  - Notices are fixed in appropriate places to identify the evacuation procedure and fire exit routes.
  - The owner of the building ensures escape routes are kept clear of obstacles at all times.
  - Smoke and fire control doors are not kept open by any method other than holdopen devices that comply with the New Zealand Building Code.
  - Exit doors are not locked or block.
  - Stairwells and passageways, which are designed for means of escape from fire, are not used for storage or where refuge can build up.
- 7. Are you required under the Fire Safety and Evacuation of Building Regulations 1992, to have an evacuation scheme?

Yes No - please go to question 9

- 8. At which stage of the evacuation scheme process is your business?
  - The New Zealand Fire Service has approved our evacuation scheme.
  - We must meet requirements requested by the New Zealand Fire Service following their inspection and trial evacuation at our premises.
  - We have lodged our draft evacuation scheme and are awaiting inspection by the New Zealand Fire Service.
  - We are in the process of preparing our draft evacuation scheme application.
  - We have not begun this process.
- 9. Are you familiar with the Memorandum of Understanding between the NZ Fire Service and the Association Farm and Home Hosts?

Yes – I have read it Yes – I have heard of it No- I have not heard of it

10. If you are aware of the Memorandum of Understanding between the NZ Fire Service and the Association Farm and Home Hosts *Are you farm or home host business?* Yes No

# Section 5: Fire Safety

1.	Do you have guest rule related to any of the following?		
		Yes	No

- Smoking inside buildings, specifically sleeping areas
- Use of candles
- Use of open flames (e.g.: fire places)
- Use of heating (e.g.: gas, electric, oil column heaters)
- Use of alcohol on the premises
- Use of drugs on the premises
- 2. Irrespective of your legal requirements, you have any form of smoke detection system? Yes No – please go to question 4
- 3. Which of the following smoke detector systems do you use on your premises?
  - Battery operated smoke detectors
  - Interconnected battery operated smoke detectors
  - An interconnected smoke detector system connected to 240 volt power supply
  - A sprinkler system
- 4. Have you ever experienced an incident of fire when working in the small accommodation industry? Yes No
- 5. Have you ever used any of the following as a source of information about fire safety?
  - New Zealand Fire Service
  - A private fire safety consultant
  - Local or regional body council
  - Industry Association
  - Occupational Safety and Health Service
  - Department of Labour
  - Your accountant
  - Public information services (e.g.: BizInfo, Citizens Advise Bureau)

- 6. In your view, what would help you to:
  - a) provide better fire safety measures:
  - b) understand the regulations pertaining to fire safety and
  - c) assist you to meet your legal obligations to fire safety?
- 7. Please feel free to add any other comments:

If you would like us to send you a copy of the executive summary, please indicate by an "x".

Thank you for participating.