

PERCEPTIONS OF BUSINESS OPPORTUNITY
IN THE
KATHERINE RETAIL SECTOR
AS A RESULT OF THE
TINDAL RAAF BASE DEVELOPMENT

by

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SYNOPSIS

This study on perceptions of business opportunity in the Katherine retail sector as a result of the Tindal RAAF Base Development provides an interesting Australian perspective to the study of behavioural economic geography. The perceptions were ascertained by means of a questionnaire survey conducted in June 1987.

The central aim of the study was to examine the perceptions of business opportunity that may have evolved within the Katherine retail sector as a result of the Tindal RAAF Base Development. Sustaining the central aim, the study also presents a detailed examination of the nature of the Katherine retail sector, as well as the characteristics of the owners and/or managers of those establishments.

The impact of the new Woolworths store in Katherine, opened in July 1987, is also taken into consideration. Some interesting results regarding the respondents motivations and concerns in exploiting any perceived business opportunities are identified. The study also highlights some unusual characteristics of the Katherine township and how they affect economic behaviour.

The study also assesses the effectiveness of the amount of consultation the Federal Authorities have had with the Katherine community, in developing the 'official' perceptions on what impact the Tindal RAAF Base is having, and is going to have, on Katherine.

Finally, the dissertation is drawn together and discussed within the broader context of the development of Northern Australia. This discussion illustrates the important role that behavioural geography can play in improving awareness and bettering the controlled development of physical and social environments.

TABLE OF CONTENTS

	<u>Page</u>
Title Page	1
Synopsis	ii
Table of Contents	iii
List of Figures	vii
List of Tables	x
List of Plates	xi
Acknowledgements	xii
Statement of Originality	xiii
Abbreviations	xiv
 CHAPTER ONE INTRODUCTION	
1.1 Introduction	1
1.2 Behavioural Geography	1
1.3 Economic Psychology and Economic Behaviour	3
1.4 Behavioural Economic Geography and Perceptions of Business Opportunity	6
1.5 Reasons for the Selection of Katherine	7
1.6 Aims of this Study	8
1.7 Organisation of the Thesis	9
 CHAPTER TWO KATHERINE: A SERVICE CENTRE	
2.1 Physical Characteristics	10
2.1.1 Introduction	10
2.1.2 Climate	10
2.1.2.1 General	10
2.1.2.2 Rainfall and Evaporation	14
2.1.2.3 Temperature and Humidity	14
2.1.3 Transport and Communications Infrastructure	16
2.2 Historical Development	17
2.2.1 History of Katherine	17
2.2.2 History of Tindal Airbase	20
2.3 Demographic Profile	22
2.3.1 Composition	22
2.3.2 Growth	23
2.3.3 Tourism	24

	<u>Page</u>
2.4 The Economic Base of Katherine	25
2.4.1 Occupational Status	25
2.5 Description of the Katherine Business and Retail Sectors	26
2.5.1 Spatial Distribution	26
2.5.2 Hierarchy of Power	32
CHAPTER THREE THE TINDAL RAAF BASE DEVELOPMENT	
3.1 Introduction	33
3.2 Overview of the Master Plan	36
3.3 Perceived Effects on Katherine	41
3.3.1 Population Projections	42
3.3.1.1 Stage 1 Population	42
3.3.1.2 Stage 2 Population	44
3.3.2 Social Effects	45
3.3.3 Economic Impact	46
3.3.3.1 Construction Phase Expenditure	47
3.3.3.2 Annual Operational Expenditure	48
3.4 Conclusion	49
CHAPTER FOUR METHOD OF INVESTIGATION	
4.1 Introduction	51
4.2 Information Harvesting	51
4.2.1 Selection of Survey Population	51
4.2.2 Selection of Survey Technique	52
4.2.3 The Questionnaire	53
4.4.4 Questionnaire Implementation	55
4.3 Proposed Evaluation of Particular Types of Questions	55
4.3.1 General	55
4.3.2 Australian Standard Industrial Classification Group Code Categories	56
4.3.3 Linear Attitude Scale Questions	57

	<u>Page</u>
4.3.4 Ranking of Concerns	57
4.3.5 Open Ended Questions	58
CHAPTER FIVE RESULTS AND DISCUSSION OF THE SURVEY DATA	
5.1 Introduction	59
5.2 Inventory of the Katherine Retail Sector	59
5.2.1 The Katherine Retail Sector	59
5.2.2 The Owners and/or Managers of the Katherine Retail Sector	64
5.2.3 Concerns and Problems	69
5.2.3.1 General	69
5.2.3.2 Construction Phase	70
5.2.3.3 Operational Phase	71
5.2.4 Spatial Attitudes and Preferences	72
5.3 Perceptions of Business Opportunity	74
5.3.1 Awareness Measures	74
5.3.2 Perceptions of Opportunity with respect to the Construction Phase	77
5.3.3 Perceptions of Opportunity with respect to the Operational Phase	81
5.4 Woolworths	90
5.4.1 Introduction	90
5.4.2 Perceived Effects and Actions	92
5.4.3 General Attitudes	96
5.5 Consultation and Information	99
CHAPTER SIX A SYNTHESIS OF FINDINGS	101
6.1 Introduction	101
6.2 Development of Northern Australia	101
6.3 Perceptions of Business Opportunity in the Katherine Retail Sector	107
6.4 Assessment of the 'Official' Perceptions	112
6.5 Conclusion	114

	<u>Page</u>
CHAPTER SEVEN CONCLUSION	
7.1 Introduction	115
7.2 Aims of the Study: An Assessment	115
7.3 Limitations of the Study	116
7.4 Relevance of the Study	116
7.5 Suggestions for Further Research	118
7.6 Conclusion	120
REFERENCES	122
APPENDICES	
I The Letter of Introduction and the Questionnaire	132
II Australian Standard Industrial Classification 1978 Edition	151
III Australian Standard Industrial Classification Group Code Categories Used In This Study (To be Used In Conjunction With Chapter Five)	156

LIST OF FIGURES

<u>Figure</u>	<u>Caption</u>	<u>Page</u>
1.1	The Behavioural Environment as Perceived as a Component of the total Objective Environment.	2
2.1	The Northern Territory of Australia.	11
2.2	Average Rainfall Figures for Katherine.	15
2.3	Average Temperature Figures for Katherine.	15
2.4	Average Humidity for Katherine.	15
2.5	Age/sex structure for Katherine and Australia as a whole.	22
2.6	Projected annual population levels for Katherine 1982 to 1990.	24
2.7	Spatial distribution of the Katherine business sector.	28
3.1	Tindal RAAF Base in relation to Katherine township.	34
3.2	Layout of the Tindal RAAF Base Development.	38
5.1	Proportion of Retail Establishments Interviewed per ASIC GCC.	60
5.2	Length of Establishment of the Retail Establishments Interviewed.	61
5.3	Type of Establishments Interviewed.	61
5.4	Origin of Stock for the Retail Establishments Interviewed.	62
5.5	Freight Means Employed by the Retail Establishments Interviewed.	63
5.6	Turnover of the Retail Establishments Interviewed.	63
5.7	Number of Years the Respondents have been Living in Katherine.	65
5.8	Number of Years the Respondents have been Living in the Northern Territory.	65
5.9	Comparison of the Average Number of Years Spent in Katherine and the Northern Territory per Respondent in each of the ASIC GCC's.	66
5.10	Age Group Distribution of the Respondents.	67
5.11	Proportion of Male to Female Respondents.	68

<u>Figure</u>	<u>Caption</u>	<u>Page</u>
5.12	Attitude to the Respondents' Current Location for his/her Establishment.	73
5.13	Perceived Best Location as a Function of Current Location.	74
5.14	Respondents Answers to the Question of the Number Houses Being Built in Katherine east for RAAF Personnel.	75
5.15	Scores to the Question of which Amenities will be Available on Base at Tindal.	76
5.16	Perceptions of the Overall Effect that the Tindal RAAF Base will have on the Katherine Retail Community.	77
5.17	The Perceived Effect the Construction Phase has had on the Respondents Business.	78
5.18	Perceptions of Business Opportunity Arising from the Construction Phase.	79
5.19	Perceptions of the Best Way to Exploit the Business Opportunity Associated with the Construction Phase of the Tindal RAAF Base Development.	79
5.20	Perceived Effect of the Operational Phase on the Respondents Business.	82
5.21	Perceptions of Business Opportunity Arising from the Operational Phase.	82
5.22	Perceptions of the Best Way to Exploit the Business Opportunity Associated with the Operational Phase of the Tindal RAAF Base Development.	83
5.23	Preferred Time Frame for Exploitation of the Perceived Business Opportunity.	86
5.24	Preferred Outlay for Exploitation of the Perceived Business Opportunity.	87
5.25	Reasons for not Exploiting the Perceived Business Opportunity.	88
5.26	Perception of the Effect the Woolworths Store and Complex will have on the Number of Customers Coming to the Respondents Location.	92
5.27	Actions that the Respondent would take to Counter the Effect the Woolworths Store and Complex will have on Custom to their Establishment.	93
5.28	Perception of the Effect the Woolworths Store will have on Competition on Commodities against the Respondents Store.	94

<u>Figure</u>	<u>Caption</u>	<u>Page</u>
5.29	Actions that the Respondents would take to Counter the Influence the Woolworths Store will have on Competition on Commodities.	95
5.30	Perceptions of what Overall Benefit the Woolworths Store will have on the Retail sector in Katherine.	96
5.31	Responses to the Question of Whether the Respondent feels that the Opening of the Woolworths Store is the Beginning of a Trend Towards Larger Retail Establishments in Katherine.	98

LIST OF TABLES

<u>Table</u>	<u>Caption</u>	<u>Page</u>
3.1	Annual Operational Expenditure - Stage 1.	48
4.1	ASIC GCC's used in this Study.	56
5.1	Comparison Between the Education Level Achieved by the Respondents and the Katherine Population Overall.	68
5.2	Ranking of General concerns/problems within the Katherine Region.	69
5.3	Ranking of Concerns/Problems Associated with the Construction Phase of the Tindal RAAF Base Development.	70
5.4	Ranking of Concerns/Problems Associated with the Operational Phase of the Tindal RAAF Base Development.	71
5.5	Comparison of Perceptions of Business Opportunity Existing between the two Development Phases.	85

LIST OF PLATES

<u>Plate</u>	<u>Caption</u>	<u>Page</u>
2.1	A road distance sign on the southern outskirts of Katherine.	12
2.2	Katherine 1987 from the air, facing south-east.	13
2.3	Northern end of Katherine Terrace looking south.	29
2.4	Central Katherine Terrace looking south.	29
2.5	Southern end of Katherine Terrace looking north also showing the Woolworths complex.	30
2.6	Pandanus Plaza.	31
2.7	Happy Corner Store Complex.	31
3.1	A view of the facilities constructed by 5 ACS also showing the completed control tower for the new Development.	35
3.2	A view of the redeveloped Tindal Airfield also showing the new aircraft dispersal area.	39
3.3	A view of the recently completed control tower for the Tindal RAAF Base.	40
3.4	A view of the on-base accommodation for the living-in personnel at the Tindal RAAF Base.	40

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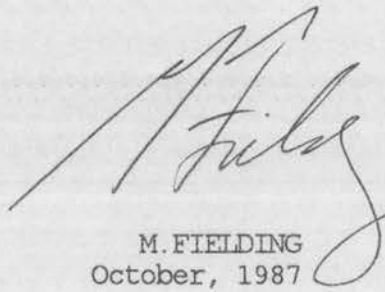
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STATEMENT OF ORIGINALITY

I hereby certify that except where
otherwise acknowledged, this thesis
is the original work of the author.



M.FIELDING
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ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACS	Airfield Construction Squadron
ADFA	Australian Defence Force Academy
AGPS	Australian Government Printing Service
ANU	Australian National University
ASIC	Australian Standard Industrial Classification
CLP	Country-Liberal Party
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DHC	Department of Housing and Construction
DoD	Department of Defence
EDNA	Economic Development of Northern Australia
EIS	Environmental Impact Statement
GCC(s)	Group Code Category(Categories)
JCC	Joint Consultative Committee
NADC	Northern Australian Development Council
NATMAP	National Mapping (Department of)
NARU	North Australia Research Unit
PSC on PW	Public Standing Committee on Public Works
RAAF	Royal Australian Air Force

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This dissertation is concerned with the subject of behavioural economic geography. The subject represents an intersection of the well established field of behavioural geography with the relatively young field of economic psychology or economic behaviour. A brief discussion on these two fields is necessary before the behavioural economic geography context of this study can be fully appreciated. Once the subject has been established, the remainder of this chapter will discuss the specific topic of this dissertation - perceptions of business opportunity - and then outline the aims and organisation of the thesis.

1.2 Behavioural Geography

Social researchers try to answer the fundamental questions about society; 'what' is going on (descriptive research) and 'why' it is going on (explanatory research). The aim is to both describe and attempt to understand society (deVaus, 1986:11). Behavioural geography (also referred to as Behaviouralism) is that aspect of social research which aims to replace the simplistic and mechanistic concepts that previously characterized much human-environment interaction theory, with new versions that explicitly recognise the complexities of human behaviour. As such, behavioural geography has strong links with the various schools of psychology, yet the objectives that each tries to achieve are intrinsically independent. Behaviouralists view the human subjects of their studies as thinking beings whose actions are mediated by cognitive processes. Cognition is defined as the mental process by which people acquire, organise and use knowledge. Behaviouralists are therefore interested in the way in which people come to terms with their physical and social milieu, and the factors that influence the inter-relationships of thought and action; yet, in so doing, they in no way assume that decisions are based upon a sequence of reasoned thought with systematic evaluation of all possible options (Gold, 1980:3,4). Peoples attitudes and experiences, aspirations, cultural affiliations, and frames of reference all shape their perception of the environment and in turn influence their behaviour (Katona, 1977:3).

The constant input of information into the human mind is first screened by the physiological filters of our sense receptors, and secondly by such

important psychological filters as language, social class, personal values, value and need, and culture (Saarinen, 1976:11) (see Figure 1.1).

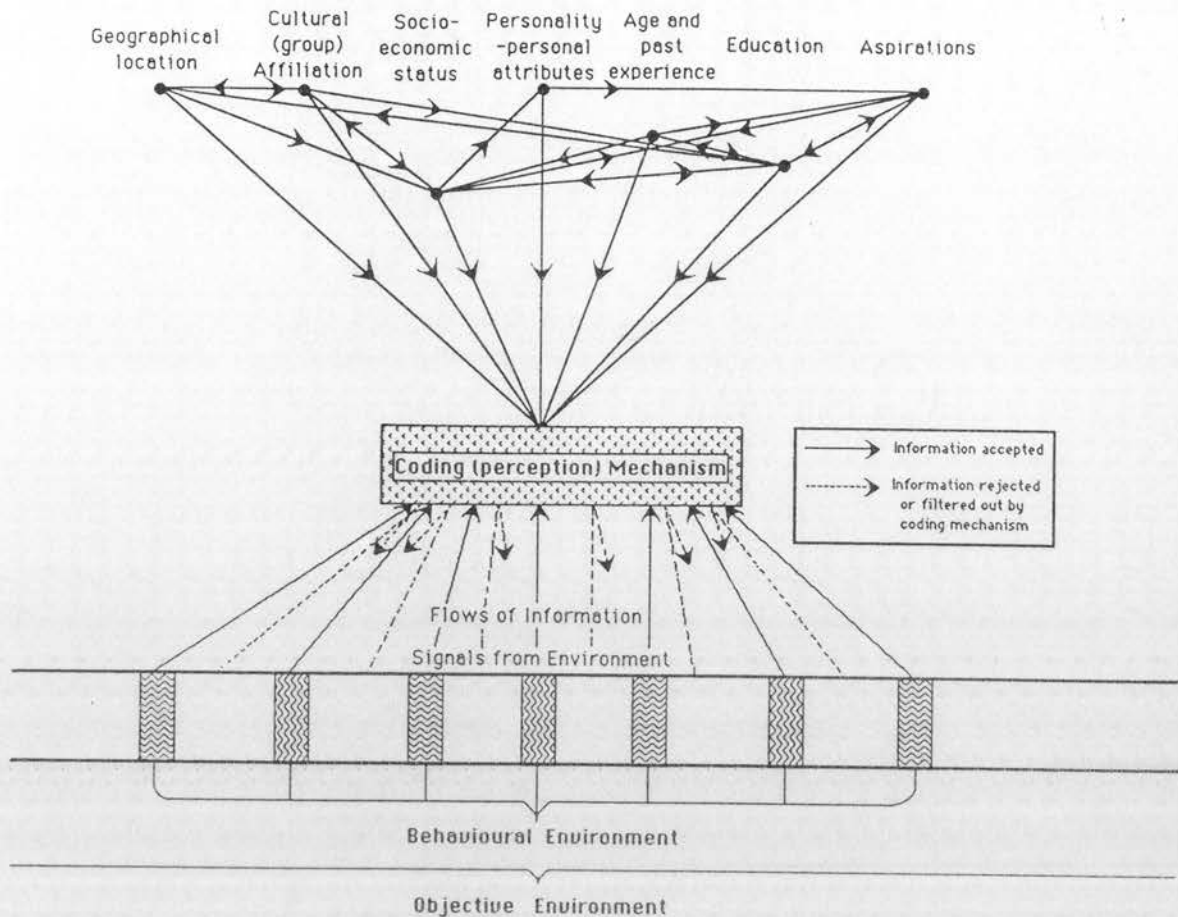


Figure 1.1 The Behavioural Environment as Perceived as a Component of the total Objective Environment.

(Source: Based on Huff, D.L. 1960. A Topographic Model of Consumer Space Preferences , Papers and Proceedings , Regional Science Association , 6 , Fig.3)

There is a considerable amount of available literature on the subject of behavioural geography. Works include: Lowenthal, 1967, Boulding, 1969, Proshansky et al., 1970, Ittelson, 1973, Skinner, 1974, Ittelson et al., 1974, Heimstra and McFarling, 1974, Saarinen, 1976, Skinner, 1978, Gold, 1980, Sant, 1982, Johnson, 1983 and Saarinen et al., 1984. For those readers unfamiliar with behavioural geography, Gold's An Introduction to Behavioural Geography (1980) is the recommended text. As such, this study will assume that the reader has a knowledge of behavioural geography to the level that Gold discusses, although some parts of this reference are not pertinent to this study.

Human beings in almost all instances and situations are cognizing and goal-directed organisms. Their attempts at need satisfaction always involve them in interactions and exchanges with their physical environment, in an attempt to organise their physical environment so that it maximizes their freedom of choice (Proshansky et al., 1970:174).

The implications of the cognitive-behavioural approach to traditional geographic problems are far reaching (Osborne et al., 1970:185). The accurate conceptualization and prediction of human behaviour remains the prime concern of the social sciences. In order to move toward a complete understanding of the individual it is necessary to consider, and assess the relative importance of biological, environmental, social and purely individual factors in determining a broad range of behaviour. The importance of this behavioural study is thus illustrated.

Behind any applied research there lies the sense of a problem arising from some observed or expected inadequacy of some defined situation. The initiator of the study may be the researcher, but is just as likely to be a body requiring advice or assistance. There tends to be a strong emphasis on providing information useful for public policy decisions. A key idea is to design with human beings as a measure, in the hopes of solving or at least ameliorating many pressing social problems. Everyday decisions are made with respect to these problems regardless of a lack of theory on people-environment interactions (Brearley, 1974:53-60). It seems likely that the quality of these decisions can be improved by the provision of better information on how people perceive and react to the environment (Saarinen, 1976:9). Thus, the study of perception on natural and human induced environmental phenomena already existing and planned for future development is extremely relevant to all aspects of a continually developing society.

1.3 Economic Psychology and Economic Behaviour

Theory in micro-economics developed in the 19th Century, at a time when psychology as a science was in its infancy. Economists at the time could not employ the present results of psychological research when they developed the basic assumptions about human behaviour in economic theory (VanRaaj, 1980:9). Hence, traditional economic theory postulates an 'economic man', who, in the course of being 'economic' is also 'rational'. This man is assumed to have knowledge of relevant aspects of his environment which, if not absolutely complete, is at least impressively clear and voluminous. He is assumed to have a well-organised and stable system of preferences, and a skill in computation that enables him to calculate, for the courses open to him, which of these will permit him to reach the highest attainable point on

his preference scale (Harrison, 1975:30; Hollis, 1975). This traditional assumption of an 'economic man' is the basis of most of modern economic theory. Recent developments in economics, and particularly the theory of business organisation, have raised great doubts as to whether this schematized model of economic man provides a suitable foundation on which to erect a theory - whether it be a theory of how business organisations 'do' behave, or how they 'should' rationally behave (Simon, 1957:241; Wooldridge and East, 1966:99; Boulding, 1969:82-94).

In previous economic research, the effects of economic behaviour have mainly been studied, eg. supply-demand relationships, without considering the intervening psychological processes of evaluation, decision and choice. Economic 'laws' assume a one-to-one relationship between economic variables without systematic behavioural 'disturbances'. When economists deal with behaviour they assume the individual tastes and preferences will 'cancel-out' against each other, or they assume rational behaviour of utility maximisation, complete knowledge and control over means. George Katona in 1946 recognised the... "need for co-operation between economics and psychology", and questioned whether... "such a co-operation would be fruitful" (Katona, 1946:46). Today, it is well accepted that the economic problems of the real world are directly and inescapably involved with questions of human behaviour (Lloyd and Dicken, 1972:175-182; Aldaheff, 1982:xi). Katona concluded in 1946 that these questions could only be answered by analysing some specific issues of economics and finding out whether their understanding and solution could be advanced by applying psychological principles and methods to them. This is the realm of economic psychology and economic behaviour. Katona argued the need for contemporary psychological studies of economic situations in the interests of explaining economic behaviour. Statements of economic behaviour, as a rule, must be based on empirical studies, where fact finding and analysis are inter-related and inter-dependant on each other to a much greater extent than any other field of research (Katona, 1977:301). Empirical findings based on observation of economic behaviour will take the place of dogmatic statements or of pure reasoning currently employed (MacFadyen and MacFadyen, 1986). Quantitative studies of expectations can be undertaken in order to understand economic processes; but as well as studying the usual manifestations of behaviour, subjective variables must also be studied (Katona, 1977:3).

Stimuli must be perceived and evaluated before they might have an effect on responses. Individuals differ in their perception and evaluation of reality and act according to their perceived/evaluated reality and not to

the stimuli as such. The economic environment as perceived by the economic actors (eg. consumers, entrepreneurs and business executives) is influenced by personality factors (VanRaaj, 1980).

Economic behaviour is almost always motivated behaviour. Persons try to reach a goal or to avoid negative consequences. It tries to explain behaviour by the learning and decision making process, basic to behaviour. Individual circumstances determine the structure and flow of the motivational patterns and it is therefore futile to search for one paramount business motive (Katona, 1977:193). The traditional objective of businessmen is the maximization of profits (Dickinson, 1922:271), yet behavioural studies have revealed that businessmen do not strive for profits alone; that striving for security, power and prestige plays an important role, in conjunction with, or even in opposition to the profit motive. The traditional assumption of profit maximisation is now replaced by a 'satisficing criterion' (VanRaaj, 1980:13).

Economic behaviour comprises the motivation, perception, evaluation and cognitive processes of consumers, entrepreneurs and business executives in their economic decisions (Hayes, 1958:307). Ittelson et al. (1974:65-84) specifically explored motivational processes as an influence over human perceptions, in an extension from the traditional psychological stimulus-response models of behaviour (after Katona touched on the subject in 1953). To act in an environment in order to achieve particular goals and purposes presupposes that our perceptions are reliable and accurate, that what we think is going to happen, by virtue of the way we perceive a situation, will actually happen (Ittelson et al., 1974:123). Behavioural studies in economics are largely inductive, starting from guided observations and leading to empirically determined relationships between concepts (VanRaaj, 1980:6). In summary, behavioural economics is the study of the behaviour of consumers, businessmen and government policy makers in spending, saving, investing, price setting and other economic activities. Although economic behaviour is elicited by the environment and its changes, human beings do not react to stimuli as automatons. Their motives, attitudes, even their tastes, hopes and fears represent intervening variables that influence both their perception of the environment and their behaviour. In order to understand economic processes, psychological considerations and subjective variables must be incorporated into the analysis (Katona, 1975:3).

1.4 Behavioural Economic Geography and Perceptions of Business Opportunity

The subject of behavioural economic geography represents an intersection of the fields of behavioural geography and economic psychology or behaviour. As a relatively young field of study, its position in the academic realm is yet to be fully defined and isolated. This has already been illustrated in the previous section, where the vocabularies of the two fields appear to overlap. The stimulus of a research atmosphere in behavioural economic geography has been generated. Thus, rather than trying to reconcile the fundamental differences in disciplinary philosophies, vocabularies and research dictions, this study will be placed in a broader social and behavioural science framework.

The study of behavioural economic geography is too large to be given a meaningful discussion in any one case study. Indeed, it is the necessary detail of its case studies that makes the topic so interesting. The first division in the subject for investigative purposes has been between consumers and business organisations. VanRaaJ identified that compared to consumer economic behaviour, the economic behaviour of business organisations is a relatively unknown area of research. Simon (1952;1959) was one of the first to study the economic behaviour of 'producers'. Managers, entrepreneurs and business executives control the decision variables in the firms. They decide on make, buy or lease, investments, and set goals for short-term and long-term profits. Both economic (financial) and non-economic (power, prestige and personal) motivations direct their behaviour (VanRaaJ, 1980:13). This aspect has become relevant to the field of models of decision-making, although the behavioural considerations do not allow the definition of a 'correct' model. The continued study of business organisations is of great importance toward the topic of behavioural economic geography.

'Economic geographers' have tended to concentrate on the perceptions and decisions involved in site location (Vinge and Vinge, 1966), but this is a small and infrequently occurring part of organisational operations (Lewis and Traill, 1968:319; Massey and Morrison, 1974:79-87; Hamilton, 1978; Walmsey and Lewis, 1984:102;). Interest now is less in behavioural mechanisms having spatial correlates and more upon the measurement of attitudes toward environmental stimuli. A few 'industrial geographers' have attempted to quantify the environmental perceptions of entrepreneurs (Taylor and McDermott, 1977; Barr and Fairbairn, 1978), but it must be acknowledged that the characteristics used to stratify and assess their perceptions (such as age and sex) are, to date, rather crude and simplistic (Burgess J.A., 1982:2). This study will concentrate on environmental perception as an

explicitly behavioural response to aspirations and motivations toward exploiting business opportunities. This subject deals with the important role that business organisations play in the economic environment, and will try to ascertain what forces motivate decisions to exploit perceptions of business opportunity. This will enable us, in turn, to estimate the effect of the behaviour of these business organisations on the consumer and other organisations.

1.5 Reasons for the Selection of Katherine

For decision-makers in business organisations the achievement of goals is a continuous and dynamic process. Success or failure is dependant on a plethora of decisions, most of which are relatively insignificant when compared to the ultimate aims of their business (Dicken, 1981:432). Over time, this collection of decisions formulates an 'attitude to business' within the individual (a combination of individual perception and behaviour, comprising decisions both programmed and involving new appraisal); analagous to an attitude to a particular phenomenon that may develop in an individual over a lifetime's experience (Moss, 1981:37). As such, temporal variations in 'attitudes to business' are small and difficult to analyse.

An extraordinary stimulus to encourage business demand and thus temporally intensify the decisions to exploit a particular business opportunity is required in order to effectively explore this area of research. The \$217 million (Department of Housing and Construction, 1987:pg 1) Tindal RAAF Base Development, 15 kilometres south-east of Katherine, incorporating a home-base for a squadron of Hornett F/A-18 aircraft and employing 700 RAAF personnel is such an extraordinary business stimulus. The Draft Environmental Impact Statement (Kinhall-Stearns, 1983) completed for the Development project stated:

"The expansion of RAAF Base Tindal will have a noticeable effect upon the economy of the Northern Territory, the Katherine Region and particularly upon the economy of Katherine itself. The principal economic effects will be a significant increase in output and employment as a result of direct demands of the Base construction and operation, which will be augmented by the multiplier effects of demands for goods and services."

(Kinhall-Stearns, 1983:iv,v)

The establishment of a Regular Army Brigade (approximately 2400 service personnel) in Townsville, North Queensland, in the late 1960's has, and continues to have, a sizeable effect on the economy of that community

(Scott, 1978:41,43; Franklin, 1986:234-250). Comparatively, the proportion of service member influx into the local population will be far greater in the Tindal instance (34%)(Kinchall-Stearns, 1983:8.15,8.16) than in the Townsville experience (8.6%)(Franklin, 1986:231). Consequently, the impact on the Katherine business community promises to be even more pronounced. Assessment of the impact is even more important because of the the role that the Tindal RAAF Base Development has to play in the overall development of Northern Australia; this aspect will be further discussed in Chapter Six.

The retail sector of the Katherine business community was specifically selected for this study on perceptions of business opportunity because it is likely that the Tindal RAAF Base stimulus will have more of an impact on this sector than, say, the service industries in Katherine. In Townsville, approximately 27% of the Army's payments to the local industries go to the retail sector. This figure excludes the substantial private expenditure that service families make into the local economy (Franklin, 1986:36). The existence of approximately seventy retail establishments in Katherine also meant that the study population would be practically manageable.

From these establishments in the retail sector the owners and managers were the main targets for the study as they are the major decision makers within the business environment (Katona and Morgan, 1952:71; Katona, 1975:291; VanRaa, 1980:13). The owners and managers are the most likely to perceive such opportunities and have the means available to exploit them.

1.6 Aims of this Study

The central aim of this thesis is to examine the perceptions of business opportunity that may have evolved within the Katherine retail sector as a result of the Tindal RAAF Base Development. To enable this central aim to be achieved a number of objectives were established.

Katona (1946:57) stressed the importance of the analysis of expectations referring to the actions of others - of competitors, suppliers, customers, or the government. Hence, the first objective of the study will be to determine the economic structure of the township and the nature of the Katherine retail sector. The second objective is to ascertain the impact of the soon to be opened Woolworths complex on the Katherine retail community.

In continuation with Katona's guidance, the third objective of this study hopes to answer some questions regarding the attitude towards the establishment of the RAAF Base in Tindal, and the amount of consultation that the Federal Authorities have had with the Katherine community.

Finally, this study will aim to relate its findings to the broader topic of Northern Australian development.

1.7. Organization of the Thesis.

The following chapter discusses the physical characteristics, the historical development and the demographic profile of Katherine, as well as giving a description of the business and retail sectors.

Chapter Three provides an overview of the Tindal RAAF Base Development and then continues on to discuss the existing perceptions, of the present and future impact of the Base on Katherine, currently held by the Federal Authorities.

Chapter Four details the method of investigation employed to collect and analyse the data used in this thesis. This is followed in Chapter Five by a presentation and discussion of results from the data collected during research field work. This chapter is composed of four major sections dealing with the central aim and objectives of this thesis.

Chapter Six presents an introduction to the arguments for the development of Northern Australia, and then presents a synthesis of the the findings of this study in relation to the broader question of Northern Australian development. Finally, this chapter will assess the validity of those aspects of the 'official' perceptions of the impact of the Tindal RAAF Base that are relevant to the findings of this study.

Finally, Chapter Seven presents an assessment of the aims and objectives of this thesis, and a discussion of the limitations of the study. Suggestions for future research are then presented, and the relevance of the study assessed, before a conclusion on the thesis is drawn.

CHAPTER TWO

KATHERINE : A REGIONAL SERVICE CENTRE

2.1 Physical Characteristics

2.1.1 Introduction

Katherine is a regional service centre (Lonsdale and Holmes, 1981:96) located 320 kilometres south-east of Darwin. Katherine is a main urban centre in that part of the Northern Territory known as the Katherine-Darwin Region (see Figure 2.1 and Plate 2.2). The Katherine-Darwin Region is bounded on three sides by sea, and roughly by the watersheds of the Daly and Roper Rivers on the fourth. Commonly referred to as the 'Top End', this region is composed of low undulating lands with a natural cover of eucalypt forest (Laut et al., 1980:150).

Katherine in 1986 had a population of 5691 (ABS, 1987:8). It could probably be accurately described as a unique town in Australia by virtue of its remote location, limited economic base, limited ethnic structure, and large population turnover. The closest urban areas are Darwin, Tennant Creek (660 km to the south)(see Figure 2.1 and Plate 2.1) and Kununurra (600 km to the west). It is located at the junction of the north-south Stuart Highway and the Victoria Highway which serves the areas to the west. As a consequence, it is a major transport centre, with all people who drive north to Darwin passing through Katherine.

This section will continue to give a more detailed description of the physical characteristics of the Katherine township and region by discussing the climate, transport and communications infrastructure, history, demography, economic base and by describing the business sector of Katherine.

2.1.2 Climate

2.1.2.1 General

The Katherine Region lies within the Australian climatic zone designated Summer Rainfall-Tropical (Bureau of Meteorology, 1982). The climate within this zone is characterised by periodic heavy rains with generally hot and humid conditions during the summer (the wet season), and mild to warm and generally rainless conditions during the winter (the dry season)(see Figures 2.2, 2.3 and 2.4).

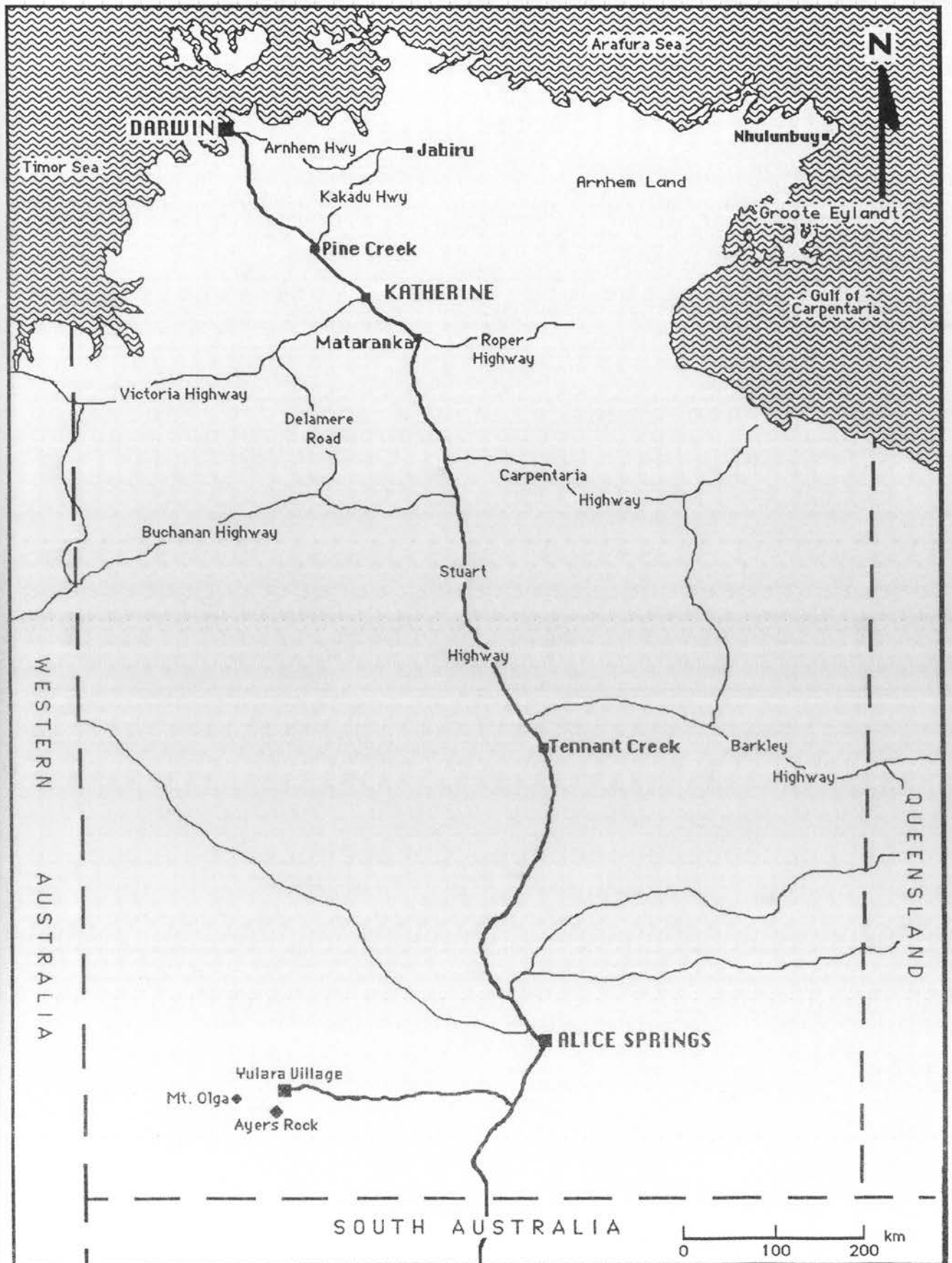


Figure 2.1 Northern Territory of Australia.



Plate 2.1 A road distance sign on the southern outskirts of Katherine.



Plate 2.2 Katherine 1987 from the air , facing south-east.
(Source: Airesearch Mapping Pty.Ltd.; Darwin)

During the summer half of the year (November to April), the Katherine Region comes under the influence of meteorological disturbances associated with the southward intrusion of warm moist monsoonal air from north of the Inter-Tropical Convergence Zone, resulting in a hot rainy season. In the winter half of the year (May to October), high pressure systems pass across the continent from west to east, and often remain stationary over the interior of Australia for several days at a time. The Katherine Region is then under the influence of mild, dry south-east trade winds (Powell, 1982:6; Department of the Chief Minister, 1986b:3).

2.1.2.2 Rainfall and Evaporation

The mean annual rainfall for Katherine is 1,011 mm, 95 percent of which occurs during the period from November to April (the wet season)(see Figure 2.2). The average number of days with rainfall of 0.2 mm or more is 63 (Division of National Mapping, 1986:12). Convectional processes during the wet season cause a high incidence of thunderstorms, and there is an average of approximately 50 days per year on which thunder is heard at least once. The average annual evaporation (Class A pan) for the Katherine Region is 3,000 mm (Bureau of Meteorology, 1982; Division of National Mapping, 1986:46). Cyclonic intrusions are rare due to the inland location of the township (Bureau of Meteorology, 1982; Cameron, 1982).

2.1.2.3 Temperature and Humidity

The average annual temperature in the Katherine Region is approximately 27°C. The highest temperatures are recorded in October and November, immediately prior to or at the start of the wet season, while the lowest temperatures are recorded during the dry season months of June and July (see Figure 2.3). Frosts do not occur in the Katherine Region (Division of National Mapping, 1986:32). The influence of monsoonal air upon the climate of the Katherine region is evident. During the dry season, average relative humidities are considerably less (50 percent at 9.00 a.m. and 25 percent at 3.00 p.m.) than those recorded during the wet season (80 percent at 9.00 a.m. and 55 percent at 3.00 p.m.)(see Figure 2.4). Katherine also experiences a high level of heat discomfort with an average of 200 days per year when the relative strain index at 3.00 p.m. exceeds the critical discomfort level (Bureau of Meteorology, 1982).

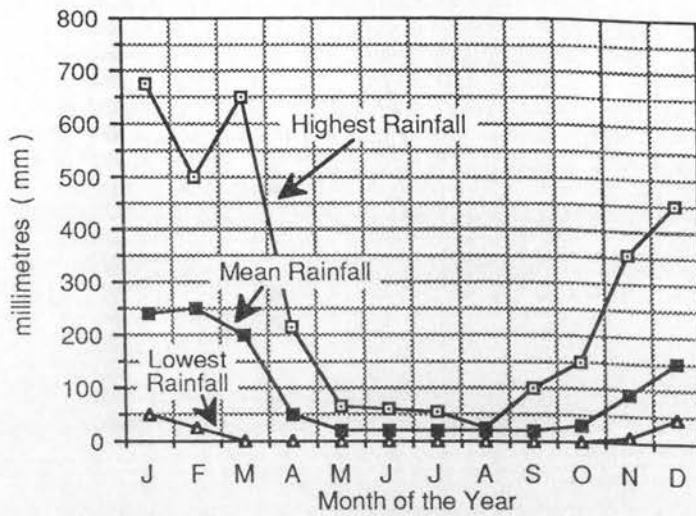


Figure 2.2 Average Rainfall Figures for Katherine.
(Source: Bureau of Meteorology, 1982)

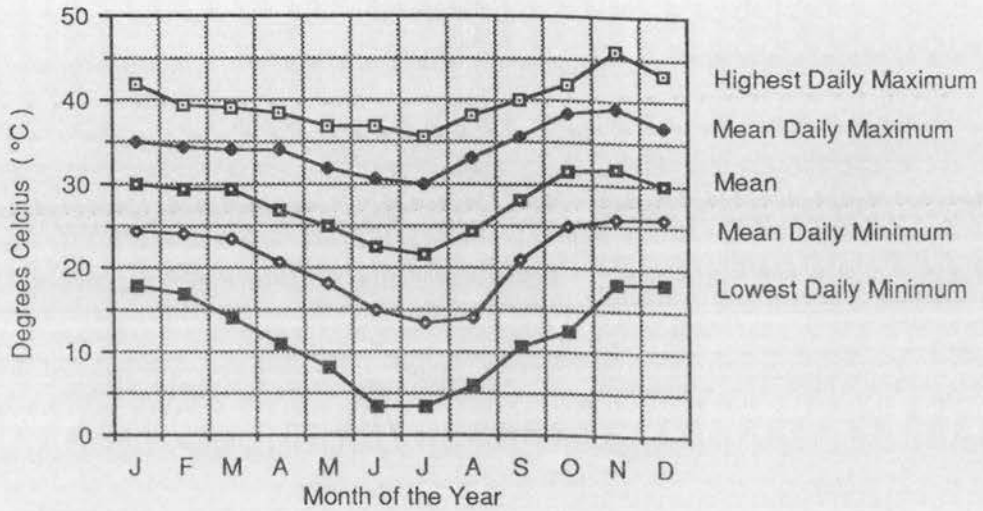


Figure 2.3 Average Temperature Figures for Katherine.
(Source: Bureau of Meteorology, 1982)

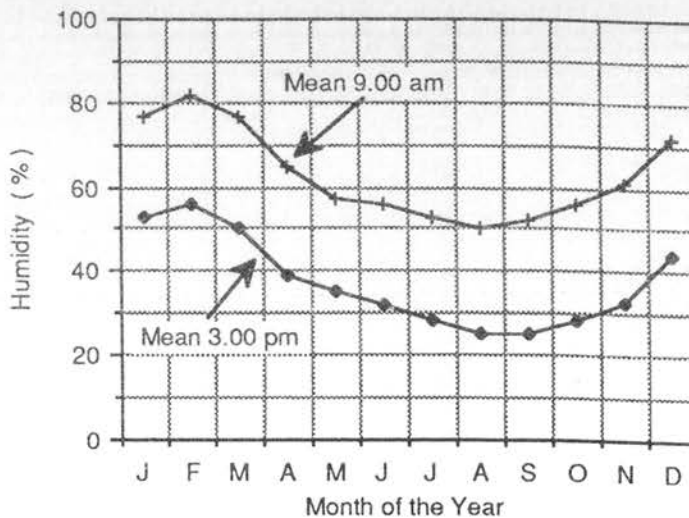


Figure 2.4 Average Humidity for Katherine.
(Source: Bureau of Meteorology, 1982)

2.1.3 Transport and Communications Infrastructure

The six major roads in the Katherine Region are the Stuart Highway, Victoria Highway, Roper Highway, Buchanan Highway, Kakadu Highway and the Delamere Road (see Figure 2.1). Road access from the south to the 'Top End' of the Northern Territory cannot be achieved without travelling through Katherine. As a result, Katherine attracts many transient workers to, and through, the town for varying periods, depending on local job opportunities. Recently, the upgrading of the Stuart Highway to National Highway Standard by the Roads Division of the Department of Transport and Works under the Australian Bicentennial Works Programme has been completed (Department of the Chief Minister, 1986b:22). The improved road quality has helped to encourage an increased freight traffic as well as a greater tourist traffic flow (see Section 2.3.3).

The rail line from Darwin to Larrimah (190 km south-east of Katherine) which was built up until the 1930's, was closed on 30 June 1976 (see Section 2.2.1) and is now obsolete. The construction of a new rail line between Adelaide and Darwin is part of a current federal debate. There are considerable arguments and counter-arguments involving defence, development and cost-effectiveness aspects (Dames and Moore, 1982; Ball *et al.*, 1985; Wade-Marshall and Langtry, 1986:133-136), but the Federal Government is maintaining its determination not to fund the project. The Territory Government is investigating a scheme involving development by private enterprise (Department of the Chief Minister, 1986b:24). If the rail link were to be completed the effect on Katherine would be substantial, both in terms of reducing the dependence on expensive road freight, as well as increasing the access of the region to tourists.

The civil aviation facilities located at RAAF Base Tindal are used to service the Katherine township under a joint defence/civilian user arrangement. Fokker F-28 jet and light aircraft services operated by Airlines of Northern Australia provide commuter services. There is also a regional light aircraft service and a parcel express service. The trunk air routes between Darwin and Mount Isa and between Darwin and Alice Springs pass over, or in the immediate vicinity of Tindal (Wade-Marshall and Langtry, 1986:135).

The telecommunications link between the Top End and the remainder of Australia is provided by the Darwin to Mount Isa microwave link. Overall, in terms of location and communication it can be seen that Katherine is an isolated township.

2.2 Historical Development

2.2.1 History of Katherine

On 8 July 1862 John McDouall Stuart in his north-south cross continent journey of Australia, discovered and named the Katherine River. Stuart's successful crossing of this country aroused the interest of the South Australian Government in this area and as a result the Northern Territory was created on 6 July 1863 under the jurisdiction of the colony of South Australia (Attwood and Humphries, 1980:3).

The Overland Telegraph Line was to provide the reason for Katherine's inception. Demands for direct communication with Great Britain were a leading issue in the 1860's. Businessmen, financiers and graziers were demanding that the Government remedy the situation. The solution chosen was a submarine cable laid from Java, coupled to an overland line from Darwin direct to Adelaide (Maff, 1986:6), and construction from both Darwin and Adelaide was begun simultaneously. The two ends of the Overland Telegraph Line met at Frews Pond and were joined on 22 August 1872. Telegraph Repeater Stations, one of which was located at the Katherine River, were built at intervals along the line to house the telegraphists and linesmen (Maff, 1986:8).

A township grew up around the repeater station because the Katherine River provided a natural barrier for wagons and horses. The original town site was located to the north of the present day Katherine on the banks of the river. With the establishment of a line of communication and a permanent water supply, stock owners and drovers passed through Katherine to take up stock pastoral leases in South Australia's Northern Territory.

The Pine Creek Gold Rush from 1872 to 1884 saw the population in the region swell, particularly by the Chinese. Early in 1883 a Post Office opened in Katherine (Maff, 1986:12) and in 1888 the Sportsman's Arms Hotel and Pioneer Cash Store were erected on the Telegraph reserve at the Katherine River crossing (Maff, 1986:16). The Cash Store was the one store for 1280 km from the south, and provided welcome facilities for travellers (Attwood and Humphries, 1980:5).

The gold discoveries at Pine Creek prompted the construction of a railway line from Darwin to Pine Creek, and this was completed in October 1889. Katherine was at this time the hub in a wheel of the pastoral industry. It was here that the station owners came for supplies and to send their messages pertaining to station business (Maff, 1986:23). Yet, by 1902 the permanent population of Katherine was still only four men and two women (Powell, 1982:119).

Also at this time, the South Australian Government realised that it could not continue to maintain its Northern Territory and they decided to transfer it to Commonwealth control. In 1907, they passed 'The Northern Territory Surrender Act, 1907', which was accepted by the Commonwealth Parliament in 1910. At the same time the Commonwealth Government agreed to complete the proposed north-south continental railway to connect up with the rail terminus at Pine Creek, but by April 1917 because of the effects of World War I, the continental railway line had only advanced 60 miles from Pine Creek. It reached a terminus 350 links north of the Katherine River, with stock loading and holding facilities to service the growing cattle industry in the region (Maff, 1986:24). The local Aborigines knew this particular area of land, by a name sounding much like "Emungalan", and the terminus became known as such (Attwood and Humphries, 1980:6; Bauer, 1964:242).

By 1923, material was available to commence building the railway bridge planned to span the Katherine River. At Emungalan a shanty town developed to service the railway workers (Bauer, 1964:120; Attwood and Humphries, 1980:6). It was the biggest project of its kind north of Townsville, and although it took two years to complete, the only difficulty encountered was in the construction of foundations for the two piers, when the river rose to flood height. By 1925 the population of Emungalan was 165 persons. With the bridge operating, train loads of material arrived to continue building the line south. Soon hundreds of tents billowed out in the direction that the railway was to take.

As time passed, the shop keepers in Emungalan realised that it would be more advantageous to move over to the more populous site on the southern side of the river, and gradually the private residents followed suit. They pulled down the makeshift shacks, and built more substantial houses in the new permanent town of Katherine (Donovan, 1984:73; Attwood and Humphries, 1980:6; Maff, 1986:31). Little today remains of the Emungalan township (Pak-Poy and Associates, 1974). In April 1928 the railhead was moved from Katherine to Mataranka, and overnight the population of Katherine dropped to 120 people (Bauer, 1964:120; Maff, 1986:35).

Through the 1930's, Katherine's population was made up of a mixture of nationalities left over from the days of the railway construction and the mining boom, or stranded in the throes of Depression. Over the years the town had degenerated until all that was left was its two hotels, two general stores, a baker shop, a few houses along the banks of the river and the railway cottages (Maff, 1986:37).

The Second World War made significant changes to Katherine, at that stage with a population of approximately 235 people. Japanese bombers lobbed two bombs on the edge of the Katherine aerodrome, on March 14 1942. This shook the complacency of officialdom and prompted the removal of the civilian population from Katherine by April 1942. Soon after the Army moved in and Katherine became a major military camp (Maff, 1986:42). The military demands on the local communications and transport networks were to lead to their upgrading, as they were wholly unsuited to the levels of demand required. The road network consisted primarily of the main north-south two-wheeled track which was subject to seasonal inundation and could in no way cope with the ever increasing volume of traffic associated with the resupply of Darwin. The railway was only of use from Darwin to Larrimah, which now became the terminus, moving back the few miles from Birdum where it terminated in 1929. Towards the latter part of 1942, the Australian and American Armies began to upgrade the road and seal it from Larrimah through to Adelaide River. The road had become Darwin's lifeline. By the termination of the war, the road was sealed right through from Darwin to Alice Springs (Courtenay, 1982:37; Maff, 1986:43).

In 1962, Northern Meat Exporters Pty. Ltd. completed the construction of the Katherine Meatworks (Maff, 1986:47), and began operations soon after, employing 200 persons per annum, and indirectly boosting the Katherine economy. By 1962 the township consisted of a butcher, two general stores, a cinema, hotel, cafe, Post Office and Police Station, school and church as well as the railway station, railway yards, and the meat works (Holmes, 1963:266). Katherine now became a regional base for road construction and development, carried out by the Commonwealth Department of Works. Beef roads were upgraded, enabling road stock transports to move beasts to the abattoirs from outback stations (Anon, 1963:20,21; Maff, 1986:47).

A new high level bridge for road traffic was planned to span the river alongside the railway bridge. It was completed on 21 August 1974. The entire length of the rail line from Darwin to Larrimah was closed on 30 June 1976 because of the decreased demand for freight services (Donovan, 1984:144). The Northern Territory achieved self-government in July 1978 (Department of the Chief Minister, 1986:6), and the first local government election in Katherine was held later that same year (Donovan, 1984:246).

Today, Katherine is a modern rural town and the third largest in the Northern Territory (see Plate 2.2). It continues to be a regional service centre for a vast amount of the central Northern Territory involved in both the cattle industry and in farming (Field Notebook 1). The tourist industry, however, supplies the bulk of the town's income today (Maff, 1986:49). The

population is growing at a steady rate (see Section 2.3.2) due to the catalysts of increased tourism and also a resurgence of interest in horticulture in the region (O'Faircheallaigh, 1986:26). The demographic profile of Katherine today is discussed in Section 2.3, and a description of Katherine's economy and business sector is contained in Sections 2.4 and 2.5 respectively.

2.2.2 History of Tindal Airbase

Tindal Airfield was originally known as Carson Airfield, after the property on which it was located. It was selected by the Allies as one of three locations suitable for heavy bombers between Katherine and Daly Waters. The airfield was named after Wing Commander A.R. Tindal, who was the Commanding Officer of No.24 Squadron in 1941. He was killed in action in 1942 during the first air raid on Darwin (Kinhall-Stearns, 1983:3.37).

Construction work was commenced about mid June 1942 by the American 43rd Engineer Regiment. They were replaced by the Victorian Country Roads Board with civilian labour in early 1944. Tindal was planned to accommodate an American Heavy Bomber Group operating B-29 Superfortress aircraft.

By Christmas 1944 the project was completed at a cost of £427,488. The runway was 7,300 feet by 150 feet, and there were 9 miles of taxiways 60 feet wide. B-29's never used the strip but it had been made suitable for bombers up to B-24 Liberator size. Fortunately, despite the cost and effort that went into Tindal, it was never used operationally and no aircraft squadrons were ever based there (Records of the Katherine Historical Society, various dates).

With the Indonesian confrontation in the early sixties, interest was once again kindled in Tindal as a back-up airfield to Darwin, to conform to the principle of defence-in-depth (Parliamentary Standing Committee on Public Works, 1984a:3). Between June 1964 and September 1969 No.5 ACS (Airfield Construction Squadron) reconstructed the Tindal runway using concrete, as well as constructing on base facilities and accommodation buildings (Proust, 1965). More than 1300 officers and men were employed in the project, thus assisting the economic growth of Katherine (Maff, 1986:46; Field Notebook 1). In July 1969 the first civilian airliner used the runway under a joint-user arrangement, with the Department of Defence being the principal and the Department of Aviation the tenant. That arrangement continues to exist today. The Katherine civilian airport has been located at the north-west end of the Tindal strip ever since. Tindal acts as the emergency alternate airfield for international and domestic flights.

The 1976 White Paper on Australia's Defence Preparedness stressed the necessity for upgrading Australia's defence infrastructure in the north and north-west of the country (Department of Defence, 1976:31,42; O'Neill and Horner, 1982:278). In particular, the White Paper recognised the importance of improving the operational capabilities of the RAAF Tactical Fighter Force in the 'Top End' of Australia, if areas of vital strategic importance were to be adequately defended. In the remote circumstance that the Tactical Fighter Force is required to engage in air combat, it may be required to operate over and beyond the vast northern region of Australia without the extensive and close control available in other more densely populated regions of the world. As hostile forces would generally need to cross large expanses of water before reaching the coast, the Tactical Fighter Force requires long-range and endurance capabilities to enable it to seek out targets at distance. The Force also requires a comprehensive array of air-to-air and air-to-surface weaponry with which to engage these targets. Given the nature of the Australian continent and its defence infrastructure, it is necessary to maintain the ability to deploy the Tactical Fighter Force at short notice over long distances, operating from bare bases with the support only of extended air supply links (Australian House of Representatives, 1981).

Support of these views by bodies such as The Northern Australian Development Council (Northern Australian Development Council (NADC), 1982:56,148) and The Joint Committee on Foreign Affairs and Defence (Joint Committee on Foreign Affairs and Defence, 1981:31,42) helped coerce the Federal Government into committing funds toward the development of a 'defence-in-depth' across Northern Australia. This was re-inforced in the, 1987 Defence White Paper (Department of Defence, 1987:31), and of course also stimulates further investment in this remote and comparatively under-developed region of Australia (Courtenay, 1982:280,300).

To this end, an air-defence network encompassing Learmonth, Derby, Darwin and Tindal was planned to form a defence 'umbrella' over north Australia linking up to the well established RAAF Base in Townsville, Queensland (O'Neill and Horner, 1982:33). Implementation of this plan is almost complete, with Learmonth and Derby both established as 'bare-base' airfield status (Langtry, 1986:27,46,47,50,51,582) and Tindal currently being constructed to 'home-base' status. A 'home-base' is a largely self sufficient base at which aircraft are permanently stationed. A base of this type has the necessary facilities for routine aircraft maintenance, although major aircraft overhauls are undertaken elsewhere. Facilities are also provided at a home-base to accommodate the necessary administration,

logistics and personnel support. RAAF Base Tindal is the last link in the Northern air-defence chain (Department of Defence, 1986:72; Department of Defence, 1987:51,52,53).

Darwin is the interim home-base of No.75 Squadron of Mirage 111 O/D fighters recently re-deployed from Butterworth in Malaysia. On 20 October 1981, the then Minister for Defence announced the selection of the F/A-18, manufactured by the McDonnell-Douglas Corporation of the U.S.A., as the new aircraft to replace the Mirage III O/D once the latter's operational life was complete. No.75 Squadron will be the first occupants of the new Tindal RAAF Base, equipped with the F/A-18's. A build-up period of personnel and stores from July 1987 will culminate in the Base becoming operational in late 1988.

An overview of the Tindal RAAF Base Development is the subject of Chapter Three.

2.3 Demographic Profile

2.3.1 Composition

Katherine is the third largest town in the Northern Territory, with a 1986 census population of 5691 (ABS, 1987:8). The 1981 age/sex structure of Katherine and of Australia as a whole are shown in Figure 2.5.

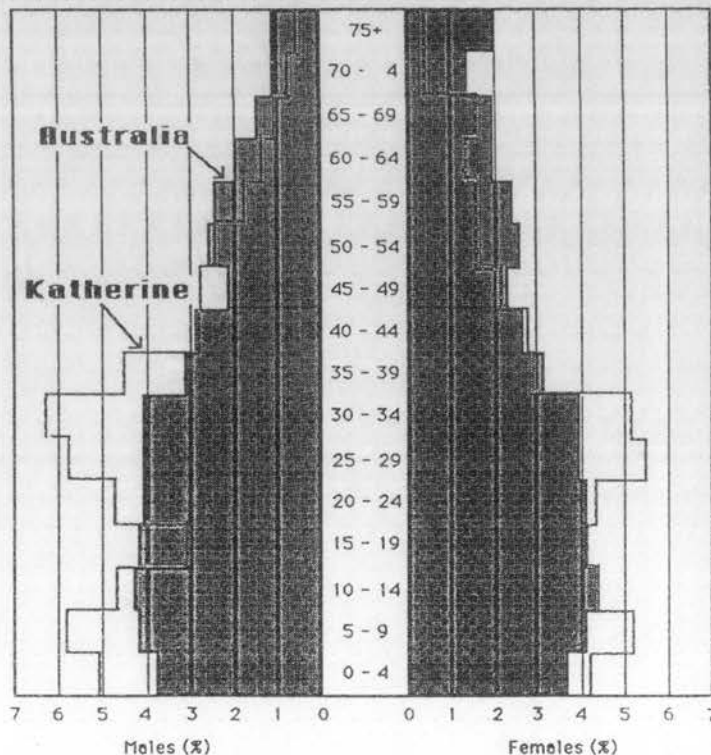


Figure 2.5

1981 Age / Sex structure of Katherine and Australia as a whole.

(Source: ABS, 1982)

The age distribution of the Katherine population is like that of most of Australia's northern centres (Coulter, 1987:2), weighted towards the young. Some 80 percent (compared to the national figure of about 65 percent) are below 40 years of age, and half of the population is below the age of 25 (ABS, 1982). There is a noticeably larger proportion of males to females (57

percent to 43 percent respectively) than the Australian population in general (49.9 percent to 50.1 percent respectively)(ABS, 1987:8).

Nearly 87 percent of the Katherine population are Australian born. Of those 13 percent born elsewhere, eight percent were born in english speaking countries (ABS, 1982). While Aboriginal people constitute almost half (47 percent) of the population of the outlying regions surrounding Katherine, they are a substantial minority within the Katherine township itself (Kinhall-Stearns, 1983:3.73).

Approximately 70 percent of the Katherine population is in the labour force, as compared with that of Australia which is close to 60 percent (Coulter, 1987:5), with a higher proportion of males (63 percent) than women (37 percent)(ABS, 1982). Income levels are certainly higher in the Territory than the national average (ABS, 1982), but this is off-set by the high cost of living generally brought about by high freight costs (Coulter, 1987:7). More data concerning the Katherine labour force will be discussed in Section 2.4.

The percentage of the Katherine population with some post-secondary school qualifications and with no qualifications were both slightly lower than for the overall Australian population, but a noticeably larger proportion did not disclose educational qualification levels.

A characteristic of the Northern Territory populaton is its degree of mobility and transience within the urban non-Aboriginal population. Intercensal (1976-1981) figures on usual residence give some indication on the scope of mobility. In 1981, excluding the under-five age group (11.4 percent of the total) and the 'not stated' category (1.9 percent), only 65 percent was resident in the Territory in 1976. The comparative figures for New South Wales and Victoria were 92 percent and 93 percent (Jaensch and Loveday, 1983:7). Of the incomers, 23 percent were Australian residents in 1976 and 6.6 percent were overseas migrants.

2.3.2 Growth

The annual population growth rate for the Northern Territory from 1979 to 1984 was 4.0 percent compared with an Australian figure of 1.4 percent (Jaensch and Loveday, 1983:7; Department of the Chief Minister, 1986b:11). Katherine, however, was noticeably less than the annual compound growth rate for the Territory with a growth rate of 3.6 percent (ABS, 1982). Irrespective, Katherine remains to be one of Australia's fastest growing towns. The projected annual population levels for Katherine 1982 to 1990, without the effects of the Tindal Development taken into account at this stage, are shown below in Figure 2.6.

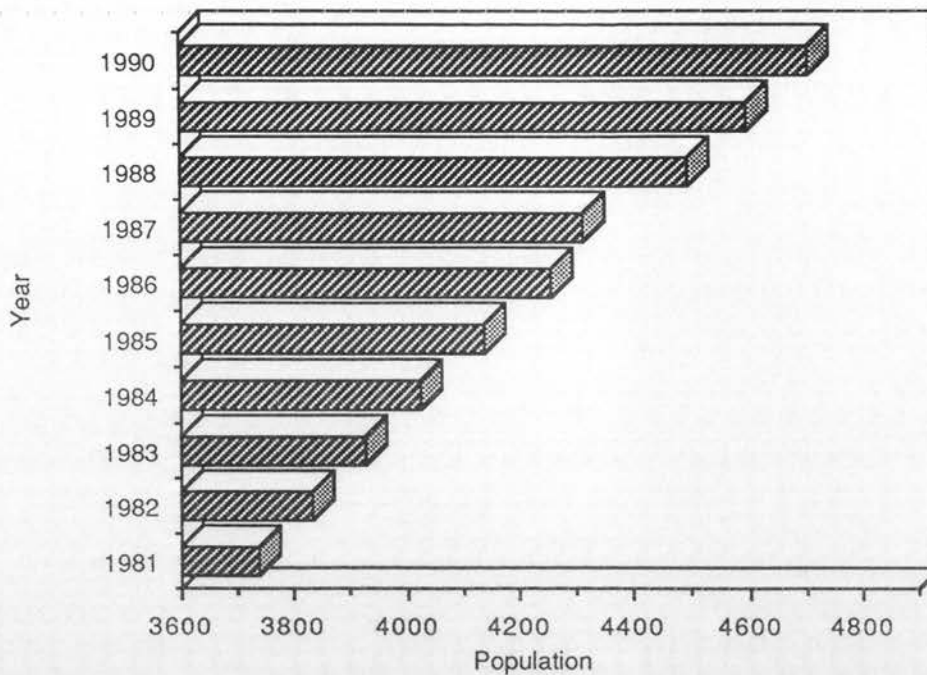


Figure 2.6 Projected Annual Population Levels for Katherine 1982 to 1990 without Tindal
(Source: Kinhall-Stearns, 1983:3.75)

As Katherines' 1986 population was 5691, it can be seen that the Tindal RAAF Base Development is already having an effect on Katherine. The population impact of the Base will be further discussed in Chapter Three.

2.3.3 Tourism

The Katherine Region is one of the three major focal points of the 'Top End' tourist industry. A 1982 survey of the Northern Territory tourist industry (Roy Morgan Research Centre, 1982) indicated that, in the twelve month period ending August 1982, a total of 113,250 people visited attractions in the Katherine Region. A more recent accurate figure is not available, however, one can safely assume that the figure is somewhat larger today due to the sealing of the Stuart and part of the Kakadu Highways (see Figure 2.1)(Coulter, 1987:23). Comparatively, this 1982 figure represents nearly 20 times Katherine's current population. The effect that the tourist season has on the service industry and on Katherine's economy is quite substantial, and prospects indicate that this trend will continue to grow (Department of the Chief Minister, 1986b:14).

Presently, the major influx of tourists into the Katherine Region occurs during the dry season (April to October). The continuous improvement of transport links (see Section 2.1.3), and the initiatives of the Northern Territory Tourist Commission, as well as private organisations, are extending the tourist season well into the wet season (Department of the Chief Minister, 1986b:14).

2.4 The Economic Base of Katherine

Since self-government in 1978 the Northern Territory has enjoyed strong economic prosperity and growth (Coulter, 1987:1). The Territory is only now beginning to feel the effects of the general recession that has developed in Australia since 1980. As was briefly touched upon in Section 2.2.1, the economy of the Katherine Region is dominated by the pastoral industry, primarily cattle raising and slaughtering. There is no mining industry of any significance, and manufacturing is limited to an export abattoir in Katherine and some food processing. As the largest town in the Katherine Statistical Division, Katherine functions as the service centre for the primarily agricultural hinterland, as well as a service centre for the Aboriginal townships and smaller centres. As discussed in Section 2.3.3, the Katherine Region is also one of the three major focal points of the Top End tourist industry.

There is evidence of increased agricultural and horticultural activity in Katherine's hinterland (O'Faircheallaigh, 1986:26). In addition, successful market gardens are being established in the Katherine area, and trial shipments of lettuce, grapes, and mangoes grown in the region have been forwarded to Asian markets (Coulter, 1987:28,29).

The export abattoir is the only industry of any size in Katherine. It is currently out of operation due to the recurring problem of cost-effectiveness, but there are strong reports of the works re-opening in the 1988 season (Katherine Times Newspaper; Katherine Advertiser Newspaper; Field Notebook 1). Cattle mainly come from the Victoria River and Barkly Tablelands districts. The abattoir is usually the major employer in the township, with a peak employment level of about 350 during the slaughtering period of April to November.

A proposed \$15 M local investment toward a five star hotel (Katherine Times Newspaper; Field Notebook 1) is a major project which will augment the many smaller developments upgrading and expanding the caravan and camping grounds within the township. The development of the Natural Gas Pipeline from Central Australia to Darwin, the Telecom fibre optic link from Darwin to Adelaide, and completion of the round Australia micro-wave radio link from Katherine to Kununurra have also resulted in increased demand for services and personnel in Katherine (Katherine Advertiser Edition 384, December 4-10, 1986).

2.4.1 Occupational Status

Katherine has a high labour force participation rate of 70 percent, as compared with that of Australia which is close to 60 percent (Coulter,

1987:5), with a significantly higher proportion of males (63 percent) than females (37 percent)(ABS, 1982). There is approximately 4.3 percent (1981 census figure) unemployment in the Katherine township, yet this figure is known to represent a low percentage due to the seasonal variation in job availability as the census was taken at a time when local employment was at a peak (ABS, 1982). In some agricultural districts, employment varies significantly from season to season. This applies particularly to the Katherine Statistical Division and Katherine township where, during the wet season months of December to February, many people on properties and cattle stations are redundant, and where the export abattoir usually operates from April to November.

Statistics from the Employment by Industrial Classification 1981 (ABS, 1982) indicate that Katherine is primarily a service centre for the mainly agricultural hinterland. The total percentage of people employed in industries of a service nature is 66.4 percent. This includes employment in public utilities (3.3 percent), retail and wholesale trade (14.6 percent), transport and storage (5.5 percent), communications (1.9 percent), insurance, finance and business services (3.5 percent), public administration (11.4 percent), community services (19.9 percent), and recreation and entertainment (6.3 percent) (ABS, 1982). The figures from the industry sector classification show that the private sector is by far the largest employer with 48.3 percent of the work force, with the State Government employing 26.6 percent, the Australian Government 7.5 percent, the local government 1.4 percent (ABS, 1982). A considerable number of these Commonwealth and Territory Government workers are directly concerned with administering the welfare of the Aboriginal population in the surrounding region.

The 1981 census data also shows that of the employed labour force, 93 percent were wage and salary earners, five percent were self employed and two percent were employers. A more detailed description of the retail sector labour force will be given in Section 5.2.2.

2.5 Description of the Katherine Business and Retail Sectors

2.5.1 Spatial Distribution

The Katherine business sector is very much centralised in Katherine Terrace, which bisects the township (see Figure 2.7 and Plates 2.2, 2.3, 2.4, 2.5). The retail and service industries dominate this area. Two minor industrial zones, catering for industrial and other service industries, have been developed by Town Planning Authorities to the north-west and south-east of the older township. The Town Planning Authorities have also attempted to

decentralise some of the retailing and services establishments by creating minor business centres in two other locations. The first is Pandanus Plaza at the corner of First and Warburton Streets (see Figure 2.7 and Plates 2.2 and 2.6) and the second is the Happy Corner Store Complex at the corner of Giles and Third Streets (see Figure 2.7 and Plates 2.2 and 2.7). Other scattered minor lots of land have also been zoned for business use (Pak-Poy and Associates, 1973; Katherine Town Planning Authority, 1985). Despite this attempted decentralisation, the nature of Katherine's economy, and the effect the tourists have driving through the centre of town strongly encourages centralisation of retail business activity toward Katherine Terrace. This aspect will be discussed further in Section 5.2.4.

The development of a new housing subdivision at Katherine East promises to have some influence on the spatial distribution of Katherine's retail sector. Presently being constructed in the centre of the development is a small supermarket and provision for a small number of specialty shops in an arcade arrangement. The supermarket is a second outlet for one of the current major food dealers in the 'old' township - Baruweil Enterprises. As the population in Katherine East will inevitably increase (especially with the married RAAF personnel (see Chapter Three)) so will the importance of these localised stores, perhaps diverting customers from similar retail outlets in the old township because of their convenience.

Several retail geography studies have identified a tendency for retail establishments dealing in similar items of a tendency to seek identical neighbours (Duncan and Phillips, 1963:93; McCarty and Linberg, 1966:140; Scott, 1970:32-36). Women's clothing, general merchandise, family clothing stores and vehicle dealerships seem to seek identical neighbours because the customer desires to compare items, while variety stores depend heavily on incidental purchases. The reinforcement of this trend is not significant in Katherine, although women's clothing and family clothing stores did have a distinct cluster in the central Katherine Terrace vicinity. The limited numerical nature of the Katherine retail sector could not allow an accurate evaluation of this interesting spatial trend.

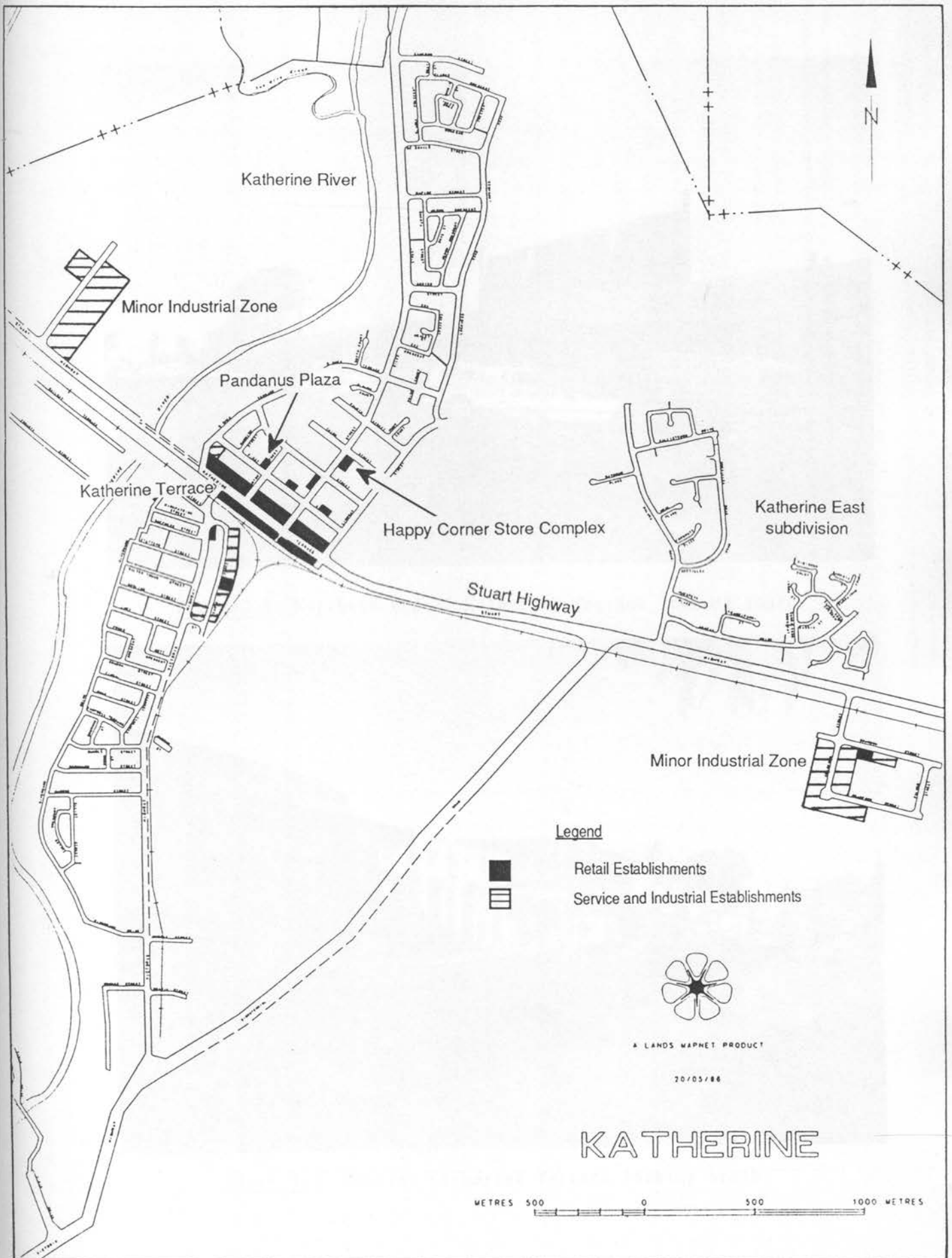


Figure 2.7 Spatial Distribution of the Katherine Business Sector
(Source: N.T. Department of Lands; Field Notebook 1)



Plate 2.3 Northern end of Katherine Terrace looking south.



Plate 2.4 Central Katherine Terrace looking south.



Plate 2.5 Southern end of Katherine Terrace looking north
also showing the Woolworths complex.



Plate 2.6 Pandanus Plaza.

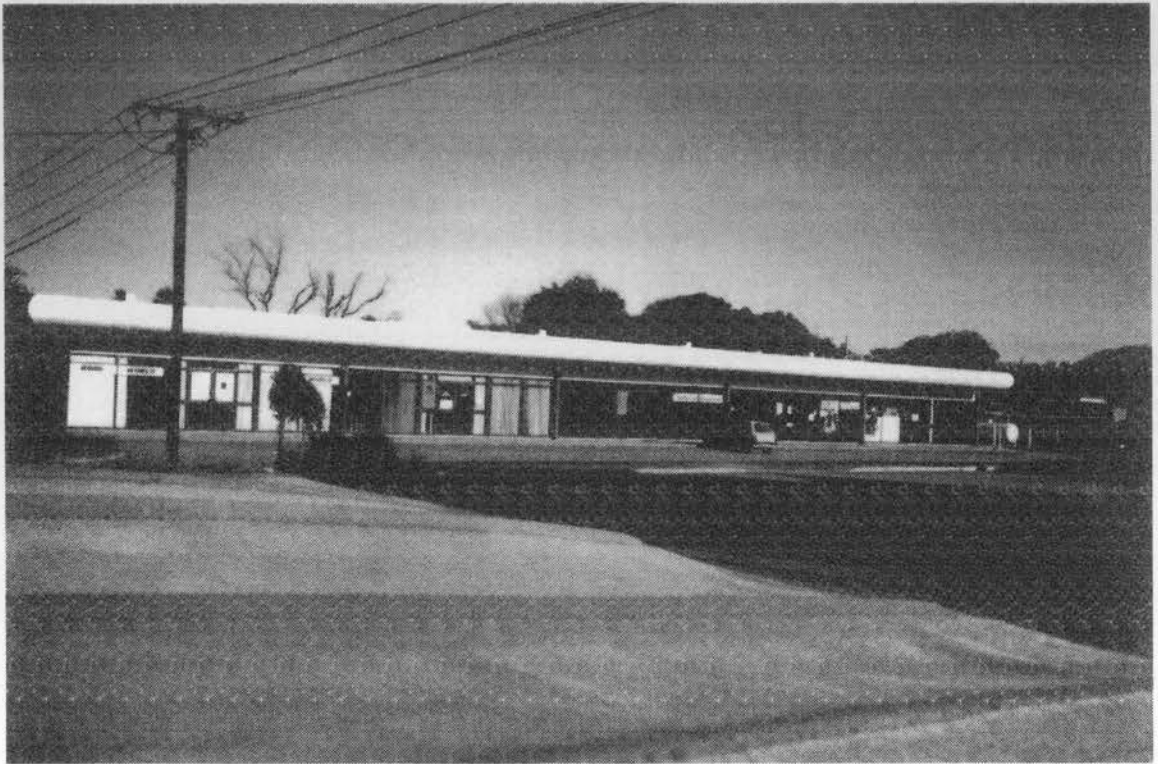


Plate 2.7 Happy Corner Store Complex.

2.5.2 Hierarchy of Power

It has been argued that the individual nature of any particular research site must be given due consideration in any dissertation. Hence, the requirement for this chapter. The image of the 'small country town' adopted by much of the population in the southern Australian states is brought to the fore in the Katherine class structure, where the political, financial and social web of interaction that exists is so complex, that members of its hierarchial elements have difficulty in assimilating the cause and effect of many decisions concerning Katherine. The hierarchy of power in Katherine is primarily a function of occupation and social status, and is composed of council members, government department heads, local business magnates and entrepreneurs as well as old Katherine residents (Jaensch and Loveday, 1983:61,62). This does not necessarily imply that preferential treatment or corruption within this hierarchy exists, but because of the small size of the population, the number of individuals in this power structure, owning or having interests investments or ventures within the township are few. Societal and developmental conflicts over individual business interests between members of the Katherine power hierarchy are raised in the local press regularly. Rumour, hearsay and exaggeration each play their parts in these published conflicts. As a brief example, during the time of the survey questionnaire, an article in the Katherine Times Newspaper produced an allegation that the Country Liberal Party (CLP) Member for the Northern Territory, Paul Everingham had personal interests in the leasing arrangements for the specialty shops in the Woolworths complex. The same article also recalled past incidents involving the CLP Government's selling of 50 acre lots of land for \$20 to preferred persons, cheap blocks of subdivided land in Katherine East being sold to members of the CLP in blatant preference to members of the public, as well as providing 'jobs for the boys' (Katherine Times Volume 5, Issue February 7, 1987). Such comments illustrate that the societal and developmental aspects of the Katherine community are complex, intriguing and can be expected to affect the peoples' perceptions. This anomaly also appears to be associated with other small remote townships such as Broome and Derby, as this hierarchial phenomenon was also identified by Buckett (1985) in his studies of these two townships (Buckett, 1985:87,94,Appendix 12).

CHAPTER THREE

THE TINDAL RAAF BASE DEVELOPMENT

3.1 Introduction

The location of the Tindal RAAF Base in relation to Katherine Township is shown in Figure 3.1 and in Plate 2.2. When work by No.5 Airfield Construction Squadron (ACS) was completed in 1970 (see Section 2.2.2) Tindal was classified as a bare-base airfield with limited or no aircraft storage, maintenance, arming, fuelling or controlling facilities (Records of the Katherine Historical Society). The runway was 2750m long and associated taxiways and aprons, four hangars, a disused construction camp, a number of demountables, a power house and various Department of Aviation facilities were also present (see Plate 3.1). The reasoning behind the decision to upgrade the Tindal Airfield to home-base status was explained in Section 2.2.2. This is the first occasion since World War II that the RAAF has had to plan a new manned operational base in Australia.

The Department of Housing and Construction (DHC), which is the Commonwealth Government authority for the design and construction of Commonwealth facilities, in conjunction with the Department of Defence, carried out the development of feasibility studies, environmental assessments and preparation of detailed designs for the proposed Base (Office of Policy and Planning, Department of the Chief Minister, 1982; Department of Housing and Construction, 1983, 1985a, 1985b, 1985-86; Conservation Commission of Northern Territory, 1984; Department of Defence, 1984). In March 1984, the Departments of Housing and Construction and Defence submitted the proposal to the Parliamentary Standing Committee on Public Works, and Government approval was received in August 1984.

The estimated cost of the project (at May 1987 prices) is \$217 M, including the following components:

Building Works	\$87 M	
Civil Works	\$78 M	
Electrical Services	\$30 M	
Mechanical Services	<u>\$22 M</u>	
TOTAL:	<u>\$217 M</u>	(DHC, 1987:2)

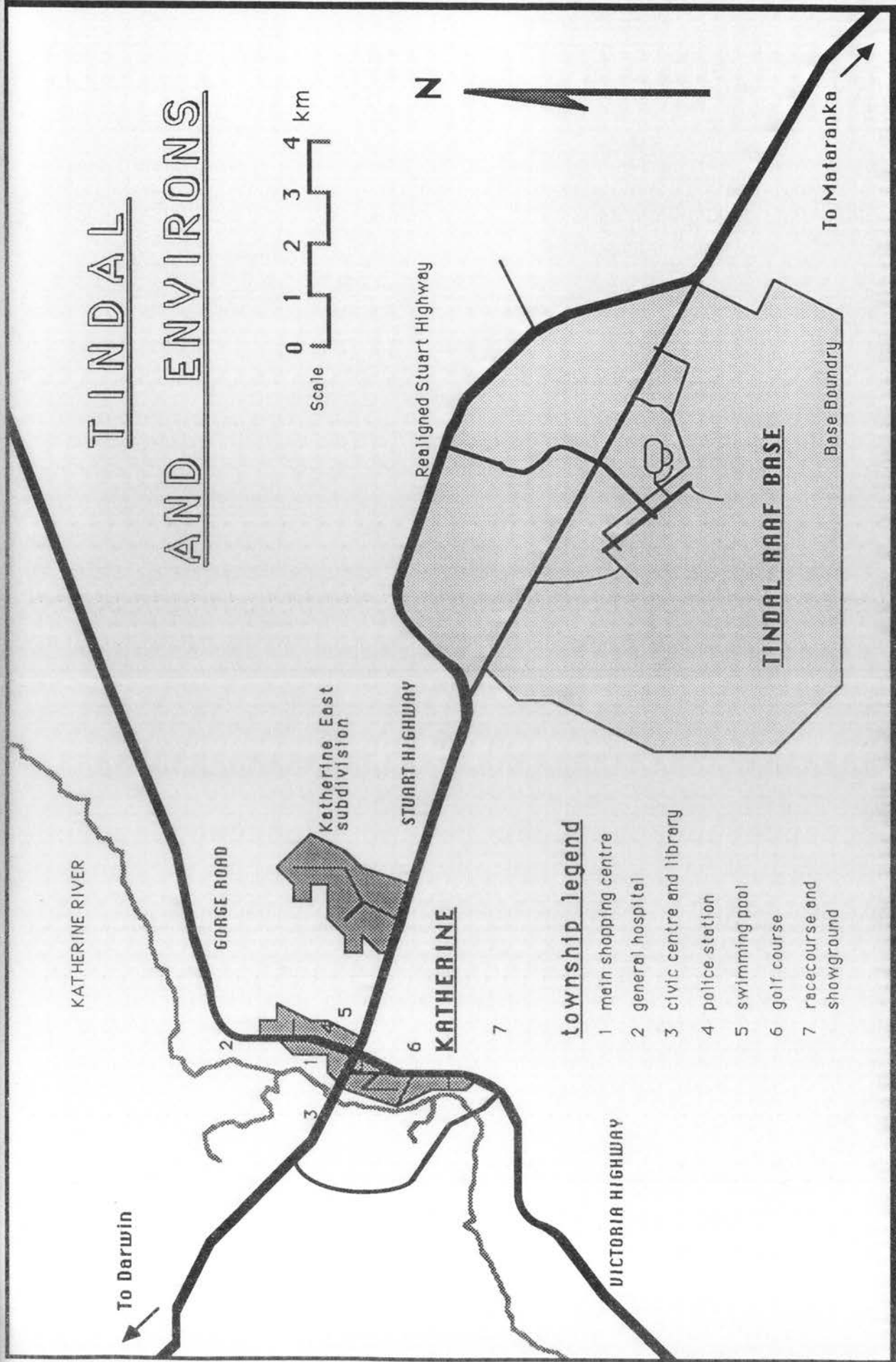


Figure 3.1 Tindal RAAF Base in Relation to Katherine Township.
(Source: Adapted from DHC, 1987:10)



Plate 3.1 A view of the facilities constructed by 5 ACS also showing the completed control tower for the new development.

An additional \$55 M (May 1983 prices) will also be spent on development of the Katherine Township infrastructure, facilities and accommodation in order to cope with the Tindal RAAF Base demands (Kinhall-Stearns, 1983:8.2).

For the purposes of discussion and analysis, the terms 'Construction Phase' and 'Operational Phase' of the Tindal RAAF Base Development will now be introduced. The former refers to the physical construction of the facilities on the base, which is the responsibility of DHC, whereas the latter refers to the stage where the RAAF take over the responsibility for the Base and begin normal operations with the F/A-18's of No.75 Squadron. The handover date at the time of writing is set for August 1988.

3.2 Overview of the Master Plan

The re-development of the Base to the status of a fully operational major facility has been structured through a Master Plan. This Plan, which incorporates all facets of the proposal, is based on a two staged upgrading and expansion of the existing facilities at RAAF Base Tindal. Stage 1 of the Development is designed to provide a home base for No.75 Squadron when it is equipped with F/A-18 fighter aircraft. The \$217 M figure stated in the previous section refers only to the development of the Base to Stage 1. Stage 2 of the proposed development involves the construction of facilities at Tindal to accommodate those functions presently performed by RAAF Base Darwin. The preparation of the Master Plan took into account the findings of the Draft Environmental Impact Statement completed by Kinhall-Stearns (the consultants). The Operational Phase will become effective between Stages 1 and 2 of the re-development.

The project will involve enlarging the current base from approximately 45 square kilometres to 122 square kilometres, and acquisition and development of a variety of sites off the main base. The enlarged base itself, by the completion of Stage 1, is proposed to include the following:

On-base

- * runway and parallel taxiway 3,050m in length
- * V-shaped taxiway to be used as emergency runway
- * flying operations facilities
- * aircraft dispersal, servicing and arming area
- * air movement support facilities
- * aircraft technical support facilities
- * navigational aids
- * aircraft ordnance facilities
- * communication facility

- * administration and base support facilities
- * engine run-up facilities
- * community and recreation facilities
- * single and married quarters and messes
- * engineering works and services
- * small arms range
- * an Army transit camp

Off-base

- * airfield surveillance radar facility
- * air to surface weapons range
- * married quarters in Katherine East
- * realignment of the Stuart Highway
- * engineering works and services

(DHC, 1987:2)

Figure 3.2 shows the layout of most of these on-base facilities, and Plates 3.2, 3.3 and 3.4 show some of the facilities themselves. Engineering services which will be required to meet the demands of the development include a potable water supply of up to 2.5 Ml/day, a power supply of 6.2 MW, on-base sewage treatment and a treated effluent disposal system, as well as the provisioning of accommodation facilities for the construction workers. It is for these services that a further \$55 M (see Section 3.1) has been allocated.

On completion of Stage 1, the Operational Phase will begin and the Base will be manned by an estimated 650 RAAF personnel, approximately 380 of whom are likely to be married (accompanied by an estimated 1,050 spouses and children) and 270 single. In addition to this service population, a further 120 civilians will be employed on the Base by RAAF and DHC in administrative, service and maintenance roles. These Stage 1 personnel will arrive progressively during the first half of 1988, with RAAF personnel being posted to Tindal for a period of two to three years. Following the completion of Stage 2, it is estimated that the Base will be manned by approximately 1,000 RAAF personnel, of whom 410 would probably be single and 590 married. It is also expected that civilian employee numbers will increase to 190.

Accommodation will be provided on-base for all single RAAF personnel as well as married quarters for 100 RAAF personnel in Stage 1 and 150 in Stage 2. The remaining married RAAF personnel will be housed in the Katherine East subdivision which is currently being developed by the Northern Territory Government. There will be a total of 200 married quarters

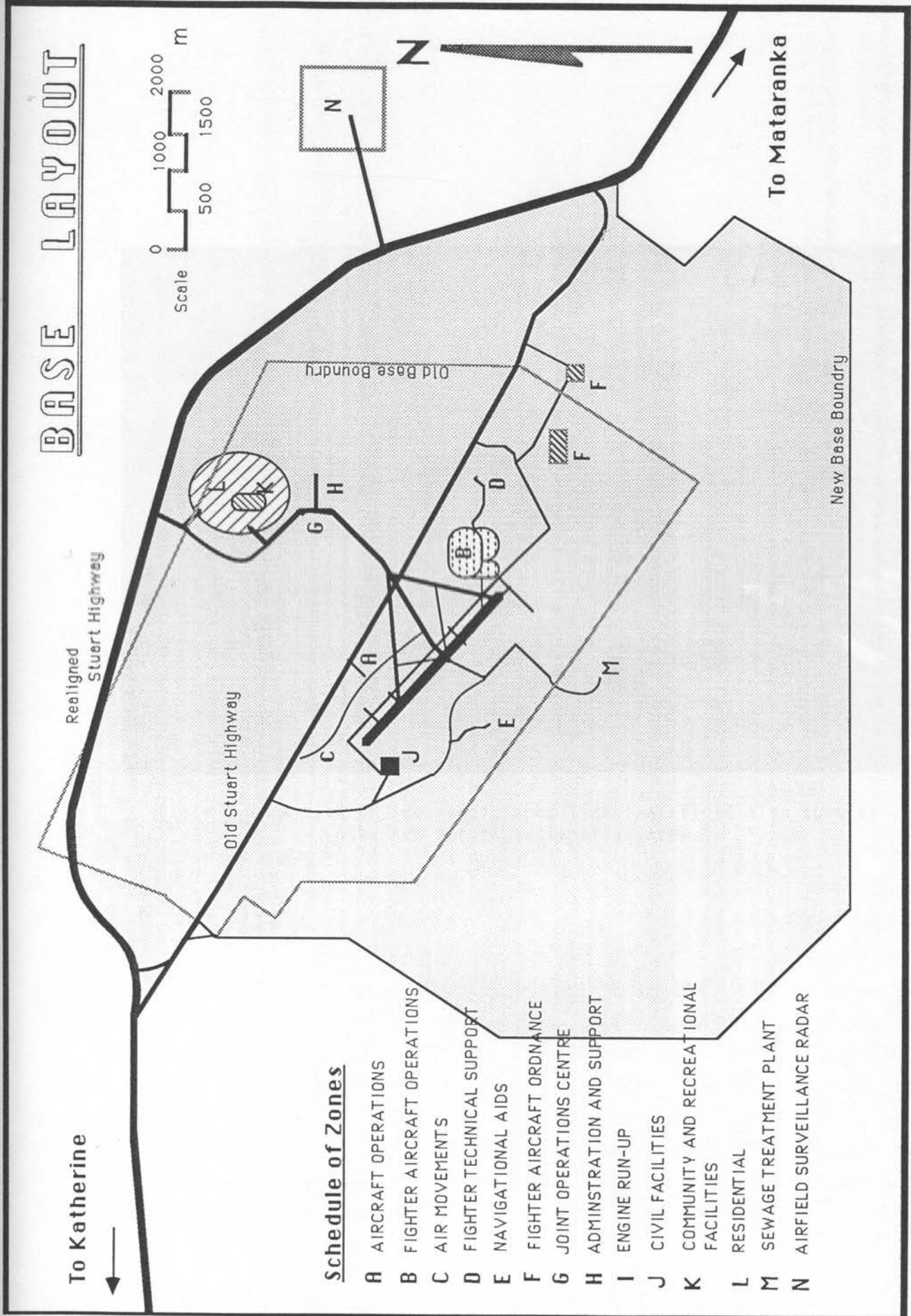


Figure 3.2 Layout of the Tindal RAAF Base Development.
(Source: Adapted from DHC, 1987:11)



Plate 3.2 A view of the redeveloped Tindal Airfield also showing the new aircraft dispersal area.

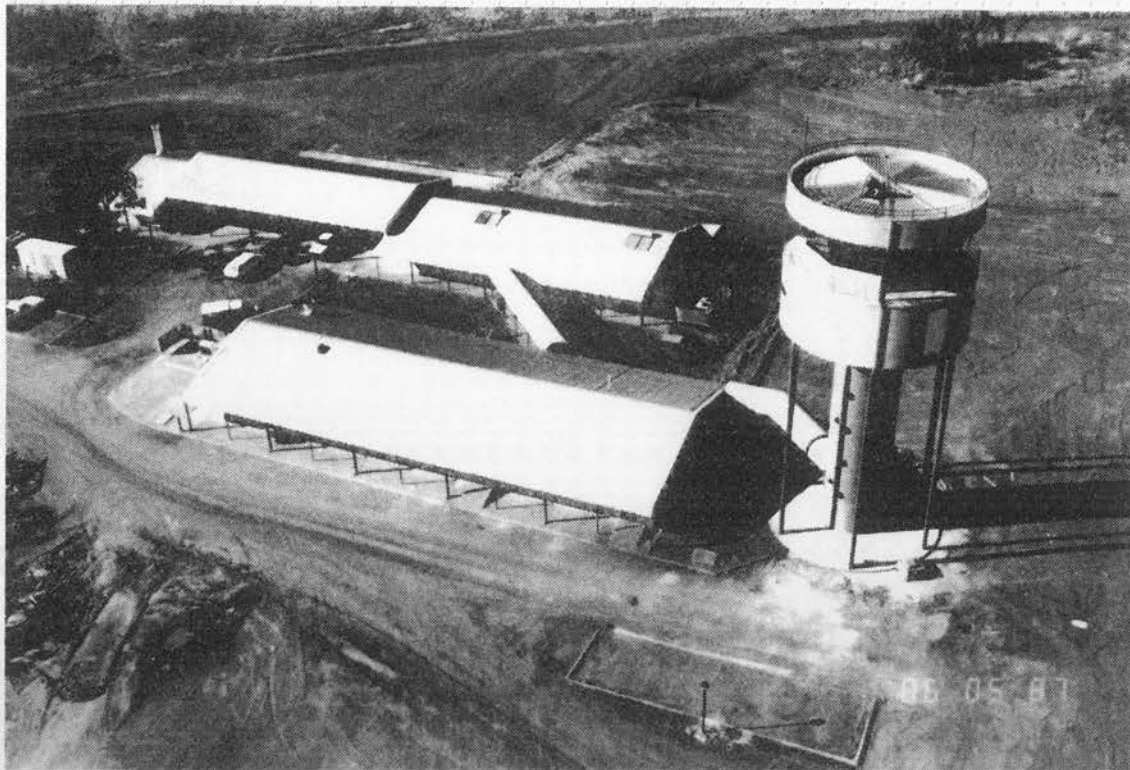


Plate 3.3 A view of the recently completed control tower for the Tindal RAAF Base.



Plate 3.4 A view of the on-base accommodation for the living-in single personnel at Tindal RAAF Base

constructed in Katherine East by the completion of Stage 2 (Parliamentary Standing Committee on Public Works, 1984a:F-3).

Some community and recreational facilities will also be provided on the Base. The community facilities will include a family store (along similar lines to a small suburban supermarket), limited postal and banking facilities, a small dry canteen/snack bar, and a petrol outlet for private vehicles (Department of Defence, 1984:18).

The present Department of Aviation facilities at Tindal will continue to be used for civilian purposes. However, in order to accommodate the expansion of the RAAF facilities, it was necessary to realign the Stuart Highway around the northern boundary (see Figures 3.1 and 3.2) and to modify the alignment for the proposed Alice Springs to Darwin railway.

The efficient development of RAAF Base Tindal will depend upon a co-ordinated approach to the project by the Commonwealth and Northern Territory Governments and the Katherine Town Council. This has been recognised by the establishment of a Joint Consultative Committee (JCC) with a permanent membership of eight. This committee has a representative from each of the three Commonwealth Government Departments of Defence, Housing and Construction, and Finance, and from each of the three Northern Territory Departments of the Chief Minister, Treasury, and Transport and Works, as well as one RAAF representative and one representative from the Katherine Town Council. Representatives from other Commonwealth and Northern Territory Government Departments are invited to participate when required.

The JCC's terms of reference are:

- a. to identify matters relating to the Development of Tindal which require co-ordination between Commonwealth and Northern Territory Governments and the Katherine Town Council;
- b. to co-ordinate consultations on these matters in order to assist with the resolution of problems.

3.3 Perceived Effects on Katherine

This section will aim to outline the perceived 'official' effects that the Tindal RAAF Base Development will have on Katherine. The findings have been derived as part of a Draft Environmental Impact Statement (EIS) completed by the Kinhall-Stearns consultants, who were commissioned by DHC, on behalf of the Department of Defence, in 1983 under the requirements of the Environmental Protection (Impact of Proposals) Act 1974-75. The Statement aimed at assessing the probable effects of the proposed Development in order to assist the Commonwealth Government in its decision

whether to go ahead with the project. The Development was approved by the Commonwealth Government in August 1984 and work on the site began soon afterwards.

Other than the Draft EIS, which was completed in early 1984 with a supplement after public perusal (Kinhall-Stearns, 1984), no further studies of the Development have been completed. Kinhall-Stearns, however, have again been commissioned by Department of Defence to conduct a review of the 1983 statement with the aim of updating relevant sections as well as completing a more comprehensive appraisal primarily of the impact associated with the Construction Phase. The scope of work for the review also includes an assessment of "a social issues" plan for the imminent Operational Phase (pers.comm. Tindal RAAF Base Advance Party). The review was commissioned in February 1987 but had not been released at the time of writing. Yet the fact that it has been commissioned indicates the need to reconsider some of the subjects considered in the 1983 statement, as well as to address subsequent new topics affecting the Development, especially the social impact of the Operational Phase.

Most of this section will comprise quoted paragraphs from the 1983 Draft EIS, in order to relate the perceived effects that DHC and Department of Defence are currently (pending the publication of the review) consulting whilst conducting the Development to date. The purpose of the quotations is to outline exactly what perceptions of impact existed prior to the Development commencing, and thus enable discussion and comparison between these perceptions and those revealed in the results of this study in Chapter Five. This section will discuss the perceived impacts that the Development of the Tindal RAAF Base will have on the population of Katherine, as well as on the social and economic environment of the town.

3.3.1 Population Projections

3.3.1.1 Stage 1 Population

"The usual method of population growth forecasting is related to the expanded employment opportunities in urban areas and output-related employment multipliers. These are usually determined on the basis of input-output analysis which evaluates the relative interdependence between the various manufacturing and service sectors within the economy. Such output-related multipliers are based on macro-economic analysis of productive and service inputs and outputs, and for this reason have limited application to the evaluation of the multiplier effects of growth and employment opportunities in remote local townships or in locations where, prior to the

Development of a major project, infrastructure and community facilities either did not exist or their provision was limited. The impact of the development of RAAF Base Tindal differs from development in large urban areas since the development will have no tangible product as an output (that is, it will not manufacture goods or services that will have a market value or inter-industry linkages). The only output in terms of induced and flow-on effects on employment opportunities in the project area will be the expenditure of goods and personal services purchased locally by the Base administration, RAAF personnel and their dependants, and by personnel engaged directly in supporting Base services. Additionally, the presence of a relatively large number of RAAF personnel and dependants will create significant new demands for community services, particularly in the areas of health, education, telecommunications and public administration, which will have to be provided by the relevant Commonwealth and Northern Territory government departments." (Kinhall-Stearns, 1983:8.7,8.8)

"In forecasting the population growth in Katherine, the following major considerations were taken into account:

- a. the temporary influx of population associated with the construction workforce required for the construction of the Base and of the additional and improved town facilities and infrastructure (such as housing, roads, drains, water supply, schools and hospital facilities);
- b. the additional permanent population associated with the basing of RAAF personnel and their dependants at Tindal and Katherine. (It should be noted that Tindal and Katherine are treated as one urban area because of their proximity.) Katherine will also provide nearly all of the supporting community facilities and services for the RAAF personnel and their dependants located at the Base;
- c. The additional permanent workforce associated with the civilian employment positions on the Base;
- d. The additional permanent population associated with the creation of new civilian employment opportunities in the areas of public service, education, welfare, community and personal services, and trade (that is, induced population growth as a flow-on effect of the Development of RAAF Base Tindal and its subsequent demands on community services and facilities in Katherine);
- e. The current growth projections for Katherine."(see Section 2.3.2).

(Kinhall-Stearns, 1983:8.8)

"In 1988, there will be an overlap of Construction and Operational activities, and the population of Katherine-Tindal will peak at 7,495, which is 3,000 in excess of the current projected, 1987 population of 4,495 (which does not take the expansion of RAAF Base Tindal into account). In 1990, during the Operational Phase when population growth will have stabilised, the population of Katherine-Tindal will be 7,160, which is 2,455 in excess of the current projected 1990 population of 4,705." (Kinhall-Stearns, 1983:8.15, 8.16)

"The sensitivity of these projections is illustrated by the high and low population projections for Katherine-Tindal. These indicate that the population during the peak associated with construction activities will vary between 6,840 and 8,135, while the 1990 population will vary from 6,815 and 7,550." (Kinhall-Stearns, 1983:8.17)

3.3.1.2 Stage 2 Population

"The expectation is that, over the years 1990 to 2000, RAAF Base Tindal will be expanded and the manning supplemented by another 140 single and 210 married personnel. It is estimated that this expansion will provide another 70 jobs for civilians at the base. The date and staging of this proposed Development is still to be determined. For assessment purposes, the effects of this increase in personnel of the population of Katherine-Tindal have been assigned to the year 2000. The population projections for the year 2000 have been derived by adding to the 1990 Katherine population (see Section 2.3.2), which includes an allowance for natural growth of 2.7 percent per annum of non-RAAF personnel. The following considerations were taken into account:

- a. the new Base associated population (that is, 140 single and 210 married personnel with families, with the average family size being 3.78 (including spouse));
- b. the estimated in-migrant population associated with the 70 new jobs created for civilians at the Base;
- c. The estimated in-migrant population associated with the new induced employment opportunities in the township.

'The population projection for the year 2000, incorporating the Stage 2 Development, is predicted to be 10,090, with a range between 9,505 and 10,770. The temporary population increase associated with the construction workforce will depend on the timing of Stage 2 as well as the expenditure and staging of construction which are unknown at this time. The effects of the construction workforce are expected to be less significant than those

during Stage 1 because, by that time, Katherine will be larger and have a broader base in terms of physical and social resources to accommodate the likely effects." (Kinhall-Stearns, 1983:8.17)

3.3.2 Social Effects

"The social impacts associated with the Construction and Operation of the RAAF Base Tindal Development are expected to occur in a variety of ways, over different durations, and to have differing spheres of influence. There will be both adverse and beneficial effects. The way in which these impacts are expected to occur include:

- a. pressure being placed on existing community facilities and services in Katherine, with a consequent demand for new and expanded facilities as relevant population thresholds are reached;
- b. pressure being exerted on existing housing and accommodation, with a consequent requirement for additional housing and accommodation;
- c. changes being made to the built environment of the township of Katherine;
- d. adjustments being made to existing social networks and attitudes, as the effects of the increased population lead to the diversification of the town area, and as new population is assimilated into the community; and
- e. adjustments taking place in the existing community and decision-making structure, as the balance between various interest groups is altered by the new population.

'Social impacts, differing in both type and duration, will be associated with the following major phases of the project:

- a. Pre-construction Phase - anticipation of changes expected to occur in the township, arising over the period from the initial announcement of the Development of RAAF Base Tindal through to its approval and the commencement of construction, will result in social impacts which will be felt primarily by the residents and the business community in Katherine. There will be optimism about the potential arising from the township's growth; concern that false expectations might be built up should the project be cancelled after initial investigations; and mixed feelings about Katherine becoming a 'RAAF town'.
- b. Construction Phase - social impacts will result from the inflow and outflow of workers as stages of the Base are constructed. Increased demands will be made on commercial and community facilities and services, with an overall increase in social and economic activity

within Katherine. Although the construction period will provide benefits to some local people in terms of increased employment and associated economic benefits, as far as others are concerned these could have an adverse impact. For example, landlords and property owners might benefit from higher rentals or rates, while people on low or fixed incomes might be adversely affected if housing prices, rents, or other costs of living increase significantly as a result of sudden or poorly managed increases in housing demand. Another impact might be the attraction to Katherine of people looking for employment who may have neither the appropriate skills for the jobs available, nor adequate finances, thus creating increased demands on the existing welfare agencies.

c. Full operation of RAAF Base Tindal - by mid-1988, Stage 1 will be complete and the Base will become fully operational in late-1988. Although operational staffing levels on the Base should remain constant, some natural population growth will continue in Katherine. However, following a significant inflow in 1988, this population growth is expected to stabilise. The demographic structure of Katherine is unlikely to change significantly. It will continue to have a more youthful age structure and a greater proportion of males than the Australian population in general. However, the Aboriginal community will decrease as a proportion of the total population.

d. Stage 2 Development of RAAF Base Tindal - the proposed addition by the year 2000 of a further 140 single and 210 married people at RAAF Base Tindal, together with the civilian employment for 70 people, could be expected to generate social impacts associated with a higher than normal growth rate. The timing of the increase in population is uncertain; by the time it does occur, it is expected that Katherine would have developed a larger stabilized population, an expanded infrastructure, and an established RAAF presence. Impacts associated with the arrival of additional RAAF personnel are therefore expected to be only marginal, provided that adequate planning and the necessary infrastructure development are undertaken." (Kinhall-Stearns, 1983: 9.1,9.2)

3.3.3 Economic Impact

"The expansion of RAAF Base Tindal will cause a noticeable increase in economic activity in the Northern Territory, the Katherine Region, and in particular in the Katherine Township. The principal economic effects will be

a significant increase in output and employment in these three levels of the economy as a result of the direct demands of the Construction and Operational Phases, augmented by the multiplier effects of demand for goods and services. The employment created by the development, either directly associated with the Base, or indirectly due to the increased demand for services, will also bring additional workers and their dependants into the Katherine-Tindal district." (Kinhall-Stearns, 1983:8.1)

"The expansion of RAAF Base Tindal will have the following two-fold impact on the income and output in the various economic sectors in Katherine and the Northern Territory:

- a. short-term transitory economic benefits during the Construction Phase derived from capital expenditure on Base facilities, town infrastructure, and housing;
- b. long-term permanent economic benefits during the Operational Phase, as a result of new demand for goods and services generated by the supply needs of the Base, together with the needs of RAAF personnel and the new permanent civilian population. These benefits are derived from the direct and multiplier effects of the additional wages spent in the economy." (Kinhall-Stearns, 1983:8.1)

The proposed contracts referred to include domestic duties such as garbage collection and removal, gardening and mowing, transport, vehicle maintenance and a catering contract (Katherine Advertiser Edition 387, 8-14 January, 1987).

3.3.3.1 Construction Phase Expenditure

"The construction programme for the Stage 1 expansion of the Base has been scheduled over four years. It is proposed to have the base operational by late 1988. The estimated cost, staging, and timing of the Stage 2 Development of RAAF Base Tindal (which is expected to occur between 1990 and 2000) are not yet available. It is therefore not possible at this time to estimate the economic impact that this second stage of development will have.

'The total additional value of goods and services which will be produced to satisfy demand during the four year Construction Phase is estimated to be approximately \$118 M, while total income related impact during the same period is estimated to be approximately \$37 M, resulting in a total economic impact of \$155 M". (Kinhall-Stearns, 1983:8.3) "It has been estimated that approximately 64 percent of the flow on economic benefits associated with the Construction Phase of Stage 1 will accrue to the

Katherine region, while 36 percent of these benefits will accrue to Darwin." (Kinhall-Stearns, 1983:8.5).

3.3.3.2 Annual Operational Expenditure

"The estimated annual operational expenditure for the RAAF Base Tindal following the completion of of Stage 1 is shown in Table 3.1.

COMPONENT	EXPENDITURE (\$millions/annum)
Personnel salaries and wages	6.5
Expenditure on local contracts and supplies - fuel, general stores, vehicle repairs, general maintenance	6.5
Postage and telephone	0.4
Light, power and water	1.4
Travel (fares and allowances)	0.8
Medical and dental	0.4
Repair and maintenance of facilities	2.0
Incidentals	0.2
Total	18.2

Note: all costs expressed in May 1983 prices.

Table 3.1 Annual Operational Expenditure - Stage 1.
(Source: Kinhall-Stearns 1983, pg 8.6)

'For the purposes of analysis, it has been assumed that the flow-on effects of the Operational Phase are independent and will commence once the Construction Phase ends. As a consequence, 1989 will be the first year in which the flow-on effects of the Operational Phase will become evident. If it is assumed that 75 percent of the flow-on benefits of the Operational Phase will accrue to the Katherine region and 25 percent to Darwin, the annual regional breakdown of these benefits will be (in 1983 prices):

Katherine region	\$6.7 M	
Darwin	\$2.2 M"	(Kinhall-Stearns, 1983:8.6)

"The initial expenditure in relation to Base Development and associated infrastructure has been estimated to be:

Construction Phase(output-related)	\$218 M
Operational Phase(income-related)	\$8.9 M/annum

'The estimated flow-on effects of the Stage 1 expansion of RAAF Base Tindal on a annual basis are:

Construction Phase(output and income-related)	\$154 M
Operational Phase(income-related)	\$8.9 M"

(Kinhall-Stearns, 1983:8.7)

3.4 Conclusion

The 1983 Kinhall-Stearns Draft EIS regarding the Tindal RAAF Base Development was nearly 300 pages in length, and was increased by a further 104 pages with the 1984 Supplement after public viewing and comment. The public involvement concerned 16 Northern Territory Government agencies, seven Commonwealth Government agencies and only five private organisations and individuals. The previous section of this chapter has conveyed some of the more relevant aspects of the Draft Statement and Supplement that are most relevant to this particular study. The sheer size of this Draft EIS is not indicative of its validity. Although a lot of descriptive information was included, the impact assessments on individual aspects of the Katherine Region and community were shallow, and in most instances drawn from comparisons with other case-studies of towns that have experienced rapid growth as a result of local resource development. Kinhall-Stearns appreciated that there were few, if any, towns the size of Katherine in comparable geographic settings which have experienced rapid growth owing to the establishment of a sophisticated defence base. The validity of some major assumptions and models used to predict financial expenditure, induced and flow-on effects for the Development, are also in question because the only output the RAAF Base will have is an intangible benefit to the local economy that cannot be isolated or numerically expressed. Criticism of the traditional economic models that do not take into account the 'human factor' or case-study anomalies has already been discussed in Chapter One. To supplement the Draft EIS, Kinhall-Stearns produces..."disaggregated first-round flow-on output-related and income-related effects by sectors, derived from using relevant multipliers." (West *et al.*, 1980; Mules and Morison, 1981; Office of Policy and Planning, Department of the Chief Minister Northern Territory, 1982; Kinhall-Stearns, 1983:8.3) Kinhall-Stearns also makes two major assumptions that..."approximately 64 percent of the flow-on economic benefits associated with the Construction Phase of Stage 1 will accrue to the Katherine Region" (Kinhall-Stearns, 1983:8.5), and..."that 75 percent of the flow-on benefits of the Operational Phase will accrue to the Katherine Region." (Kinhall-Stearns, 1983:8.6) This same EIS also envisaged that accommodation would have to be especially built to cater for the influx of construction workers onto the Development site, yet we shall see in Section 5.2.3.2 that this in fact was not required, because the preferences of the construction workers involved was not taken into consideration. The need to consult the community on which the Development is going to have an impact - and not simply rely on purely economic projections - is becoming

increasingly more important to the interests of good planning and environmental management. Indeed, the attitudes of the owners and/or managers in the Katherine retail sector will thus provide a valuable insight into an aspect of Town Planning and Development which can no longer afford (in both monetary and social contexts) to be ignored. As was mentioned in the Introduction to this chapter, the comparison of these 'official' viewpoints toward the Development at Tindal to those elicited in the next chapter should prove interesting.

The size of the 1983 Kinhall-Stearns EIS is neither indicative of its comprehensiveness or its depth of investigation. This is reinforced by the re-commissioning of Kinhall-Stearns by the Department of Defence to conduct a review of the 1983 EIS. The review is a result of the need to adjust both the range of aspects for impact investigation as well as the depth of investigation into the impact on each of these aspects.

CHAPTER FOUR

METHOD OF INVESTIGATION

4.1 Introduction

The central aim of this thesis was to examine the perceptions of business opportunity that may have evolved within the Katherine retail sector as a result of the Tindal RAAF Base Development. A research design employing questionnaires was used to harvest the data, as several recent studies concerning behavioural economic geography have suggested the suitability of this methodology (Moser and Kalton, 1973:45; Katona, 1975:403,423; Sieber, 1982:176-188; Fowler, 1984:9; deVaus, 1986:5,6). Survey techniques, in general, explore attitudes rather than behaviour. They can also be useful in evaluating an individual's reactions to a situation or an environment (Ittelson *et al.*, 1974:210). Many recent studies also highlighted the problem areas associated with this approach (Oppenheim, 1966; Warwick and Lininger, 1975; Burgess R.G., 1982b:9; Zelditch, 1982:168-174; Fowler, 1984; deVaus, 1986), and consequently attempts to circumvent such problems were made throughout this study.

In this chapter, the selection of the survey population, survey technique, questionnaire design, and questionnaire implementation used in this dissertation will be discussed.

4.2 Information Harvesting

4.2.1 Selection of Survey Population

It was decided to obtain one response from either the manager or owner from each of the retail establishments in Katherine. Thus, the survey aimed to obtain responses from each of the 63 qualifying establishments in the Katherine retail community. This figure is open to interpretation depending on the definition of "retail establishment" employed (Davies, 1977:47). The definition of retail establishment chosen for this study was taken from the Australian Standard Industrial Classification (ASIC), 1978 Edition Volume 1: The Classification (ABS, 1978), (see Appendix II), which in Division F classifying wholesale and retail establishments states:

"The term 'retail trade' is used here, generally speaking, to include the resale of new or used goods to final consumers for personal or household consumption. The more important types of

business engaged in retail trade are department stores or other shops, stalls, mail order houses, hawkers, door to door sellers, milk or bread vendors, vending machine operators or consumer cooperatives. Establishments mainly selling goods on a commission basis to final consumers for personal or household consumption are included. However, cafes, restaurants, licensed hotels, motels, wine saloons and clubs are included in Division L, Recreation, Personal and Other Services."

(ABS, 1978:337)

The principal reason behind the employment of this particular classification system was that it would be beneficial in the analysis of the data harvested (Hayes, 1950:318; Hamilton, 1978:127). This aspect will be discussed in depth in Section 4.3.1 and in Section 7.3 when limitations of this study are discussed. Suffice to state that the immediate relevance of a contemporary Australian definition is clear-cut. Using the 1978 ASIC classification of business, there were 63 retail trade establishments maintaining businesses in Katherine at the time of the survey.

4.2.2 Selection of the Survey Technique

In order to achieve a representative sample, the survey aimed at achieving 100 percent of responses from the survey population (Katona, 1977:307; Burgess R.G., 1982c:75,76; deVaus, 1986:56-68; Warwick and Lininger, 1975:42; Fowler, 1984:59). The development of the questionnaire itself will be discussed in Section 4.2.3.

The method by which survey questionnaires would be presented and explained to the individual (Fowler, 1984:142), then left with them for a period of time before collection by myself was eventually chosen (Oppenheim, 1966:36; Walker, 1976:284,285; Fowler, 1984:70,103). The reasoning behind selecting what is commonly termed the "drop and collect method" for this study can be summarised as follows:

Advantages:

1. Personal contact with potential respondents permitted maximum flexibility when initially explaining the objectives of the survey and again when administering reminders;
2. The potential respondent may have felt under a greater compulsion to complete the questionnaire since he must face an encounter with the field worker (who is dependant on his action);

3. The questionnaires are completed in the respondent's time and not in that of the field worker, and also frequent recalls minimise the delayed response, common to postal surveys;
4. It enabled checking of the completeness of responses, as well as permitting supplementary questions to be asked at the time of collection;
5. It allowed the respondent's answers to be supplemented by observational material;
6. The method is quicker and cheaper than interviewing;
7. It allows time for considered responses to be completed;

Disadvantages:

1. The questionnaire had to be relatively short, employing questions that were simple and straightforward enough to be understood with only the help of printed instruction;
2. It would be inappropriate to include questions which require spontaneous answers independent of discussion with others;
3. No guarantee that the potential respondent selected would be that specific individual who finally completed the questionnaire.

(Adapted from Walker, 1976:284)

For the benefit of readers who are unfamiliar with survey techniques the subject is addressed in greater detail in these publications: Oppenheim, 1966, Warwick and Lininger, 1975, Burgess R.G., 1982a, deVaus, 1986, and Fowler, 1984.

4.2.3 The Questionnaire

The questionnaire (see Appendix I) was designed to serve a number of functions - firstly to acquire information about the existing retail establishments in Katherine, and secondly to measure perceptions of business opportunity as a result of the Tindal RAAF Base Development, as well as the establishment of the Woolworths complex. Detailed instructions for the completion of questions were given with each individual question due to the diverse nature of the responses required.

The questionnaire was divided into six sections, A through to F (see Appendix I). Section A contained questions dealing with the respondent's retail establishment. Questions A.1, A.2 and A.3 were simple questions of fact designed to build up the respondent's confidence (Warwick and Lininger, 1975:146). Question A.4 was designed to ascertain which ASIC Group Code Category, or Categories, the establishment is a member of, as well as other information on the sources of stock and the freight methods employed.

Questions A.5, A.6 and A.7 were designed to ascertain the size of the respondents' business firstly by their turnover, and secondly by the number of customers served.

Section B contained questions dealing with the personal details of the respondents. From the position the respondents hold within the establishment in question B.1, to the educational standards attained in question B.9, all the questions in Sections A and B have been closed response questions in order to categorise the details ascertained by these sections (Warwick and Lininger, 1975:135).

Section C was aimed at ascertaining certain details pertaining to the respondents' attitudes toward present and best shop locations for retail establishments in Katherine, as well as whether the respondents felt that their business was a monopoly in Katherine. A measure of the amount of influence the tourist season has on the respondent's business was also included in Question C.5.

Section D comprised questions of awareness measurement with regard to the Tindal Development Project. Two questions were used in order to achieve a validity check of the consistency of awareness. This section was designed to be used in conjunction with the later questions of Section E.

The initial two questions of Section E employed a ranking technique to assess the degree of importance that respondents placed upon various problems or concerns associated with both the Katherine Region generally, and also with the Tindal Base specifically (Saarinen, 1976:158-160). The remaining twelve questions in Section E were specifically concerned with the perceptions towards the existing and future effects the Tindal Development and the Woolworths complex are and will be having on the respondents' business. The questions also aim to ascertain aspirations towards exploiting business opportunities. This section employed a series of open-ended and closed response questions (Dixon and Leach, 1979:32; deVaus, 1986:74,75) in order to obtain categorised responses supplemented by explanatory details. Questions E.11 and E.13 also used linear attitude scales (Miller, 1956; Oppenheim, 1966:133-142; Keats, 1971:70; Sartain et al., 1973:112; deVaus, 1986:75,76) to judge respondents' attitudes toward the Woolworths store in terms of competition to their business as well as the benefit to the Katherine retail sector.

The final formalised Section F employed a series of closed response questions to ascertain attitudes toward the amount of consultation the Federal Government and Territory Government have had with the community with respect to the impact the Base will have socially and economically on Katherine.

Lastly, at the end of the formal questionnaire, respondents were invited to comment about any of the subjects referred to in the questionnaire. This section hoped to elicit any further insights and attitudes that may not have been appropriate to include elsewhere in the questionnaire.

4.2.4 Questionnaire Implementation

A pilot survey of 10 questionnaires (16 percent of the total survey) was conducted between the 4 June and 9 June 1987 (Babbie, 1973:205-226) in the northern region of Katherine Terrace (see Figure 2.2). The response rate to the pilot study was a promising 100 percent, and overall public reaction to all aspects of the questionnaire was favourable. No adjustments to the questionnaire were necessary before the survey proper was implemented.

The full scale questionnaire survey was conducted between the 10 June and 20 June, 1987. The survey was completed in one phase where distribution took approximately three days, and the completed questionnaires were collected approximately one week later (Dixon and Leach, 1976). A further four days were required to collect surveys from late respondents. Generally, the only reason given for not having the questionnaire completed on time was a lack of time due to the pressures of work (Field Notebook 1).

The structure of this sampling procedure ensured that there would be little temporal variation of measured attitudes. There were no major or minor incidents related to the Tindal Development or the Woolworths complex in the period of the survey, therefore there should not be any anomalies in the data due to incidents provoking ephemeral responses. Cross-checking of completed questionnaires showed that most people followed the instructions well, and did not collaborate when completing the questionnaire.

The details of response rates and the results of the survey questionnaire will be presented and discussed in the next chapter.

4.3 Proposed Evaluation of Particular Types of Questions

4.3.1 General

Although elements of objectivity might emerge with regard to information harvested from the survey questionnaire, the interpretation of such information involves a subjective appraisal; that is, my perceptions of the underlying influences. As with any study concerning human interaction with the environment there are no definite laws of behaviour against which to review research results (Scriven, 1956:331).

This section will outline, in order to reduce explanation within the discussion of results in the next chapter, the methodology behind the

analysis of some of the question techniques used. Such explanation is only required for four of the question techniques employed, as the analysis of the remaining techniques will be self evident within the discussion in Chapter Five. The four techniques to be discussed include: the ASIC Group Code Categories, the linear attitude scales, the ranking of concerns questions and the open-ended response questions.

4.3.2 Australian Standard Industrial Classification Group Code Categories

Hayes (1950:318) and Barr and Fairbairn (1978:127) identified "kinds of commodities" as being the most important institutional factor that must be taken into account in stratifying data on studies of retail environments. The 1978 ASIC GCC's (Group Code Categories) were adopted for meaningful and compatible analysis of the harvested data. Appendix II contains a detailed listing of Division L Subdivision 48 which outlines the GCC's and Class Code Categories for retail establishments.

The 1978 ABS definition of "retail establishment" (see Section 4.2.1) states that "cafes, restaurants, licenced hotels, motels, wine saloons and clubs are included in Division L, Recreation, Personal and Other Services", and thus will not be included in the scope of this thesis. Hairdressers, however, will be included, even though they are classified in Division L under GCC 935, because it was felt that they are a legitimate member of the retail sector. A summary of the GCC numbers used in this thesis is contained below in Table 4.1.

<u>GROUP CODE CATEGORY</u>	<u>DESCRIPTION</u>
481.....	DEPARTMENT AND GENERAL STORES
484.....	CLOTHING, FABRIC AND FURNITURE STORES
485.....	HOUSEHOLD APPLIANCES AND HARDWARE STORES
486.....	MOTOR VEHICLE DEALERS, PETROL/TYRE RETAILERS
487.....	MILK AND BREAD VENDORS
488.....	FOOD STORES
489.....	OTHER RETAILERS
935.....	HAIRDRESSERS, BEAUTY SALONS

Table 4.1 ASIC Group Code Categories used in this Study.

The application of these GCC's will become apparent in Chapter Five when the results of the questionnaire survey are presented and discussed. Meanwhile, it is necessary at this stage to extrapolate on the method of interpretation planned specifically for Question A.4 (see Appendix I). This question aimed at ascertaining the class of each retail establishment by ASIC GCC. Predictably, some of the establishments interviewed qualified for two and sometimes three separate GCC's because of the range of goods they

offered for sale. There were two possible approaches that could have been adopted in these instances:

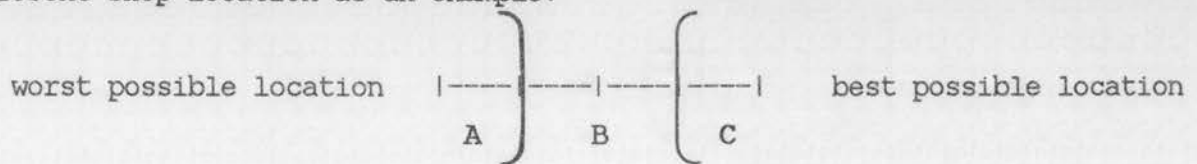
a. The respondents could be classified into the GCC for which they handled the greatest percentage of their total stock (derived from question A.4.b - see Appendix I); or

b. the respondents could be classified into all of the GCC's for which they qualified.

The latter option was selected for the purpose of this thesis due to the relatively small nature of the survey population (63), and the necessity to bolster the representativeness of each GCC. The details of the number of establishments who were classified in more than one ASIC GCC are included in Section 5.2.1. Thus, for a respondent whose business qualified for inclusion into three ASIC GCC's, his or her responses were included three times in the survey. For the purpose of nomenclature, however, these multiple responses shall be referred to as individual 'respondents' throughout most of the remainder of this thesis.

4.3.3 Linear Attitude Scale Questions

The employment of the linear attitude scales question technique is well covered by Oppenheim (1966:133-142) and Osgood *et al.* (1957:25-30). In this questionnaire bipolar adjectives were also incorporated into the attitude scales. The methodological explanation necessary is simply that on the five point scales employed, the responses achieved were analysed in the following manner. If we use question C.1 regarding respondents' attitudes to their present shop location as an example:



Responses in Zone A were regarded as being negative, ie. the respondent had a negative attitude to his or her present shop location, conversely, responses in Zone C were regarded as being positive, ie. the respondent had a positive attitude to his or her current shop location. Responses in Zone B, however, were regarded as being indifferent, ie. a non-committal or neutral response to either differential on the scale.

4.3.4 Ranking of Concerns

Questions E.1 and E.2 employed a technique where the respondents were asked to record their five most important concerns in order from greatest to least concern. Each question offered a selection of possible responses, yet

still encouraged other subjects to be nominated if necessary. The individual responses to these questions were interpreted such that the greatest concern nominated was awarded five points, the second greatest concern was awarded four points, etc. Unlike all of the other questions in the survey, these particular questions were analysed on a 'one survey - one vote' basis as opposed to the ASIC GCC analysis. Hence, a ranking of concerns was generated with the greatest concern accumulating the greatest number of points. The analysed responses to these questions are presented and discussed in Section 5.2.3.

4.3.5 Open-Ended Questions

The technique of employing open-ended response questions is well documented in Dixon and Leach (1979:32). It is necessary to explain at this stage simply that responses to open ended questions in the course of analysis were often able to be categorised. As such, categories of responses to certain questions will be presented in Chapter Five which have not been postulated in the questionnaire. The purpose of this section is to simply make the reader aware of this transitory step in the analysis.

CHAPTER FIVE

RESULTS AND DISCUSSION OF THE SURVEY DATA

5.1 Introduction

It is impractical, if not impossible, to record all behaviour in one particular study, so some selection must be made. Once such a selection of behaviour has been made, however, the problem of interpretation still remains. Hence, the analysis of the perceptions of business opportunity in the Katherine retail sector as a result of the Tindal RAAF Base Development is to some extent subjective. However, as far as practicable, methodological and analytical biases due to subjectivity have been avoided in this study. This has been achieved by concentrating on the results of the survey questionnaire, and supplementing findings with secondary data sources, or with Field Notebook material.

This chapter will both present and discuss the data in four distinct sections, and where possible, explain findings in the light of existing behavioural theory. The first, Section 5.2, will detail an inventory of the establishments, and the owners and managers in the Katherine retail sector. This section provides background information on the survey population before their perceptions of opportunity and aspirations are discussed in Section 5.3. Section 5.4 deals with the Woolworths complex, whilst the final section deals briefly with the attitudes towards the amount of consultation the Federal Authorities have had with the Katherine community with regard to the Tindal Development. A table containing descriptions of each ASIC GCC is included in Appendix III, which should be folded out to assist in the interpretation of figures used in this chapter.

5.2 Inventory of the Katherine Retail Sector

5.2.1 The Katherine Retail Sector

Of the 63 qualifying establishments, survey responses were received from 57, a 90 percent response rate - exceptional by many standards (Katona, 1975:419; Fowler, 1984:55,66; deVaus, 1986:65). Since such a good response rate for the questionnaire was achieved there was no need to ascertain the statistical significance of the responses achieved. When the 57 survey responses were classified into ASIC GCC's (some establishments qualified to be included into three categories - see Section 4.3.2) the total number of respondents identified was 67. Thus, the total number of respondents

considered in most sections of this chapter is 67, and where more than one response could be given the discussion will refer to the number of responses.

The proportion of interviewed to not-interviewed establishments per ASIC GCC (Group Code Category) is shown in Figure 5.1.

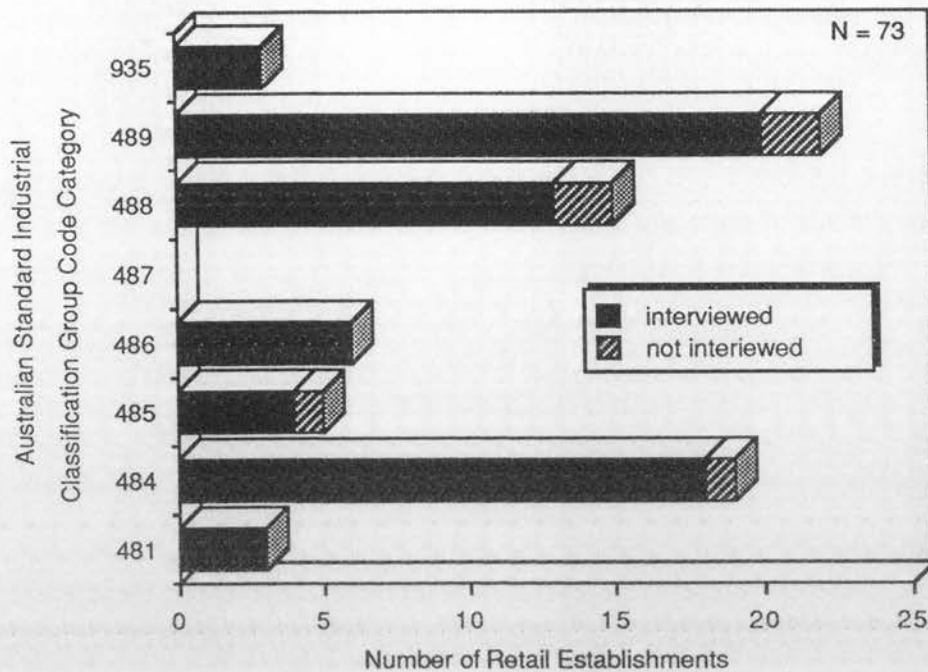


Figure 5.1 Proportion of Retail Establishments Interviewed per ASIC GCC

No particular ASIC GCC was mis-represented because of non-response to the survey questionnaire. Also, it can be seen that ASIC GCC's 484 (clothing, fabric and furniture stores), 488 (food stores) and 489 (other retailers) are the predominant types of retail establishments in Katherine.

Figure 5.2 shows the number of years the retail establishments interviewed have been established - independent from the present management. Establishments that are less than 5 years old are dominant, and this reflects not only the transient and short-term nature of the population in Katherine, but also their success rate. Since approximately 80 percent of all small businesses in Northern Australia fail in their first five years (Pickup, 1986:30), Figure 5.2 also illustrates how rapidly the retail sector has grown since the Territory Government was established in 1978 (Jaensch and Loveday, 1983:9), especially in the last two years.

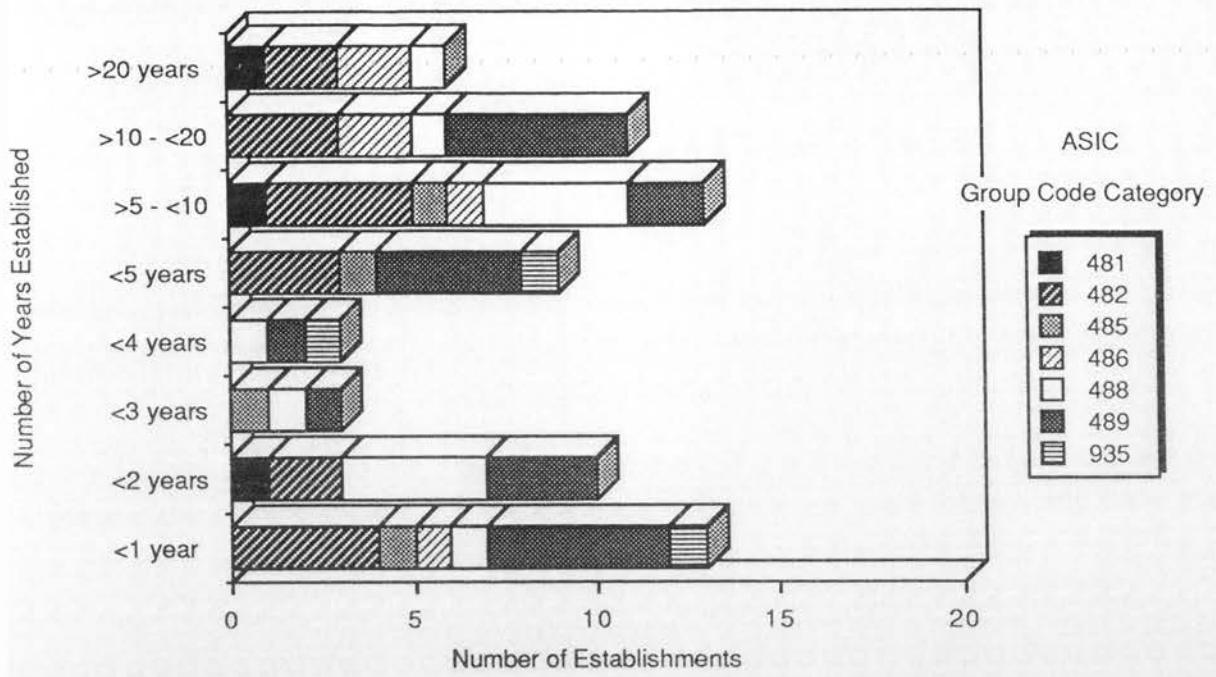
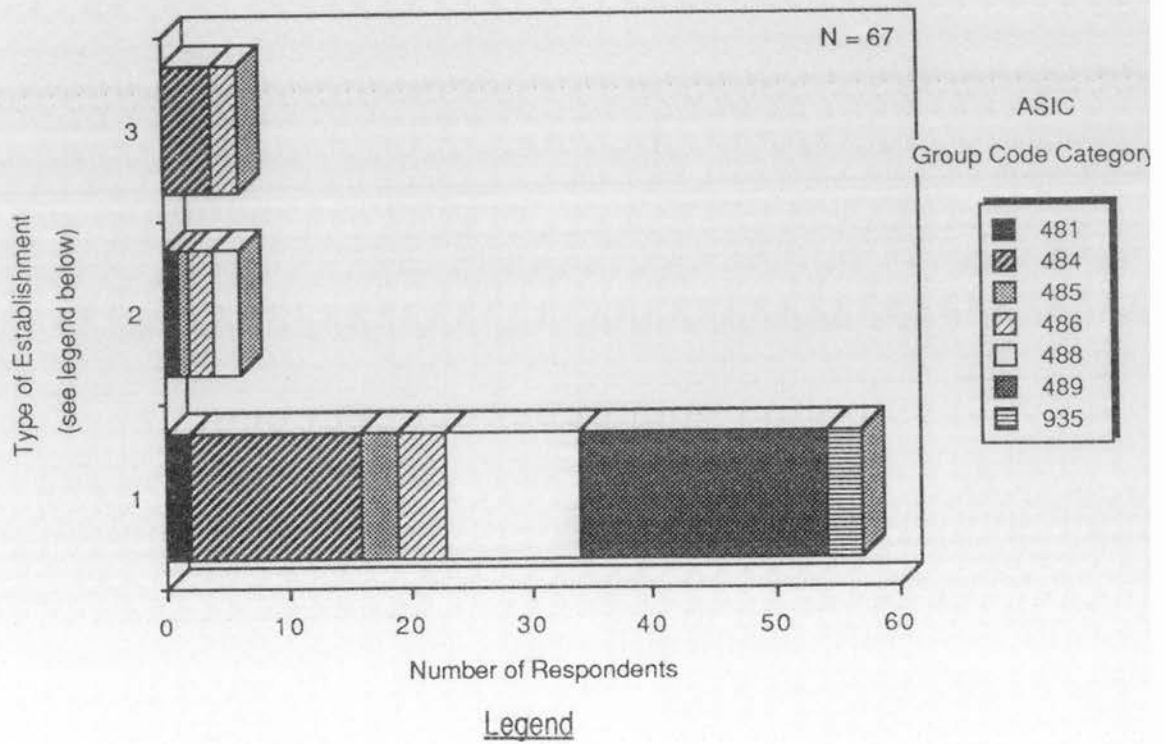


Figure 5.2 Length of Establishment of the Retail Establishments Interviewed



1. an Independent Store based in Katherine
2. an outlet for a National Company not based in Katherine
3. an outlet for a Statewide Company not based in Katherine

Figure 5.3 Types of Establishments Interviewed

Independent stores based in Katherine comprise 84 percent of the retail sector, while statewide companies (seven percent) and national companies (nine percent) have smaller numeric (although larger impact) representations (Figure 5.3). The stock for the establishments studied comes mainly from Adelaide, followed by Darwin and Brisbane (Figure 5.4). Seventy three percent of establishments use road freight as the means of getting stock to Katherine, while 13 percent use air freight which is the only other available freight means (Figure 5.5). Seven percent received all their goods or stock from Katherine. As Darwin also receives the majority of her stock from Adelaide and Brisbane, and as all the road links to Darwin pass through Katherine, it is logical that the Katherine retailers graft into this larger freight stream to obtain their stock.

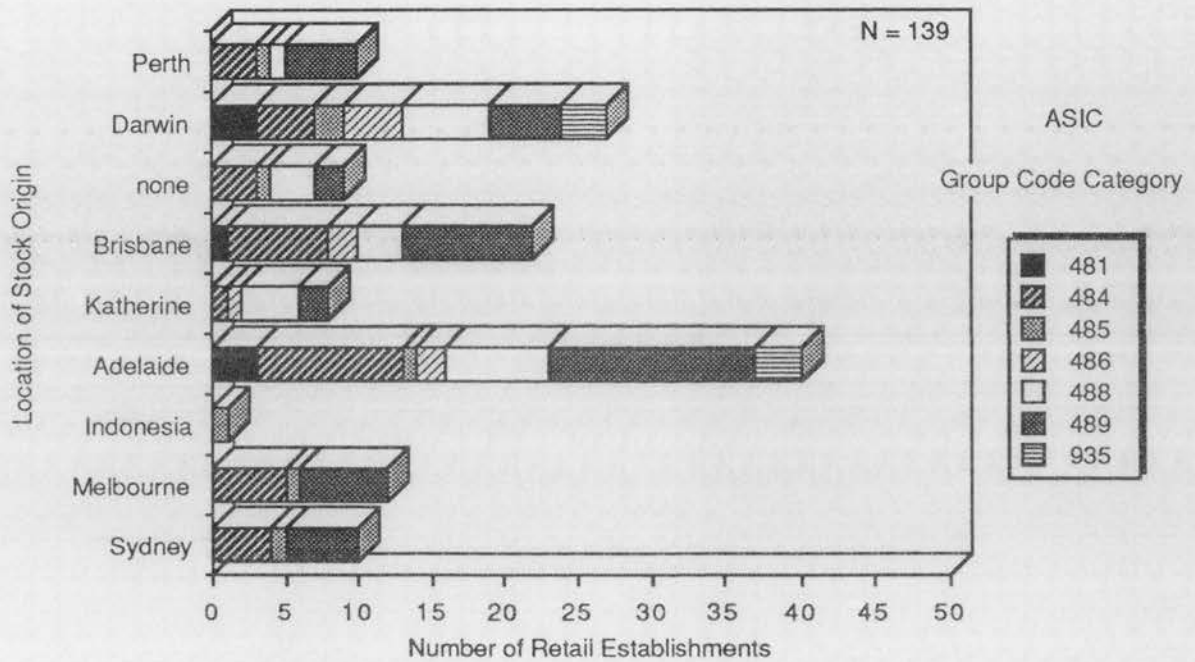


Figure 5.4 Origin of Stock for the Retail Establishments Interviewed

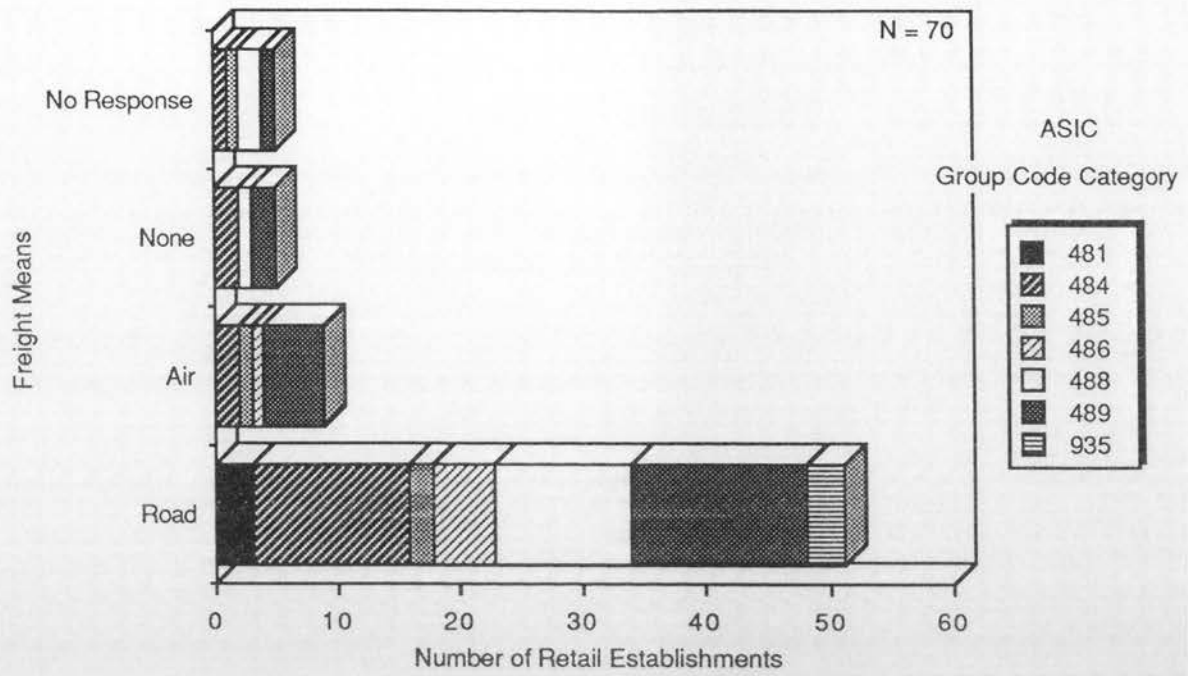


Figure 5.5 Freight Means Employed by the Retail Establishments Interviewed

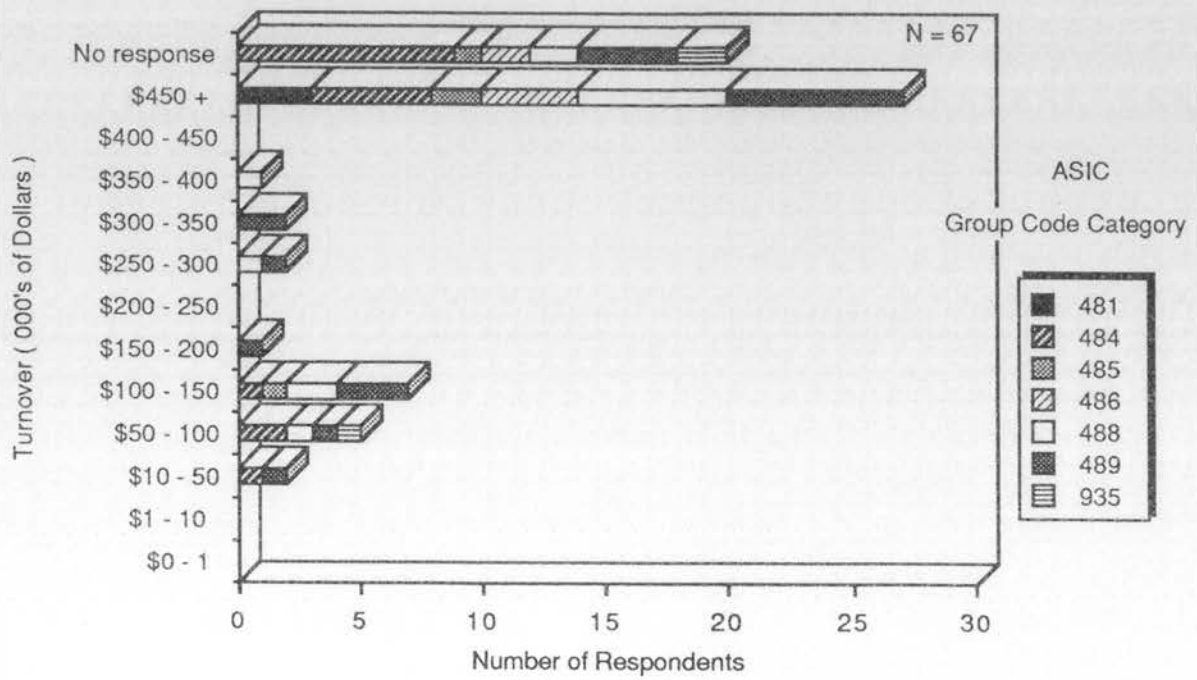


Figure 5.6 Turnover of the Retail Establishments Interviewed

The majority of establishments interviewed had a turnover of over \$450,000 (Figure 5.6). This reflects an unfortunate mis-judgement of the categories that were used in this question, as the results in Figure 5.6 are weighted towards the \$450,000+ category and do not provide details of turnovers over that figure. Noticeably, GCC's 481 (department and general stores) and 488 (food stores) had a strong representation in the \$450,000+ category. The "No Response" category for this question was quite large and reflects the reluctance that owners and/or managers have toward revealing confidential details of their business.

Accurate counts of the number of customers per establishment could not be collected, yet respondents generally estimated that custom to their establishments increased considerably during the tourist season.

5.2.2 The Owners and/or Managers of the Katherine Retail Sector

Thirty six percent of respondents were managers, seven percent were owners and 57 percent were owners and managers. Whilst most GCC's had respondents from each category, GCC's 481 (department and general stores) and 486 (motor vehicle dealers) were only represented by the manager category, indicating that these categories of retail establishments have owners remote from their business.

When asked what motivated the respondent to maintain their business, 76 percent indicated that it was a business venture in the interests of monetary gain, whilst only 24 percent indicated that it was for a vocation or job.

Figure 5.7 shows that the majority of the respondents have been living in Katherine for less than five years. The other predominant group are the 15+ years category who represent the long-term residents of Katherine. Again, most GCC's were represented in each category, except that all of the respondents from GCC 481 (department and general stores) were in the 0-5 years category and all the 935 (hairstylists) respondents were in the 15+ years category. Figure 5.8 has a similar pattern to Figure 5.7 where the 0-5 years and 15+ years residency in the Northern Territory categories are both predominant.

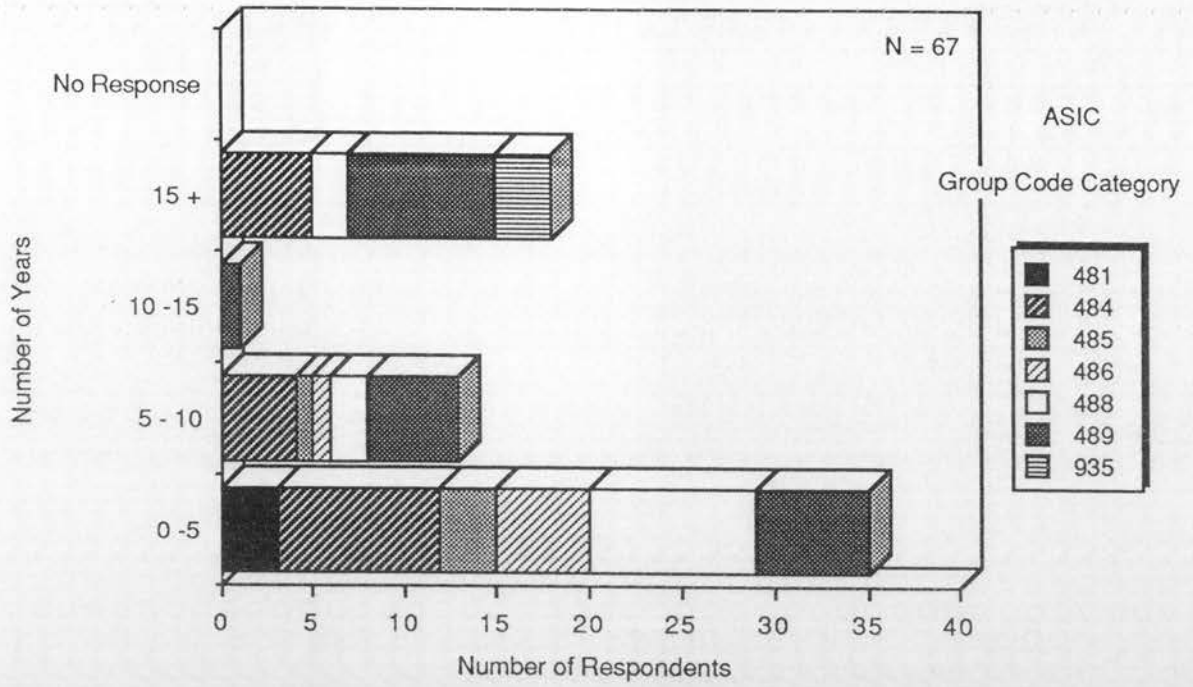


Figure 5.7 Number of Years the Respondents have been Living in Katherine

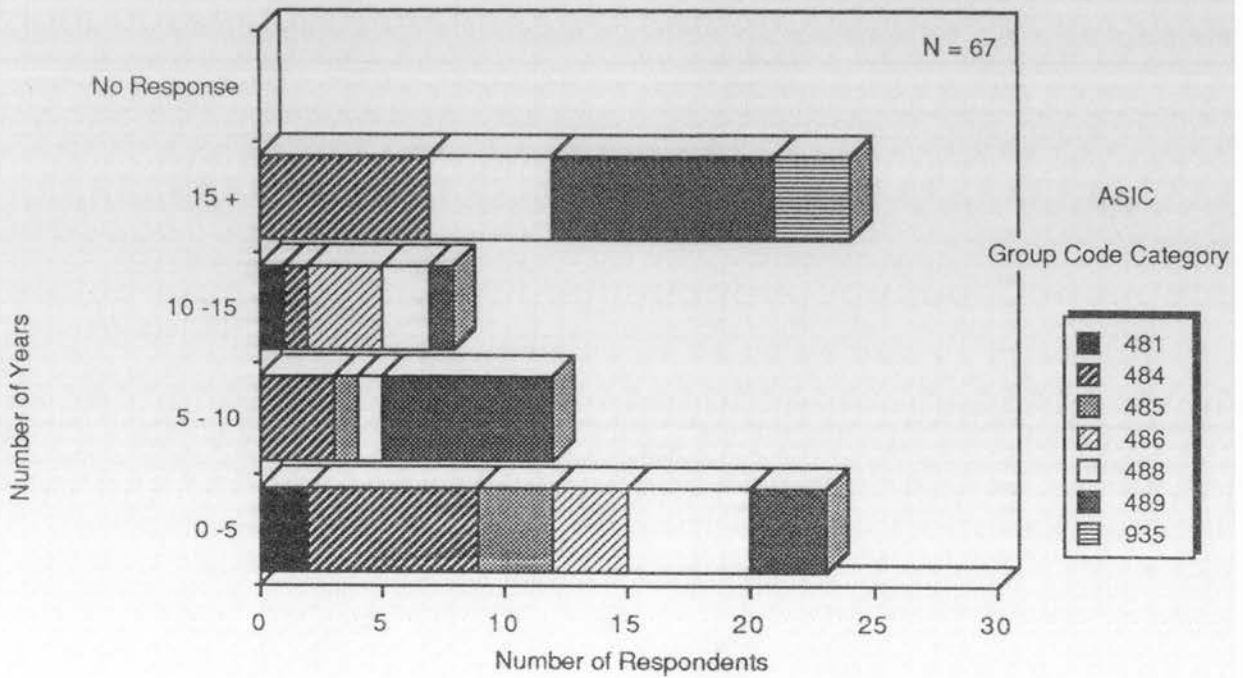


Figure 5.8 Number of Years the Respondents have been Living in the Northern Territory

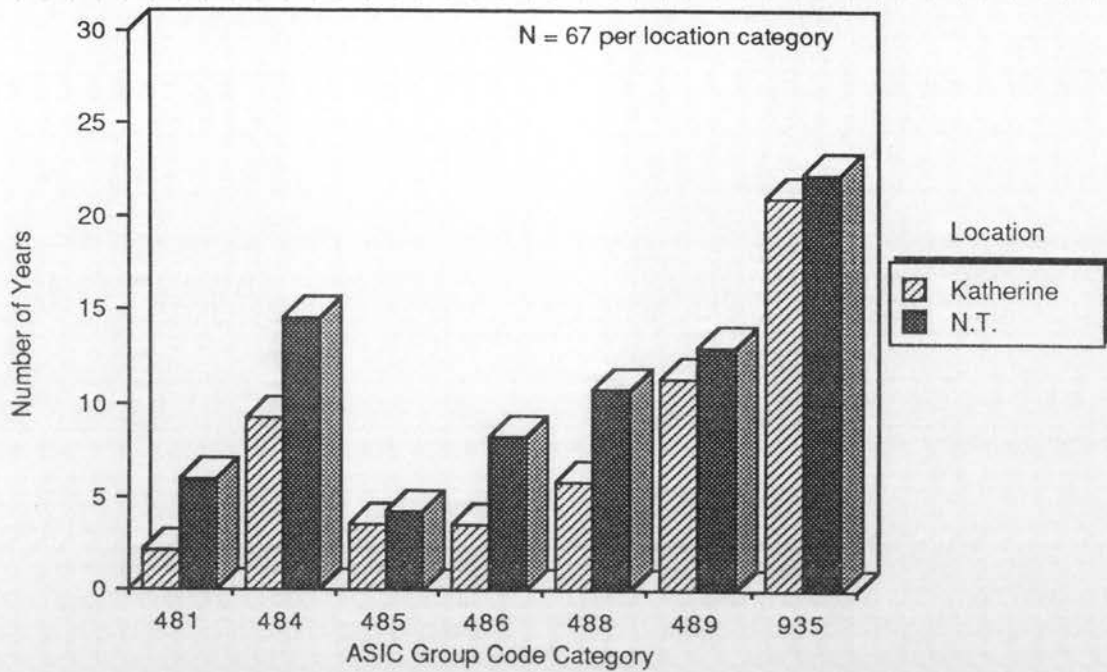


Figure 5.9 Comparison of the Average Number of Years Spent in Katherine and the Northern Territory per Respondent in each of the ASIC GCC's

Comparatively, Figure 5.9 shows the average number of years spent in Katherine and the Northern Territory for each ASIC GCC. GCC's 484 (clothing, fabric and furniture stores) and 935 (hairdressers) have had the longest period of residency on average, while GCC's 481 (department and general stores) and 485 (motor vehicle dealers) have had the shortest; a feature which corresponds to the respondents managerial role in those GCC's.

The rapid growth of the retail sector was illustrated when 70 percent of the respondents indicated that they have been in their present job for less than five years, but it was also found that there was considerable depth of experience in the retail industry amongst the respondents.

Figure 5.10 clearly shows how the older members of the workforce are dominant in the owner or manager positions. This is to be expected because of their experience and capital reserves. There still remains, however, a strong representation of younger owners and managers (more the latter than the former) reflecting the rapid growth of the region and the availability of new business opportunities that can be exploited with youthful energy.

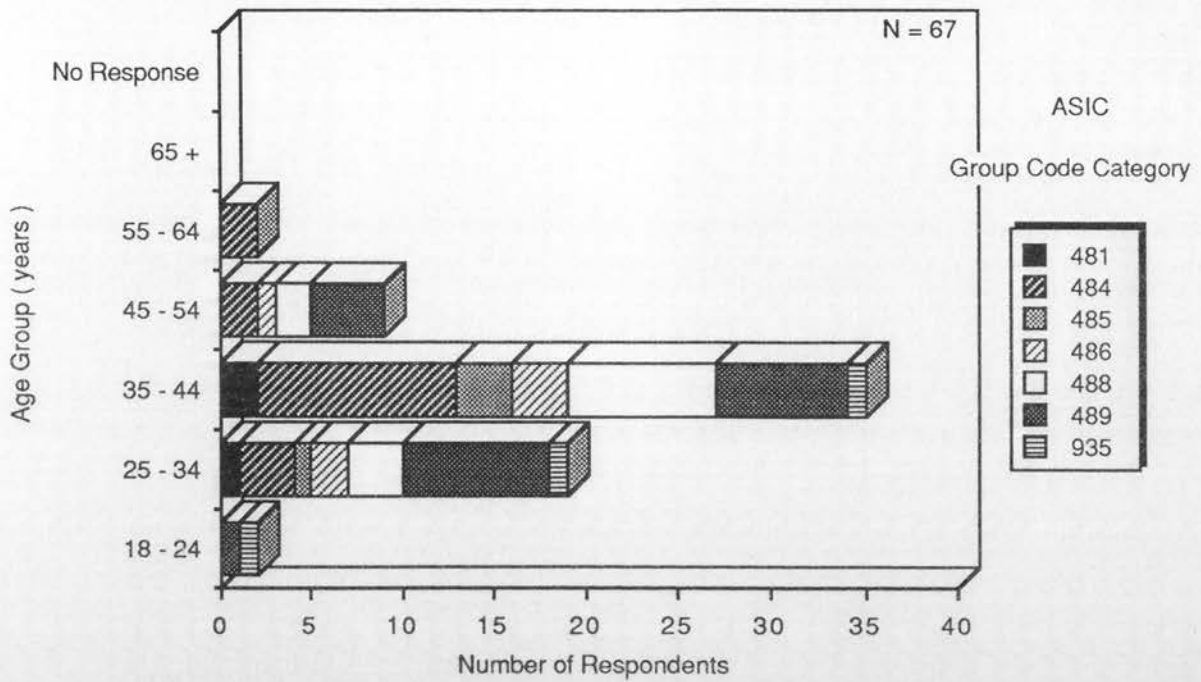


Figure 5.10 Age Group Distribution of the Respondents

As was discussed in Sections 2.3.1 and 2.5.1, there is a dominance of males over females working in the Katherine retail sector as owners and/or managers. This trend is typical for Australia, but the extent displayed here is large and characteristic of Northern centres (Coulter, 1987:5). Figure 5.11 shows that GCC's 481 (department and general stores), 485 (household appliances and hardware stores), 486 (motor vehicle dealers), 488 (food stores) and 489 (other retailers) are dominated by males, and that GCC's 484 (clothing, fabric and furniture stores) and 935 (hairdressers) are dominated by females. This can be directly related to the nature of the goods being handled by the establishment.

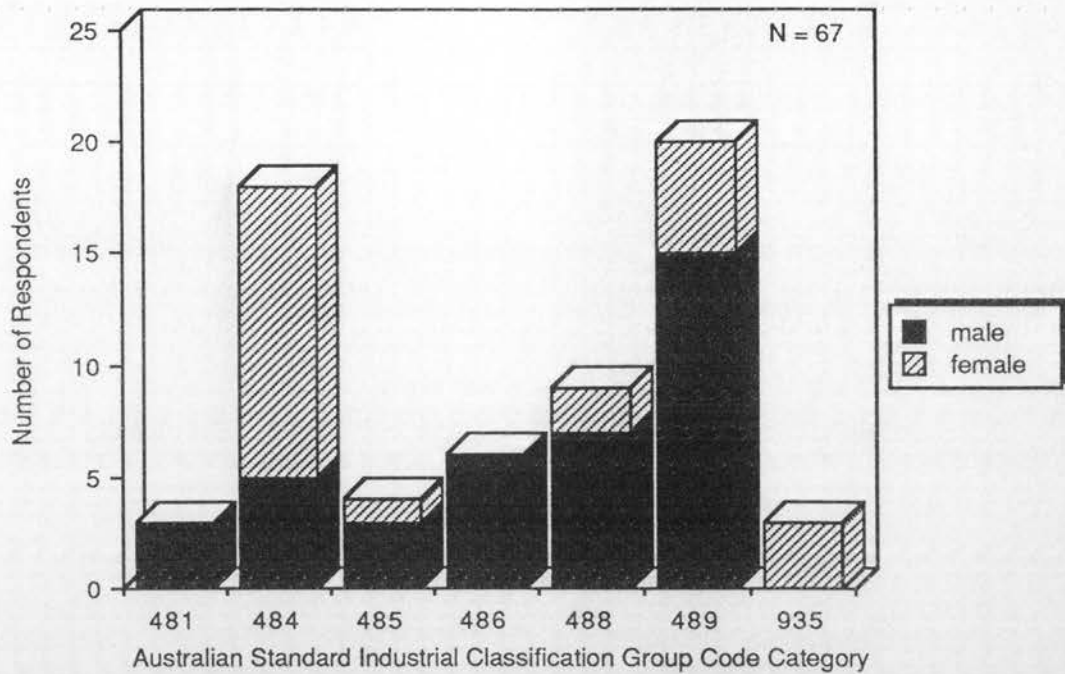


Figure 5.11 Proportion of Male to Female Respondents

Table 5.1 shows that the education level achieved by the respondents is high in comparison to the Katherine population in general (1981 census). The last two sections describing the Katherine retail establishments and their owners and/or managers, were necessary to gain a background image of the respondents before their perceptions are investigated (Katona, 1946:57).

EDUCATION LEVEL ACHIEVED	RESPONDENTS (%)			KATHERINE POPULATION OVERALL (%)		
	Males	Females	Total	Males	Females	Total
University/University Post Graduate	6.3	5.1	11.4	2.2	1.3	3.5
Diploma/Trade Certificate	13.9	1.3	15.2	11.2	3.1	14.3
Other Certificate/HSC	20.2	8.9	29.1	2.4	3.4	5.8
No Qualification (ie. less than HSC)	29.1	15.2	44.3	27.5	31.1	58.6
Not Stated or Still at School	-	-	-	10.0	7.8	17.8

Note: The figures shown for the Katherine population overall are from 1981 census data.

Table 5.1 Comparison Between the Education Level Achieved by the Respondents and the Katherine Population Overall.

5.2.3 Concerns and Problems

5.2.3.1 General

Respondents were asked to rank their five greatest general concerns with the Katherine region.

Greatest Concern	Score
Crime (123)	
Development (79)	
Inflation (64)	
Drugs/Alcohol Abuse (64)	
Federal Politics (60)	
Tindal RAAF Base (54)	
Unemployment (43)	
Tourism (39)	
Isolation (37)	
Aboriginal Welfare (36)	
State Politics (33)	
Racism (24)	
Least Concern	
Exploitation of the Environment (17)	N = 57

Table 5.2 Ranking of General Concerns/Problems within the Katherine Region

Table 5.2 shows that Crime (123), Development (79), Inflation (64), and Unemployment (43) all rank highly as concerns within the Katherine region. This is most likely attributable to the close ephemeral association of these interacting concerns with the position of an owner and/or manager in a business establishment. The unpredictability of these concerns in the Katherine Region would ensure their continual address by the respondents. Tourism ranked quite low with a score of 39. Considering the dependence the retail industry in Katherine has on the tourist trade, this is a likely indication that the respondents do not feel that the tourists contribution to their business is likely to decline in the near future. The fourth ranking of the Drugs and Alcohol concern with a score of 64, can be most likely attributable to two factors:

- The personal physical discomfort experienced by people living in the township, especially during the wet season can be manifested in social stress-related behaviour such as excessive drinking or domestic disharmony; and
- A highly visible drug and alcohol problem affecting the local Aboriginal people.

Federal Politics ranked fifth with a score of 50 probably in response to the debate regarding statehood for the Northern Territory, and at the time of

the survey the impending 1987 federal election. Most importantly, the Tindal RAAF Base was ranked sixth, achieving half the score (54) of concern as did Crime (123). The implications of this relatively low ranking of concern are dealt with more closely in the next two sections, but it was necessary for this section to position the Tindal RAAF Base in relation to the respondents other concerns with the region.

5.2.3.2 Construction Phase

Respondents were then asked to rank their five greatest concerns with the Construction Phase of the Tindal RAAF Base Development.

Greatest Concern	Accommodation (136)	Score
	Social Impact (123)	
	No Problem (120)	
	Population Increases (70)	
	Economic Effects (64)	
	Environmental Effects (40)	
	Leisure Activities (34)	
	Employment (31)	
	Land Use Impact (21)	
	Welfare Services (10)	
Least Concern		N = 57

Table 5.3 Ranking of Concerns/Problems Associated with the Construction Phase of the Tindal RAAF Base Development

Table 5.3 shows that Accommodation (136) and Social Impact (123) are the two major concerns associated with the Construction Phase of the Tindal RAAF Base Development. The construction workers associated with the Tindal project - a maximum of 680 in mid-1986 (Kinchall-Stearns, 1983:v) and about 430 when the survey questionnaire was conducted (Field Notebook 1) - mostly (90 percent of single workers (Field Notebook 1)) prefer to live in locally rented houses, or in caravan parks rather than in the accommodation provided for them in especially built on-site construction camps. The single construction workers, or workers who do not have their family in Katherine (about 95 percent of the workforce currently on site (Field Notebook 1)), while working on site (usually ten hours per day, seven days per week) see no need to indulge themselves in the relative luxury offered by the construction camp accommodation. They mainly opt to reside collectively for a considerably cheaper sum (Field Notebook 1). This has subsequently placed a great deal of strain on the demand for accommodation within the Katherine

township, especially with the oncoming of the peak of the tourist season at the time of the survey, and is reflected by the high score in this ranking.

Similarly, high scores for Social Impact and Leisure Activities are also brought about by the construction workers, who have a substantial presence in the two local hotels (Field Notebook 1). The fourth ranking concern of Population Increases (70) also reflects the fear that the social atmosphere of the town will be adversely affected. The ranking of the Economic Effects concern (with a score of 64) has been brought about because the benefit of increased trade the construction workers have brought to the retail sector (see Section 5.3.2) will be inevitably lost when the Tindal Base becomes Operational. At that stage, the consuming construction workers will be replaced by RAAF personnel, who will not be as dependant on retail services (Field Notebook 1). Conversely, some respondents indicated that their concern was a result of outstanding invoices that the larger construction companies were slow in settling (Field Notebook 1).

Interestingly, the third highest score was achieved by a specific "No Problem" response (120) (as opposed to a "No Response") which suggests that many of the respondents felt that there were little or no concerns associated with the Construction Phase of the Tindal Development. This is reinforced by the relatively low scores for the remaining concerns in Table 5.3.

5.2.3.3 Operational Phase

Respondents were then asked to rank their five greatest concerns with the Operational Phase of the Tindal RAAF Base Development.

Greatest Concern	No Problem (125)	Score
	Social Impact (112)	
	Noise Pollution (111)	
	Population Increases (58)	
	Leisure Activities (44)	
	Accommodation (41)	
	Employment (34)	
	Economic Effects (32)	
	Strategic Risk to Katherine (21)	
	Environmental Effects (20)	
Least Concern	Welfare Services (14)	N = 57

Table 5.4 Ranking of Concerns/Problems Associated with the Operational Phase of the Tindal RAAF Base Development

Table 5.4 shows that most respondents perceived No Problem with the Operational Phase of the Tindal Development. This indicates that the retail sector owners and/or managers are even more positive in their attitude towards the Operational Phase of the project than they are towards the Construction Phase. Social Impact (112), Population Increases (58) and Leisure Activities (44) rank at two, four and five respectively. As with the ranking of concerns for the Construction Phase, these concerns are all associated with the sizeable social impact that a good deal of the population perceives will occur when the Base becomes Operational (Field Notebook 1).

Accommodation became a middle ranking concern with a score of 41, most probably due to the incorrect perception that RAAF personnel will be utilising the local rental market for the accommodation of married personnel and their families (Field Notebook 1). The 200 married quarters that are currently being constructed off-base in Katherine East, and the 179 married quarters which will be constructed on-base, will cater adequately for the married RAAF personnel and their families. Employment (34) and Economic Effects (32) again receive scores due to the ephemerality of these subjects to the respondent's business interests, and the uncertainty associated with these aspects in the future context. The Strategic Risk to Katherine achieves a relatively low score of 21, yet this still implies that there is at least some concern within the community that the establishment of the Tindal RAAF Base is increasing the attractiveness of Katherine as a strategic military target.

5.2.4 Spatial Attitudes and Preferences

The location of a retail establishment plays a vital part in its success; this is because location determines, to a large degree, the sales made and the profits realized. Because of population shifts, the movement in or out of other retailers, the improvement or deterioration of buildings, the establishment of shopping centres, good locations may become gradually poorer or better ones. Consequently, the retail store proprietor is always faced with a location problem (Duncan and Phillips, 1963:93).

Figure 5.12 shows that central Katherine Terrace and south Katherine Terrace are seen as the most favoured retail zones in Katherine (see Figure 2.7). The responses for north Katherine Terrace reflect the uncertainty in location brought about by the establishment of the Woolworths complex at the southern end of Katherine Terrace. The large proportion of indifferent responses may illustrate the casual attitude that is characteristic of the respondents and the Katherine community in general (Field Notebook 1). This

attitude within Northern Australian communities has also been noted recently by Buckett (1985:28,29,86).

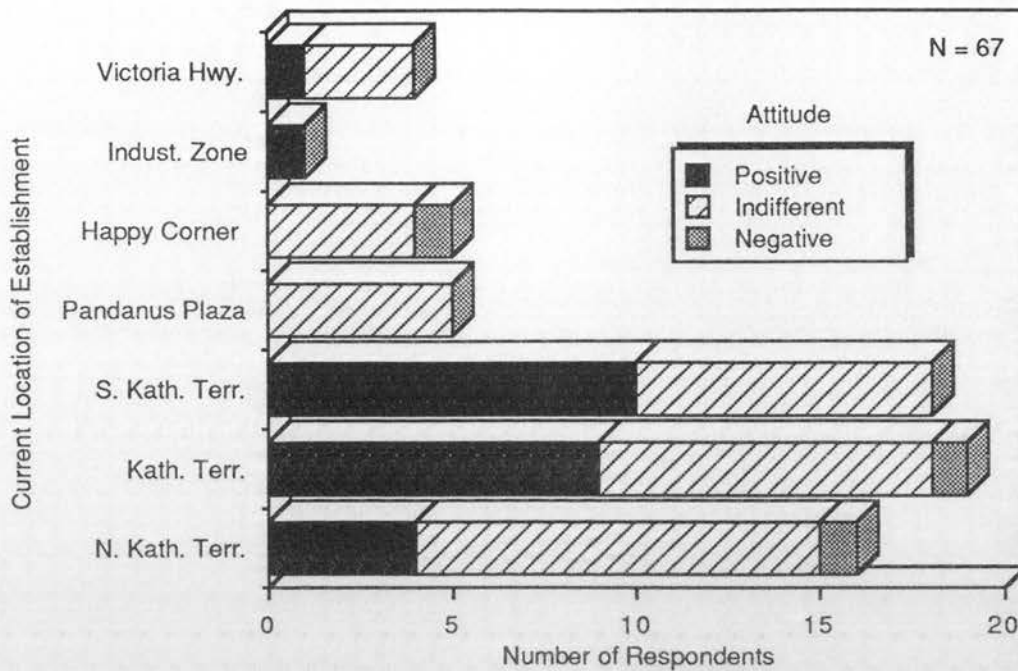


Figure 5.12 Attitude to the Respondent's Current Location for his/her Establishment

When current location of establishment was explained in relation to the number of years the business had been established, the pattern could be closely linked to the development of the particular retail zones discussed in Section 2.5.2. The older zones of central, north and south Katherine Terrace had approximately half of their establishments over five years of age, whereas locations such as Pandanus Plaza, The Happy Corner Store Complex, and the minor industrial zone all consisted of stores less than three years of age.

When respondents were asked to nominate which location in Katherine or Katherine East they felt was the best retail location, central Katherine Terrace received the most votes (see Figure 5.13), with south Katherine Terrace being the second most popular. The other location preferences are most likely a function of the respondent's current location. The relatively large proportion of No Responses to this particular question could indicate either an attitude that there are no best locations in Katherine for retail establishments - thus adding to the specific "None" category in Figure 5.13 - or it could simply indicate a lax attitude toward the question.

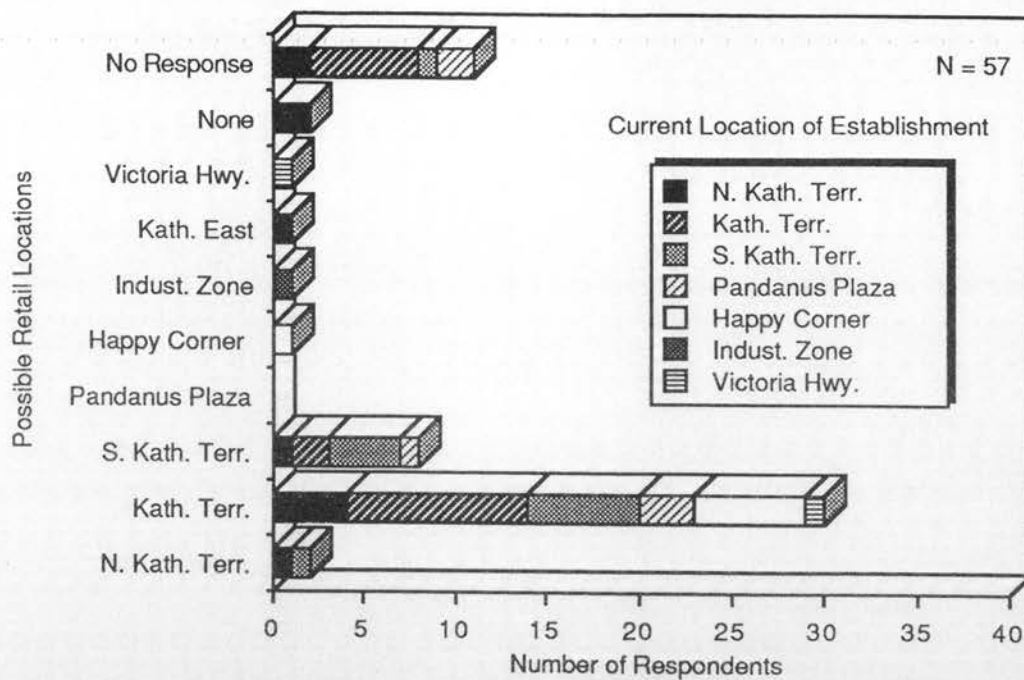


Figure 5.13 Perceived Best Retail Location as a Function of Current Location

5.3 Perceptions of Business Opportunity

5.3.1 Awareness Measures

The purpose of questions D.1 and D.2 in the survey questionnaire was to measure the awareness the respondent had of the Construction and Operational Phases of the Tindal Development. Question D.1.a asked the respondent to identify the correct number of married quarter houses that will be constructed in Katherine East for RAAF personnel by making a selection from five possible closed responses and one possible open response (see Appendix I). The individual projects associated with the Construction Phase of the Development have been tendered out to several local and national private construction firms under the guidance of DHC. There is a considerable amount of public-relations work carried out by DHC, in conjunction with the Tindal RAAF Base Advance Party, with regard to informing the Katherine public as to the progress of construction development. This is achieved by two official means:

- a regular column entitled "Tindal Update" in both of the Katherine newspapers, which is drafted by DHC, provides consistent and accurate information on the progress of the various tenders and on the project overall, as well as giving pre-emptive details on the Operational Phase. The articles have been included in the fortnightly papers since November of 1986; and

b. a DHC public-relations officer conducts regular presentations and tours on the site for the benefit of any member of the public who makes an appointment. These presentations contain an abundance of information and any additional queries can usually be answered immediately.

Thus, there is a lot of information about the Tindal Development being passed onto the Katherine community via several media means. Specific information regarding the project is available to any member of the public who may wish to seek it - a fact which is also advertised regularly.

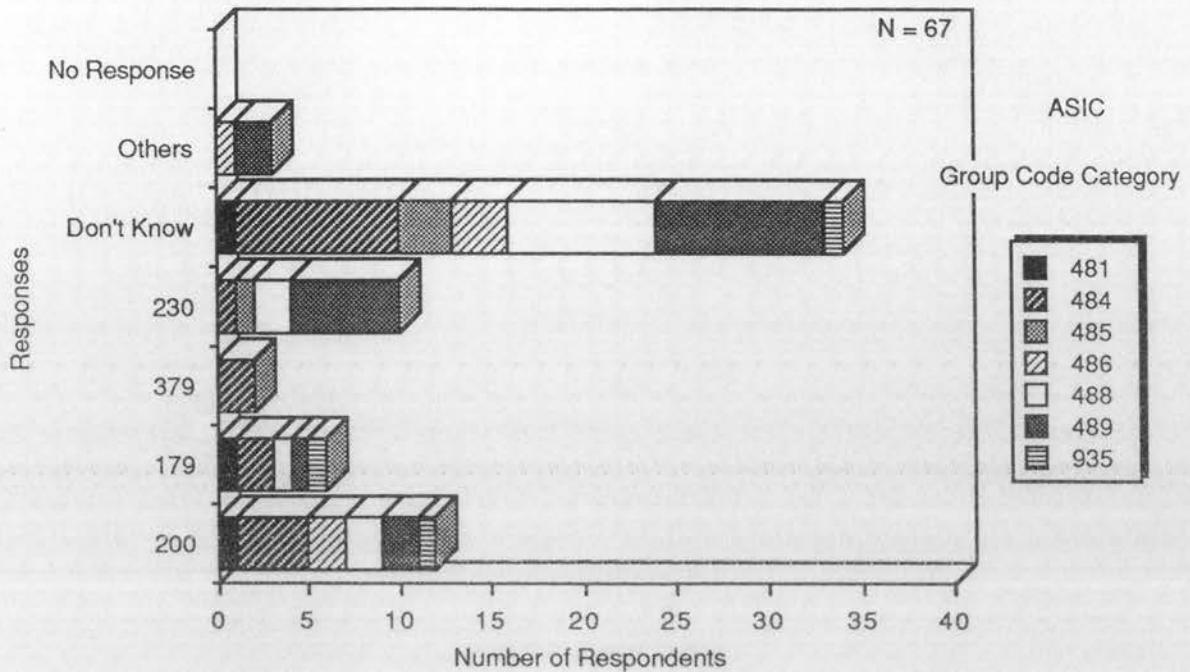


Figure 5.14 Respondents Answers to the Question of the Number of Houses Being Built in Katherine East for RAAF Personnel

The number of houses to be built in Katherine East for married RAAF personnel has been referred to in many of the Tindal Update articles since November 1986. Despite this publicity, and the relevance that this information has to the owners and/or managers in the retail industry, only 18 percent of the respondents indicated the correct figure of 200 houses (see Figure 5.14). The greatest response was for the Don't Know category (51 percent), and the small number of responses for the other incorrect categories reflects the low level of awareness the respondents had toward the Construction Phase of the Development. There did not appear to be any trend within the responses between the ASIC GCC's.

Question D.2 aimed at estimating the respondents' level of awareness of the Operational Phase. They were asked to indicate which amenities were being provided on-base for RAAF personnel and their families. The amenities that are being constructed include a family store, limited postal and

banking facilities, a snack bar and a petrol outlet for private vehicles. Again, this information has been regularly published in the two local newspapers as well as comprising part of the public-relations officer's presentation. This information also has immediate relevance for the owners and/or managers of the retail sector. Respondents were asked to select these amenities from a list of 12. The responses were analysed such that for every amenity correctly indicated, or incorrect amenity not indicated, was awarded one point. Hence a scoring system evolved where the perfect score was 12 points.

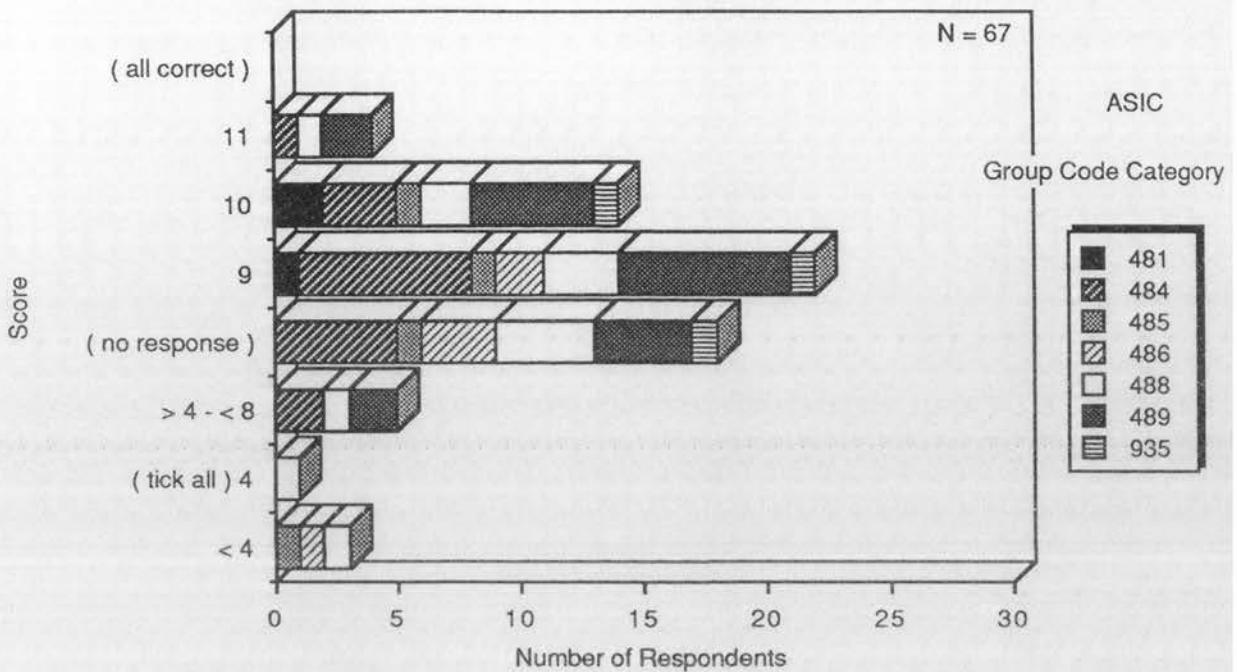


Figure 5.15 Scores to the Question of which Amenities will be Available on Base at Tindal

No respondent achieved a score of 12 (Figure 5.15), and only four respondents managed a score of 11. This indicates that only six percent of respondents had what could be considered a high level of awareness of the Operational Phase of the Development. The bulk of the respondents (54 percent) fell within scores of nine or ten, indicating that most respondents had a medium level of awareness of the amenities that will be provided on-base. Twenty seven percent of the respondents gave No Response to this question (and subsequently scored eight points) thus reflecting both the low level of awareness of the project, as well as the high level of uncertainty associated with this information by the respondents not even attempting this particular question. The respondents who achieved scores of less than eight (13 percent) are those who had a very low level of awareness of the project, yet did attempt the question. Again there were no obvious trends within the responses between the ASIC GCC's.

In summary, these two questions have given a reasonably accurate indication that the majority of the owners and/or managers in the Katherine retail sector have only a low to medium level of awareness of the Development project. These aspects of the Development should be of inherent interest to the survey population, yet despite the abundance of available, and potentially available information, their level of awareness in general was suprisingly low. There was, however, a very small percentage of respondents who had obviously gone to professional efforts in gaining knowledge about the Development, in the interests of having sufficient background information for any business decisions they may have to make. This professional business attitude was what this section of the questionnaire was trying to uncover, but it appears not to exist to any great degree within the Katherine retail community (Field Notebook 1).

5.3.2 Perceptions of Opportunity with respect to the Construction Phase

Before differentiating between the Construction and Operational Phases of the Development, respondents were asked what overall effect they felt the Tindal RAAF Base would have on the Katherine retail community.

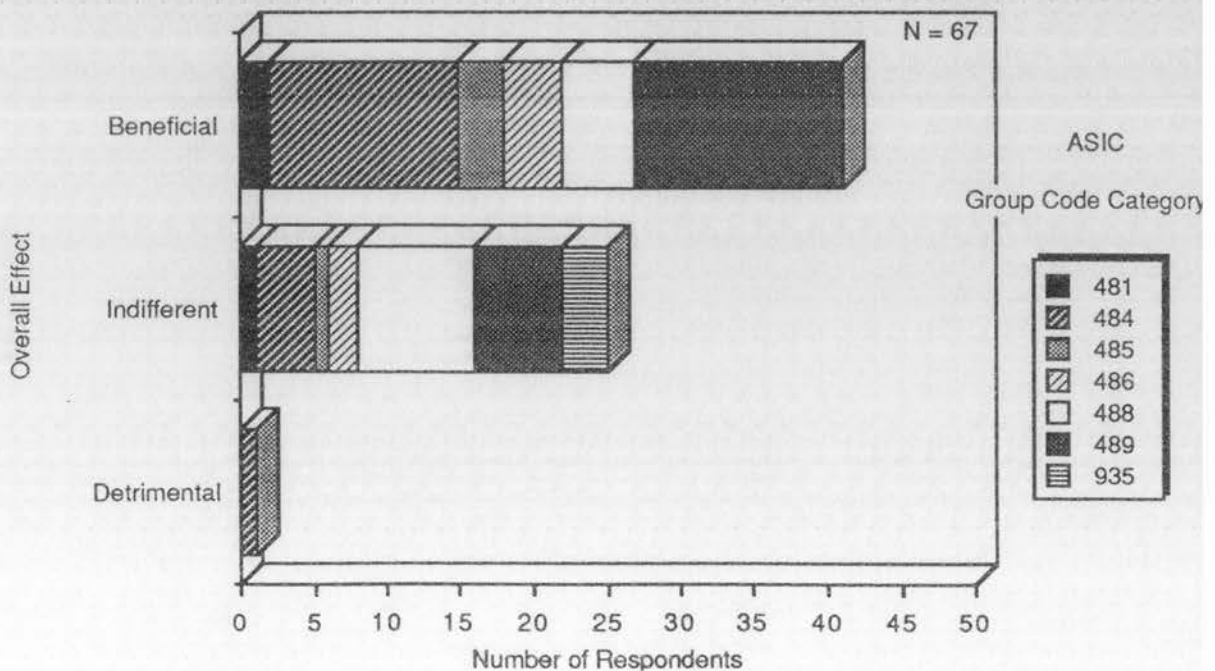


Figure 5.16 Perceptions of the Overall Effect that the Tindal RAAF Base will have on the Katherine Retail Community

Figure 5.16 shows that the clear majority (61 percent) of the respondents perceived that the Base will be beneficial to the retail community. Only one respondent (0.6 percent) felt that the Base would be detrimental, while the remaining responses were classified as being

indifferent. A greater proportion of ASIC GCC's 484 (clothing, fabric and furniture stores), 486 (motor vehicle dealers) and 489 (other retailers) had a larger representation in the beneficial perception category whilst ASIC GCC's 488 (food stores) and 935 (hairdressers) have larger proportions in the indifferent perception category.

The remainder of this section will deal specifically with the Construction Phase of the Tindal RAAF Base Development. The Construction Phase had been in operation for two years at the time of the survey and was planned to continue for a further 18 months. Respondents were asked what effect they perceived the Construction Phase had already had on their business.

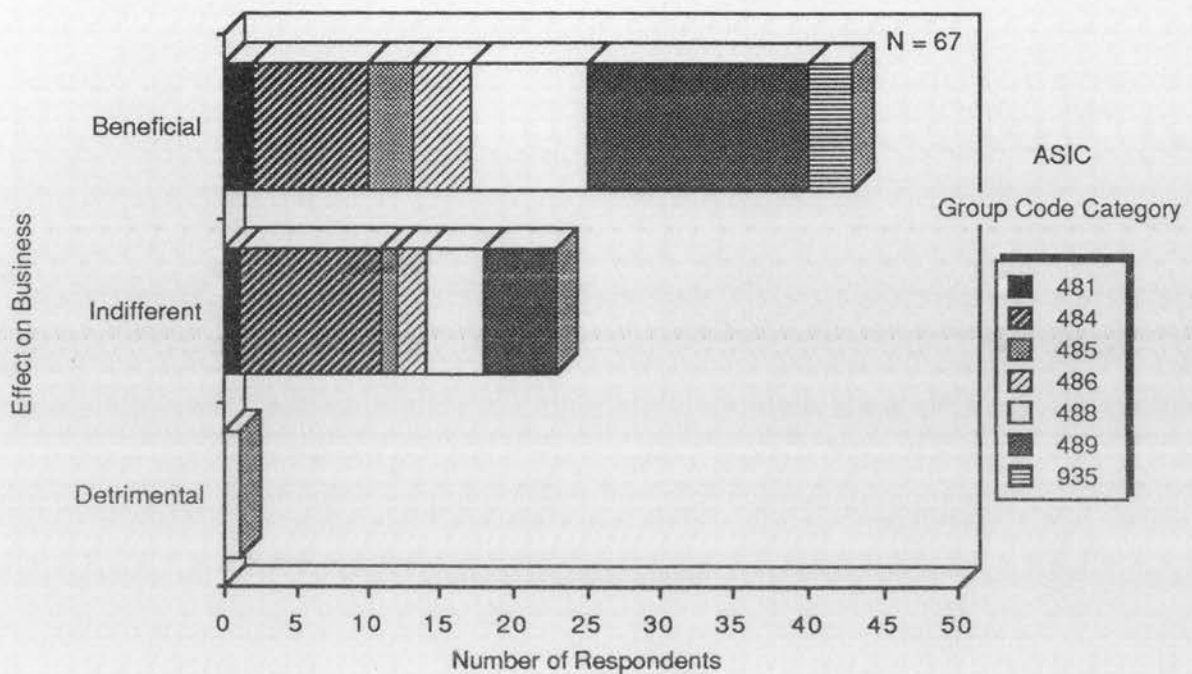


Figure 5.17 The Perceived Effect the Construction Phase has had on the the Respondents Business

Figure 5.17 shows that 64 percent of respondents felt that the Construction Phase had been beneficial to their business, while 34 percent were indifferent in opinion as to the effect that the Base had had. This is almost certainly due to the fact that the consumption by the construction workforce, and the demand for materials, have been concentrated on particular ASIC GCC's - namely 486 (motor vehicle dealers), 488 (food stores), 489 (other retailers) and 935 (hairdressers).

When respondents were asked whether they felt that a business opportunity had evolved as a result of the Construction Phase, 60 percent responded No and 40 percent Yes (see Figure 5.18). This is indicative of the

general perception that even though the Construction Phase had increased the business volume in 64 percent of the establishments interviewed, respondents did not feel that there existed sufficient opportunities by which they could, or should, improve their business. There did not appear to be any significant trend within the responses between the ASIC GCC's.

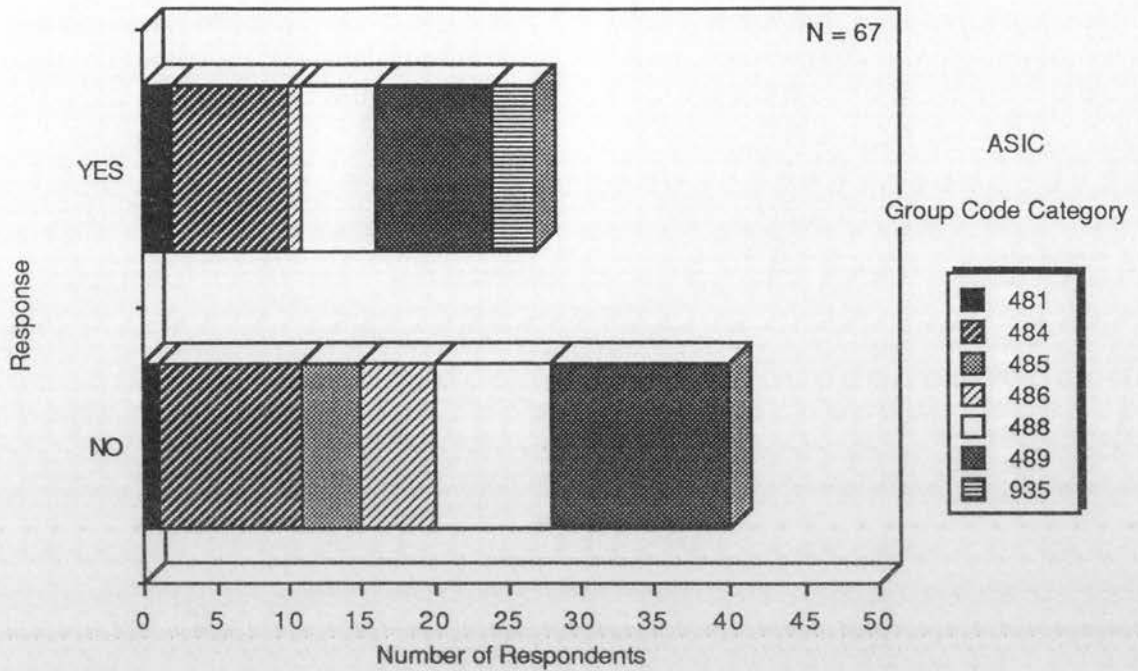


Figure 5.18 Perceptions of a Business Opportunity Arising from the Construction Phase

The 27 respondents who felt that there was a business opportunity to be exploited as a result of the Construction Phase, were then asked which method(s) would be best to exploit this opportunity.

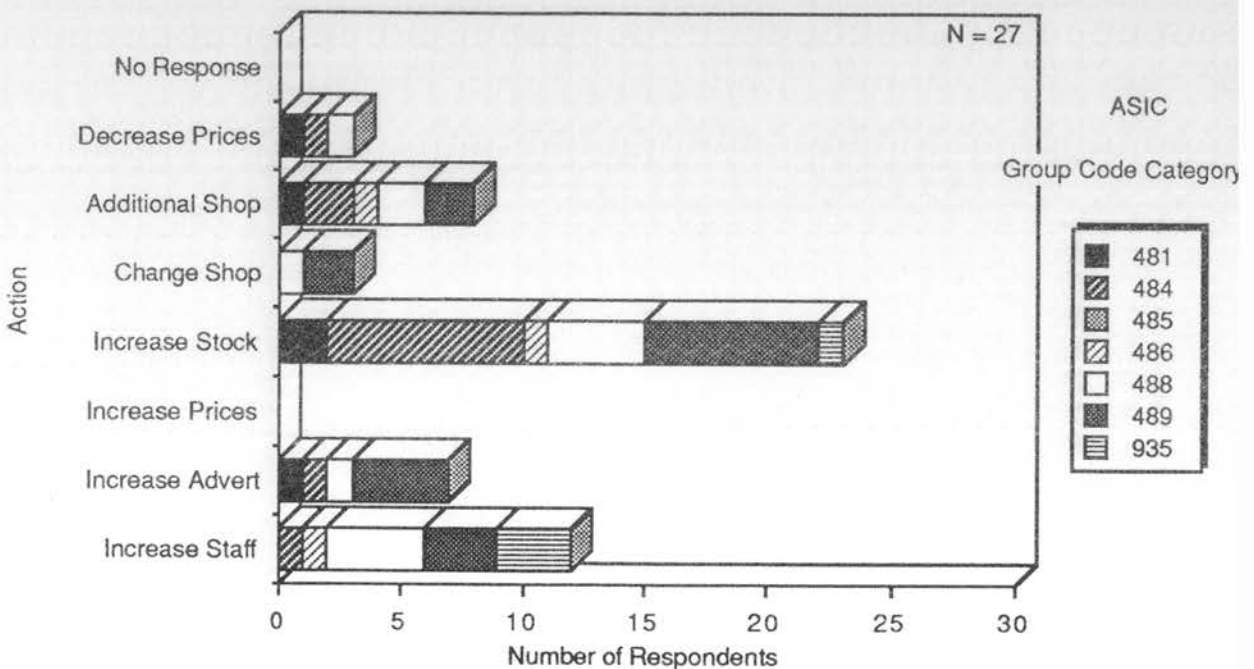


Figure 5.19 Perception of the Best Way to Exploit the Business Opportunity Associated with the Construction Phase of the Tindal RAAF Base Development

Figure 5.19 shows that increasing their stock range was the most popular means, followed by increasing the number of staff and then by increasing the amount of advertising. These means of exploitation are all characteristically 'soft' options that do not involve a great financial outlay or involve a great deal of risk. The responses of opening an additional store, or changing the location of the current premises, in all cases referred to the recently developed outlets in the Woolworths complex. In brief, the Woolworths store comprises the major tenant of the complex, while there are 16 additional premises available for specialty shops as minor tenants. It is to these specialty shop locations that reference is being made. The Woolworths complex was due to open one month after the survey questionnaire was conducted. Opening an additional store, or changing the location of the current one is more so in response to the establishment of the complex itself rather than because of the increased trade from the Construction Phase. These particular respondents claimed that this action was warranted by the competition that the Woolworths complex would place on custom to their business and shift the shopping focus of the town toward the southern end of Katherine Terrace. The perceived impact that the Woolworths store and complex is going to have on the Katherine retail sector is discussed in depth in Section 5.4.

It must be remembered that despite the indication of these means of business exploitation there is a factor of background response that must be taken into account. The Construction Phase cannot be given responsibility for all of these perceived opportunities, as the growth figures in Section 2.3.2 have already shown that Katherine was, and still is, experiencing rapid expansion irrespective of the Tindal RAAF Base Development. Again, the Base must be considered as a catalyst to growth not the reason for growth.

When asked what percentage chance for success the respondents felt their actions in the previous question would achieve, the greatest number of responses were either in the upper range of percentages (over 75 percent) or in the lower range (less than 50 percent). This reflects that respondents are either very confident of the success of their chosen actions or quite unsure of their possible success. Generally, the greater the preferred outlay, the greater the percentage chance for success. Note that respondents were not asked what actions they would be taking to exploit the business opportunity, only which actions they would like to take up. Hence, the answers gained here may not be 'real world' responses - taking into account the financial and temporal constraints that would have to be appraised if the respondent were definitely proceeding with these actions. It can thus be assumed that in some instances, the actions and percentage chances for

success associated with them are somewhat inflated. This approach was necessary in the interests of confidentiality to the respondents, thus ensuring maximum number of responses. Within the responses, GCC's 481 (department and general stores) and 486 (motor vehicle dealers) were both very confident that their proposed actions would be successful.

In summary, this section has shown that the majority of respondents (64 percent) felt that their business had benefited as a result of the Construction Phase of the Tindal RAAF Base Development, yet only 40 percent of respondents perceived that there thus existed a business opportunity to be exploited. Of the respondents who felt that there was a business opportunity to be exploited, the majority indicated options of increasing stock range, staffing, and advertising, which are characteristically 'soft' means of exploitation. Several respondents also indicated that they would be changing or opening additional premises in the new Woolworths complex. In general, respondents were either very confident or quite unsure whether their proposed actions would be successful.

5.3.3 Perceptions of Opportunity with respect to the Operational Phase

The Operational Phase of the Tindal RAAF Base Development was due to begin some 17 months after the time that the questionnaire survey was conducted. As such, the future context of the perceptions ascertained by these questions must be viewed on an entirely separate plane to those associated with the Construction Phase, even though the same questions themselves were asked.

Respondents were first asked what effect they perceived the Operational Phase will have on their business. A greater proportion of respondents (81 percent) felt that the Operational Phase would be beneficial to their business, compared to the 64 percent who felt so for the Construction Phase (see Figure 5.20). The more positive attitude can be to some degree attributed to the future context of the perception, however, the respondents clearly believed that the Operational Phase - with the influx of RAAF personnel and their families - will be of even greater benefit to their business than the Construction Phase.

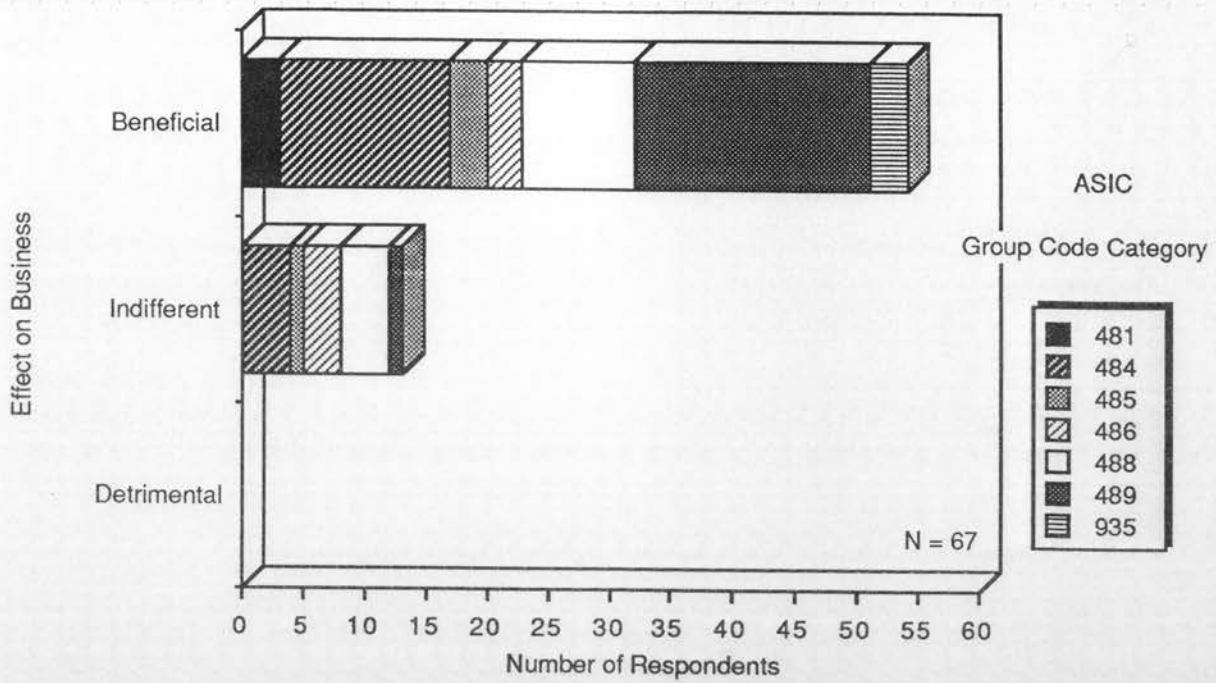


Figure 5.20 Perceived Effect of the Operational Phase on the Respondents Business

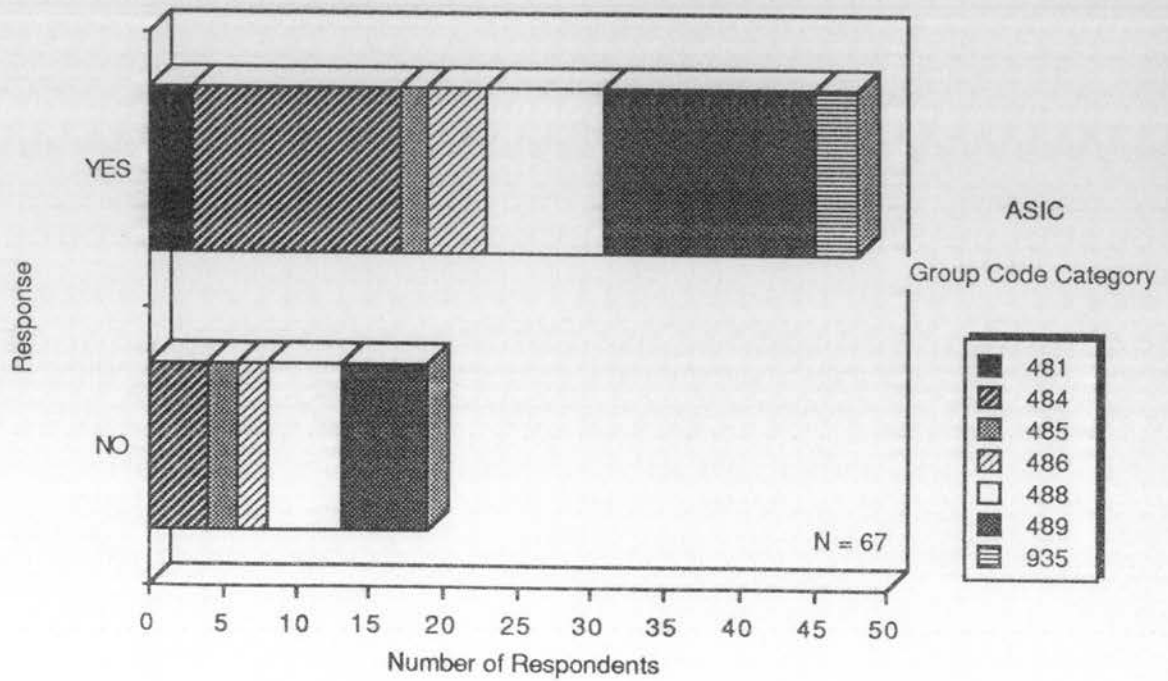


Figure 5.21 Perception of Business Opportunity Arising from the Operational Phase

Similarly, Figure 5.21 shows that 72 percent of the respondents felt that there would be a business opportunity arising from the Operational Phase of the Development; a much greater proportion to those who perceived an opportunity from the Construction Phase (40 percent). Accordingly, a lesser proportion (28 percent) perceived that there would not be a business opportunity arising from the Operational Phase than in the Construction Phase (60 percent). These figures indicate that the respondents are considerably more positive about the impact of the Operational Phase than that of the Construction Phase. There were no significant trends with the responses between the ASIC GCC's. The increase in the perceptions of a business opportunity existing between the two Development Phases was more prominent between the owners and owner/managers than it was between the owners within the survey population.

The 48 respondents who felt that there would be a business opportunity to be exploited as a result of the Operational Phase, were then asked which method(s) would be best to exploit this opportunity.

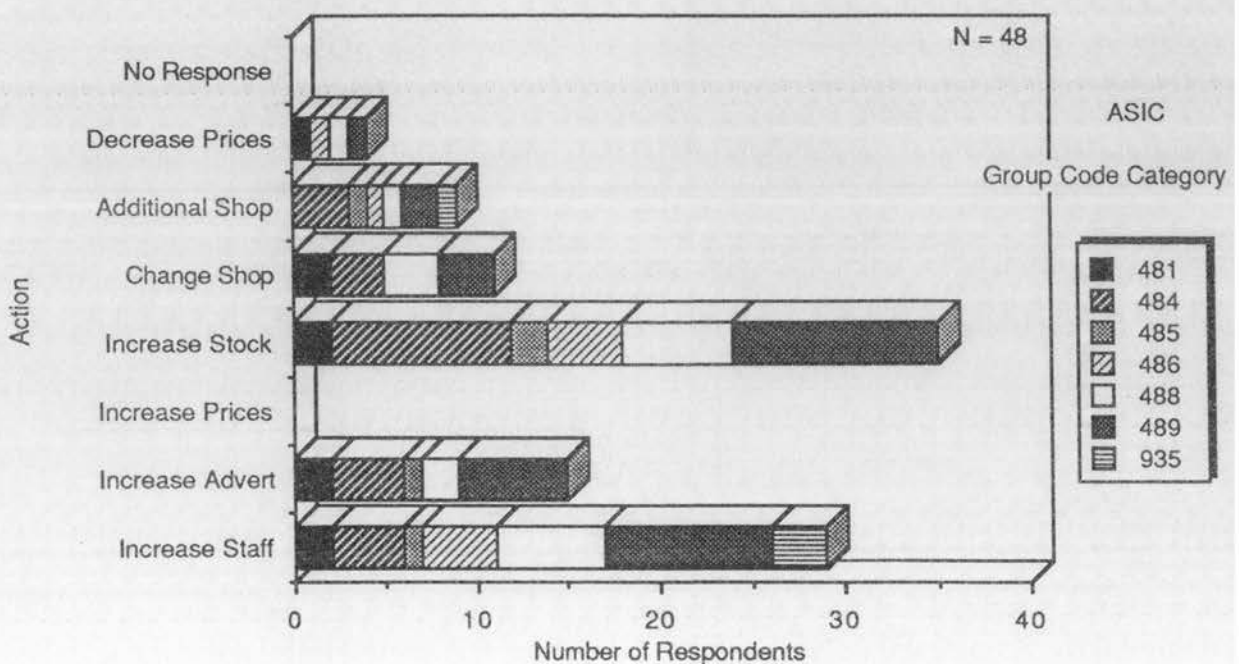


Figure 5.22 Perception of the Best Way to Exploit the Business Opportunity Associated with the Operational Phase of the Tindal RAAF Base Development

The responses shown in Figure 5.22 are similar to those achieved for the Construction Phase. Again, the most popular actions selected were to increase the stock range, followed, again, by increasing the number of staff, followed, again, by increasing the amount of advertising. The respondents who in the actions for the Construction Phase nominated that they would like

to change current or open additional premises, have again indicated this action with respect to the Operational Phase. Interestingly, Figure 5.22 also indicates that one more respondent felt that he/she would like to open an additional shop, while eight more respondents felt that they would like to change current premises. By comparing the responses, we can see that some respondents have indicated these actions for both of the Development Phases, whereas there are several respondents who have only indicated either or both of these actions for the Operational Phase. The reasons for the selection of these actions by the respondents in the Construction Phase context can still be justified. However, it clearly appears that there are more plans for the changing or addition of premises oriented specifically toward the increased business volume perceived to be resulting from the RAAF personnel and their families. This action also implies that this particular element of the survey population does not feel that the opening of the Woolworths complex poses any immediate threat to their business, and that their exploitation of the perceived business opportunity can be accomplished within time, given that the the Operational Phase begins in 17 months (from the time of the survey). The motivations of these particular elements of the survey population will be discussed in depth in Section 5.4.

Respondents were then asked to indicate what percentage chance for success they associated with the actions they had designated in the previous question, and similar responses to that achieved for the actions for the exploitation associated with the Construction Phase were obtained, ie. a predominance in the upper and lower percentage categories. The noticeable difference is that the No Responses have increased dramatically at the expense of all of the percentage chance for success categories. This can be most likely attributable to the future context of the perceptions of business opportunity associated with the Operational Phase, and thus the ability to predict such concepts is illustrated to be evidently difficult. Generally, the greater the preferred outlay the greater the percentage chance for success the respondent associated with the options for exploitation. Within the responses, there are several interesting trends between the GCC's, especially in comparison to the responses received to the same question with regard to the Construction Phase. Firstly, GCC 481 (department and general stores) had a lower perception of the chances for success than they had for the Construction Phase. Secondly, GCC's 486 (motor vehicle dealers), 489 (other retailers) and 935 (hairdressers) each perceived increased chances of success for their selected actions. GCC 485 (household appliances and hardware stores), of whom none perceived a business opportunity arising from the Construction Phase, now felt that

there existed a business opportunity which they would like to exploit, even though the chances for success they associated with their chosen actions were noticeably low. This positive variation of perceptions between the two Phases of Development can be attributable to the optimistic attitude toward the Operational Phase of the Tindal Development, which has been identified in various sections of this chapter. Although general awareness of the Project can be considered low (see Section 5.3.1), the survey population was certainly under the impression that the Development Project overall has been and will be beneficial to their business (see Section 5.3.2; Field Notebook 1). This no doubt resulted from the large amount of positive general information being passed onto the Katherine community by public relations measures (Katherine Times Vol.4 Issue 47, 4 December 1986; Katherine Advertiser Issue 387, 8-14 January 1987). Finally, the perceived chances for success from GCC's 484 (clothing, fabric and furniture) and 488 (food stores) did not alter substantially for their selected actions of business exploitation between the Construction and Operational Phases. These two GCC's can thus be regarded as being sceptical, or realistic?, towards the increased benefits that the Operational Phase will provide with respect to their business; or perhaps both GCC's have not differentiated between the two Phases, and thus regard the benefits they have identified in the previous questions of the survey questionnaire as belonging to the Development as a whole. Each option appears equally likely, and the results are probably a function of both explanations.

		Construction Phase	
		Yes	No
Operational Phase	Yes	36%	33%
	No	9%	22%

Note: % refers to proportion of the 67 respondents.

Table 5.5 Comparison of Perceptions of a Business Opportunity Existing between the two Development Phases.

Respondents who perceived a business opportunity existing from either or both the Development Phases (78 percent of respondents - see Table 5.5) were then asked to indicate within what time frame they would like to see their selected actions for the exploitation of the perceived business opportunity completed.

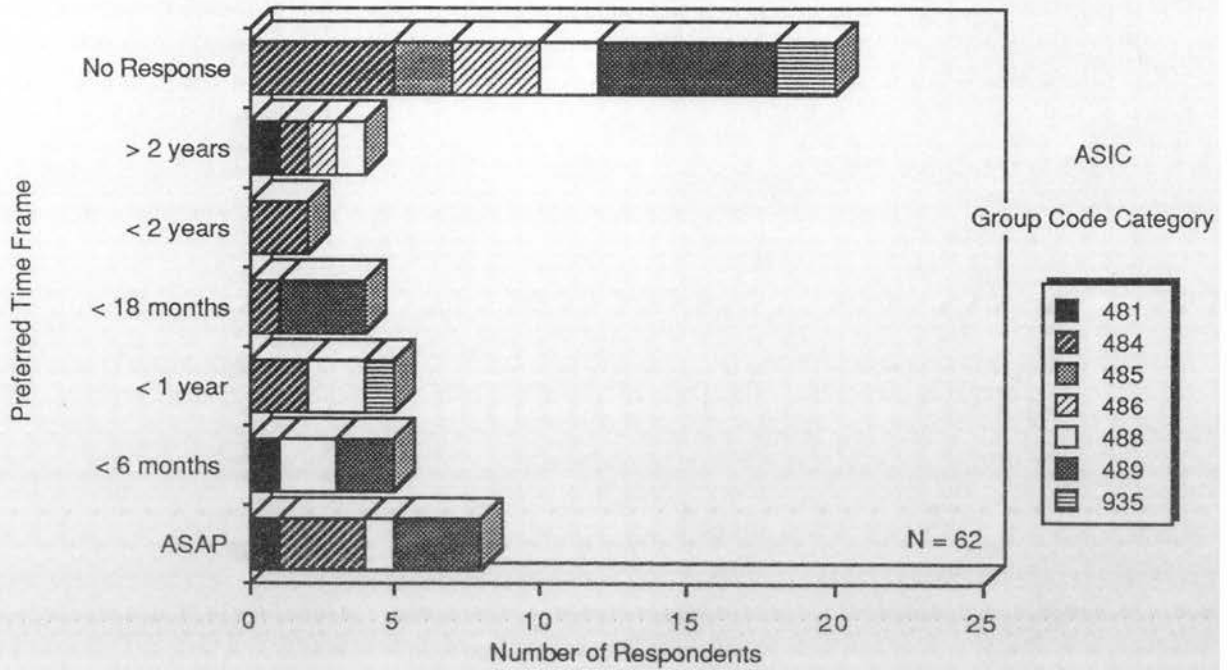


Figure 5.23 Preferred Time Frame for Exploitation of the Perceived Business Opportunity

Figure 5.23 shows that the largest response category is No Response - a reflection on the lack of confidence the respondents have toward the exploitation of their perceived business opportunities. Of those respondents who did indicate a time frame in which they would like to see their selected actions for the exploitation of the perceived business opportunity completed by, the majority favoured the shorter term (under one year). This is most probably in readiness for the transition from the Construction to the Operational Phases, and the desire to reap a timely return for the expenditure they may have incurred in implementing their selected actions. The other responses from one year or more are the long term implementations which appear to be being planned to coincide with Stage II of the Development, in which the service population of the Base will approach the 1000 mark. A degree of retrospectivity and uncertainty must be acknowledged here, where respondents are obviously waiting for the Base to establish its routine before making any monetary commitments.

The respondents were also asked how much money they would be prepared to outlay in order to implement the actions selected to exploit the perceived business opportunity.

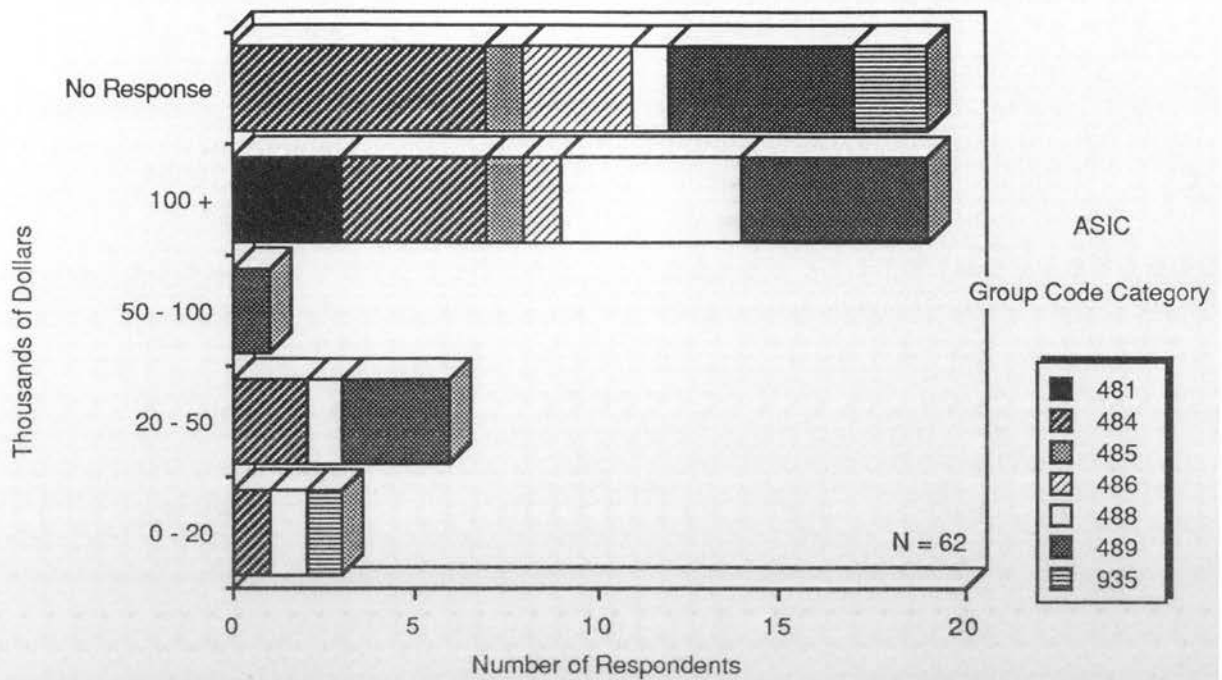


Figure 5.24 Preferred Outlay for Exploitation of the Perceived Business Opportunity

Again the personal nature of some of the questions is reflected by the substantial number of No Responses to this question (40 percent)(Figure 5.24). Despite the lack of validity due to the small response to this question, we can see that a large number (40 percent) of respondents would be prepared to outlay over \$100,000 in order to implement their selected actions. The respondents included in this category are those who nominated to either change current or open additional premises, as well as those who intended to implement one or more of the various 'soft' options, such as increasing stock, staff or advertising to a large extent. Thus, there is an apparently large spread of preferred outlays - reflecting individual perceptions.

The next question in this section asked the 78 percent of respondents who had identified a business opportunity to exist in either or both of the Development Phases, to indicate why they would not go ahead and exploit that opportunity.

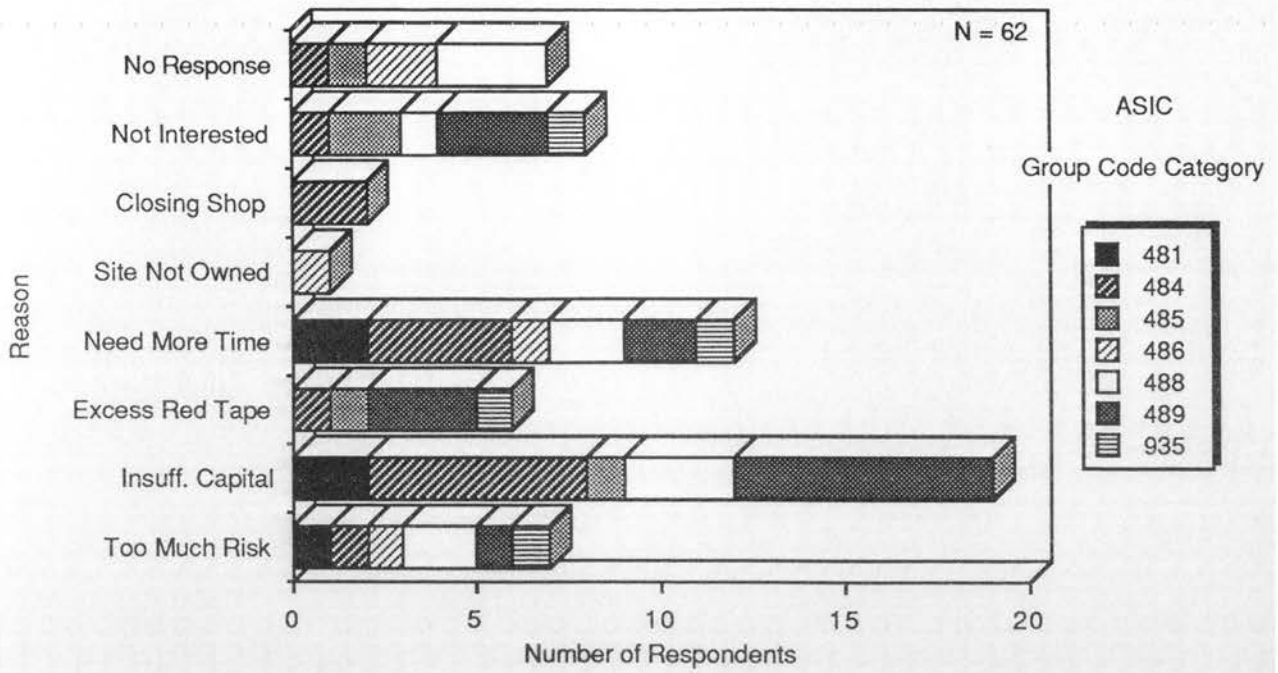


Figure 5.25 Reasons for not Exploiting the Perceived Business Opportunity

Figure 5.25 shows that 31 percent of the responses received to this question indicated that respondents would not go ahead with the implementation of their chosen option(s) due to insufficient capital, while 19 percent of responses received indicated that respondents needed more time before they made a decision. This again reflects a degree of uncertainty about the amount of impact the Operational Phase will have, resulting in hesitancy amongst the respondents to commit themselves toward firm decisions. Eleven percent of the responses received indicated that respondents felt that there would be too much risk involved to warrant implementing their selected action(s) - also supplementing the degree of uncertainty mentioned above. Ten percent of responses indicated that respondents felt that there was too much red tape (ie. borrowing funds, obtaining council permits etc.), while 13 percent of responses indicated that the respondents were simply not interested in taking up the business opportunity, illustrating a degree of complacency within the survey population. The 11 percent of respondents who gave No Response to this question conversely felt that there would be no reason at all why they wouldn't go ahead with the exploitation of their perceived business opportunity. Some researchers (Katona, 1975:291-293) have claimed that owners strive to maximise profits while managers strive to maximise salary. Variations in this profit motive do not appear to have been validated here - probably due to the large proportion of owner/managers.

Lastly in this section, respondents were asked whether they perceived any business opportunities, such as new business endeavours or the expansion of current businesses, to exist for any other forms of retail establishments in Katherine. Thirty nine percent of the respondents felt that there were no business opportunities other than their own, not implying that each of these did feel that there was an opportunity for their own business. Many of these particular respondents were of the opinion that Katherine had sufficient retail facilities (Field Notebook 1), and the majority of these were older Katherine or Northern Territory residents, the antithesis of the attitude which appears to exist in the larger retail communities of southern Australia. The majority (55 percent) of respondents felt that they could identify one or more business opportunities in Katherine other than their own business. The opportunities that these respondents identified included the following: white goods and domestic equipment, furniture and electrical, haberdashery and manchester, childrens clothing, shoes and shoe repair, coffee shop and restaurant, variety and department store, mens hairdresser, craft shop, night club, sporting complex, entertainment/tourist complex, and winery. Some of these are strictly specialist retail endeavours, whereas others can be considered more entrepreneurial in nature.

In summary, this section has shown that most respondents (81 percent) felt that their business will benefit as a result of the Operational Phase of the Tindal RAAF Base Development, and that 72 percent of respondents perceived that there will exist a business opportunity to be exploited. Of the respondents who felt that there will be a business opportunity to be exploited, the majority indicated 'soft' options of increasing stock range, increasing the number of staff and increasing the amount of advertising. This hierarchy of choice of options are the same as those received for the Construction Phase in the previous section, reinforcing the hierarchy of preferred implementation that the respondents place on these particular options. Several respondents indicated that they would like to change current or open additional premises, some of them in addition to their indication of this action with respect to the Construction Phase, but most for the first time with respect to only the Operational Phase. These responses indicate that this particular element of the survey population perceive a greater business opportunity developing as a result of the population influx associated with the Operational Phase than that which is perceived to exist from the Construction Phase. On the whole, respondents were less confident about the chances for success they associated with the actions they selected to exploit the perceived business opportunity in comparison to the Construction Phase. A greater proportion of respondents

gave No Response to this percentage chance for success question, thus illustrating the difficulty respondents had in predicting such future oriented concepts.

Respondents generally preferred a short time frame (within one year from the time of survey) for the implementation of their selected actions to exploit the perceived business opportunity; most likely in order to coincide with the transition into the Operational Phase of the Development. Other respondents indicated a longer time frame of greater than one year (from the time of survey), most likely in response to some degree of uncertainty and hesitancy as to the amount of impact the Operational Phase will have on the Katherine retail sector. This degree of uncertainty and indecision within the survey population is illustrated to an even greater extent by the large proportion of No Responses to this particular question. There appeared to be a large range of preferred outlays (\$0 to over \$100,000) for the implementation of the respondents selected action(s). However, these particular responses lack validity due to the large proportion of No Responses to this question. Respondents who perceived an opportunity arising from either Phase of the Development indicated that insufficient capital would be the most likely reason (31 percent of responses) why they would not go ahead with the exploitation of the perceived business opportunity, with the next most likely reason being the need for more time to make a decision (19 percent of responses), illustrating a desire to make retrospective decisions. Other lesser reasons included feelings that there was too much red tape, or they were simply not interested in exploiting the perceived business opportunity. Only a small number of respondents (11 percent of responses) claimed that there would be no reason why they would not go ahead implementing their selected actions of exploitation.

Lastly, 39 percent of respondents felt that there were no other forms of business opportunity that could be exploited in Katherine, whereas 55 percent felt that there were opportunities in specialist retail establishments as well as in entrepreneurial or tourist oriented ventures.

5.4 Woolworths

5.4.1 Introduction

After the Federal Government announced its intention to proceed with the Tindal RAAF Base Development in 1984, Woolworths Pty.Ltd. realised that the population increase in Katherine was now virtually assured. Woolworths usually base their decision on where to locate new stores by the criteria of a sufficiently sized market. The population figure usually quoted is 10,000, but this is only a rough working guide, and in most instances the decision

is subject to a variety of other factors. This was very much the case in Katherine whose population at the time of the decision was only approximately 5,000. As mentioned above, Woolworths considered the establishment of the Tindal RAAF Base as sufficient insurance that the Katherine population would increase - due to the RAAF personnel as well as the induced population - to a level which would be able to support one of their stores. The reason why the complex was completed in July 1987 rather than coinciding with the commencement of the Operational Phase in late 1988 was for strictly monetary considerations. Due to the inflation of building costs, it would have cost Woolworths more to have the complex built to coincide with the commencement of the Operational Phase. Compared to the amount of money than they could have lost due to trade with a smaller market over that period the alternative of building early had a monetary advantage. The small losses in trade over the next 18-24 months could be easily absorbed by the other outlets in more profitable parts of the country (Field Notebook 1). Hence, the \$12 M Woolworths store and complex which opened on July 16 1987 was a highly ephemeral topic that continually appeared in many informal conversations with respondents, as well as in the local media. This Woolworths store is the first major chain store establishment to begin trading in Katherine.

The Woolworths store itself was to begin trading with an extensive range of foodstuffs including dairy products, fruit and vegetables and meat departments - comprising three quarters of the available floorspace, as well as smaller ranges of haberdashery, household appliances and childrens toys comprising the remainder. The store is larger than it needs to be because room for growth has been incorporated into the initial design. The initial stock range is already planned to be reviewed according to the demand trend associated within the first few months of trading, with the ultimate goal of developing a 'Big-W' store. Woolworths prior to opening claimed that the store itself will employ 60 permanent staff, 60 casuals and 60 'nightfillers' on various shifts (Katherine Times Vol.5 Issue 14, 9 April 1987). The 16 specialty shops included in the complex were to be let to both Katherine and Darwin based retail businesses, yet according to the leasing agents for the complex, many intended tenants were forced to withdraw (Katherine Times Vol.5 Issue 14, 9 April 1987). One of the most likely reasons for the withdrawals are the relatively high rental fees that are being asked for premises (Field Notebook 1). At the time of writing, there were several premises in the complex still vacant.

5.4.2 Perceived Effects and Actions

In the survey questionnaire, respondents were asked how they felt the Woolworths store will affect the number of customers coming to their establishment. The respondents were asked to mark their attitude on a five point bipolar alternatives scale (see Section 4.3.3) in which the bipolar alternatives were "will cause a lot more/less customers to come to my location" (see Appendix I).

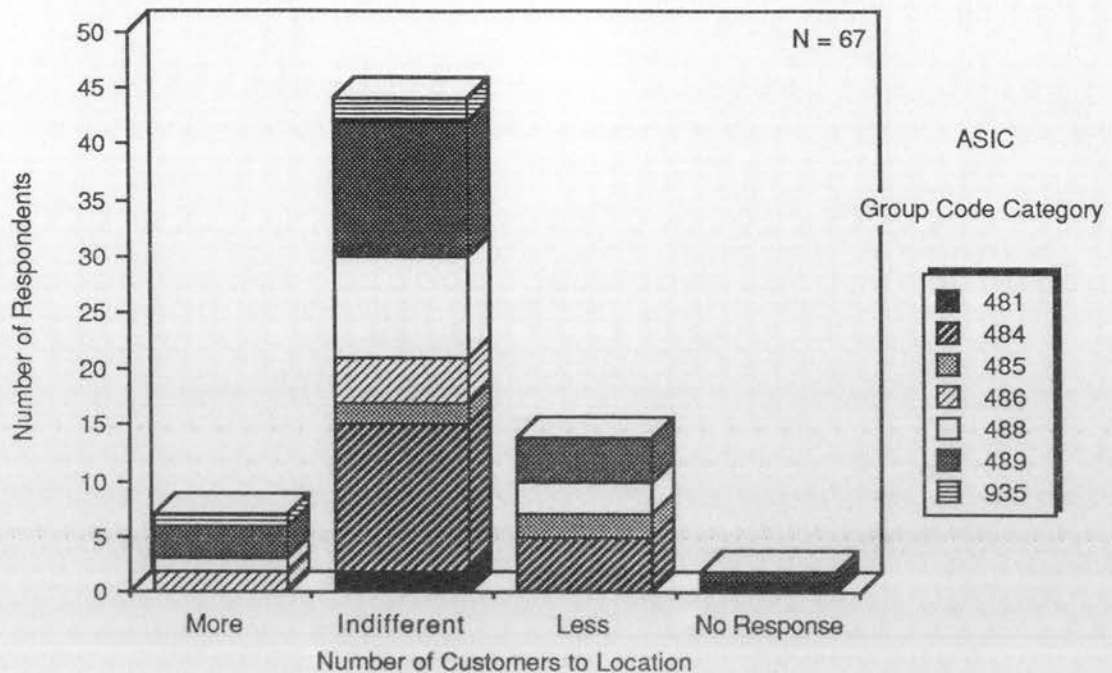


Figure 5.26 Perception of the Effect Woolworths store and complex will have on the Number of Customers Coming to the Respondent's Location

It can be seen from Figure 5.26 that the clear majority of respondents (66 percent) were categorised as being indifferent, ie. they felt that neither more nor less customers would come to their location. Twenty one percent felt that the Woolworths complex would cause less customers to come to their location, while 10 percent felt that it would cause more customers to come to their location. Primarily these responses can be considered as a function of the respondents current location. Section 5.2.4 showed that some respondents with establishments in northern Katherine Terrace felt that the Woolworths complex would shift the centre of shopping interest toward the southern end of Katherine Terrace. This is reinforced by the respondents here in the category who felt that the complex would cause less customers to come to their business location. Those respondents who earlier felt that there were no preferable sites for retail establishments in Katherine, make up the indifferent category of this question. Also, the indifferent

responses to this question may be a function of the ASIC GCC, where GCC's 935 (hairdressers), 486 (motor vehicle dealers) and 488 (food stores) are predominantly indifferent because of their handling of goods that were not being offered by Woolworths.

Respondents were then asked what actions they would take to counter the effect the Woolworths store will have on the number of customers.

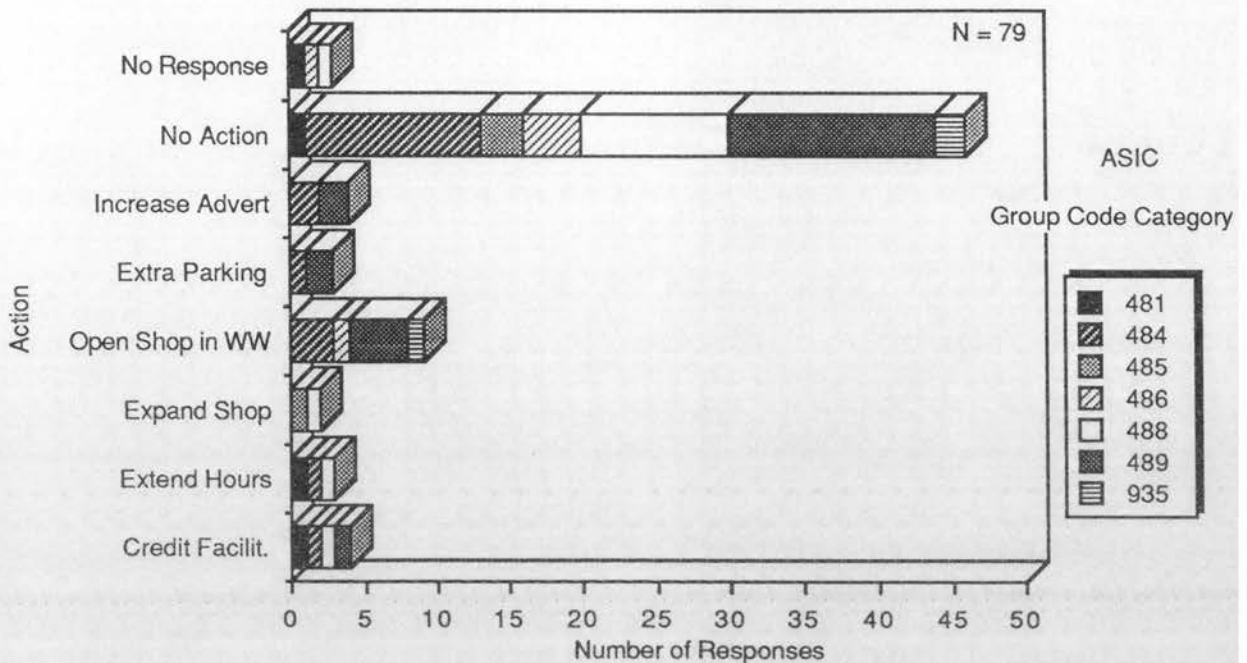


Figure 5.27 Actions that the Respondents would take to Counter the Effect the Woolworths store and complex will have on Customage to their Establishments

Figure 5.27 shows that the greatest response was No Action (69 percent of responses), most of which were part of the indifferent category in the first half of this question, again illustrating the casual business attitude that appears to exist within a great proportion of the Katherine retail sector. This category would also include those respondents who felt that the Woolworths store would bring more customers to their location. Some respondents, however, were prepared to take action - noticeably those who felt that the Woolworths store would cause less customers to come to their location. Ten of those respondents, the largest percentage, indicated that they would be opening a specialty shop in the Woolworths complex, in a desire to tap the custom that the Woolworths store will attract. Other actions included increasing the amount of available parking space, the hours of opening and increasing the range of goods. These actions were closely related to the responses given in the first part to this question discussed above and similarly, there were no trends within the responses between the ASIC GCC's.

In the second part of this section respondents were asked how much effect they felt the Woolworths store will have on competition on commodities handled (ie. undercutting prices). Again responses were achieved on a five point scale using 'a great deal' and 'no competition at all' as the bipolar alternatives (see Appendix I).

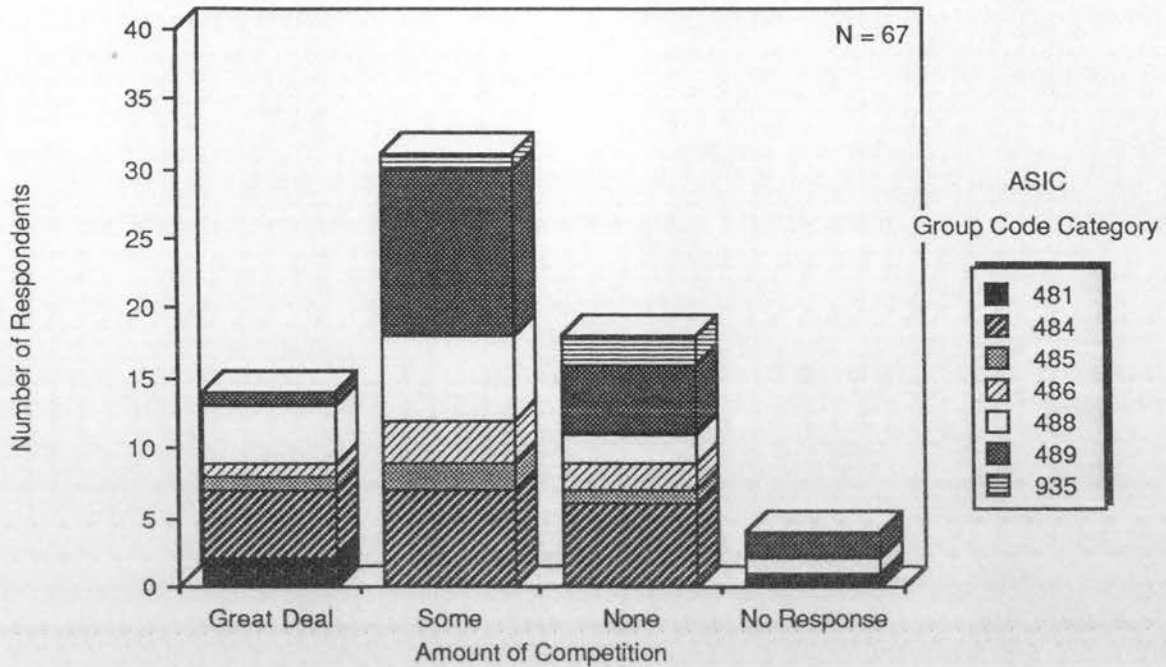


Figure 5.28 Perceptions of the Effect the Woolworths Store will have on Competition on Commodities against the Respondents Store

Figure 5.28 shows that a large proportion of respondents (46 percent) felt that the Woolworths store would offer Some Effect on the competition to the commodities sold in the respondent's store. Twenty seven percent of respondents felt that the Woolworths store would offer No Competition, while 21 percent of respondents felt that the Woolworths store would offer A Great Deal of competition on commodities. An interesting result from this question is the apparent lack of consistency in responses between ASIC GCC's, in that each Category is represented in each of the response categories for this question. During the conduct of the survey, informal conversations revealed that the respondents had very little knowledge of what stock the Woolworths store would carry. Hence, the spread of response categories for each particular ASIC GCC is achieved by a lack of knowledge, and thus, the ability to recognise competition on commodities. Similarly, respondents were then asked what actions they would take to counter the competition the Woolworths store would offer.

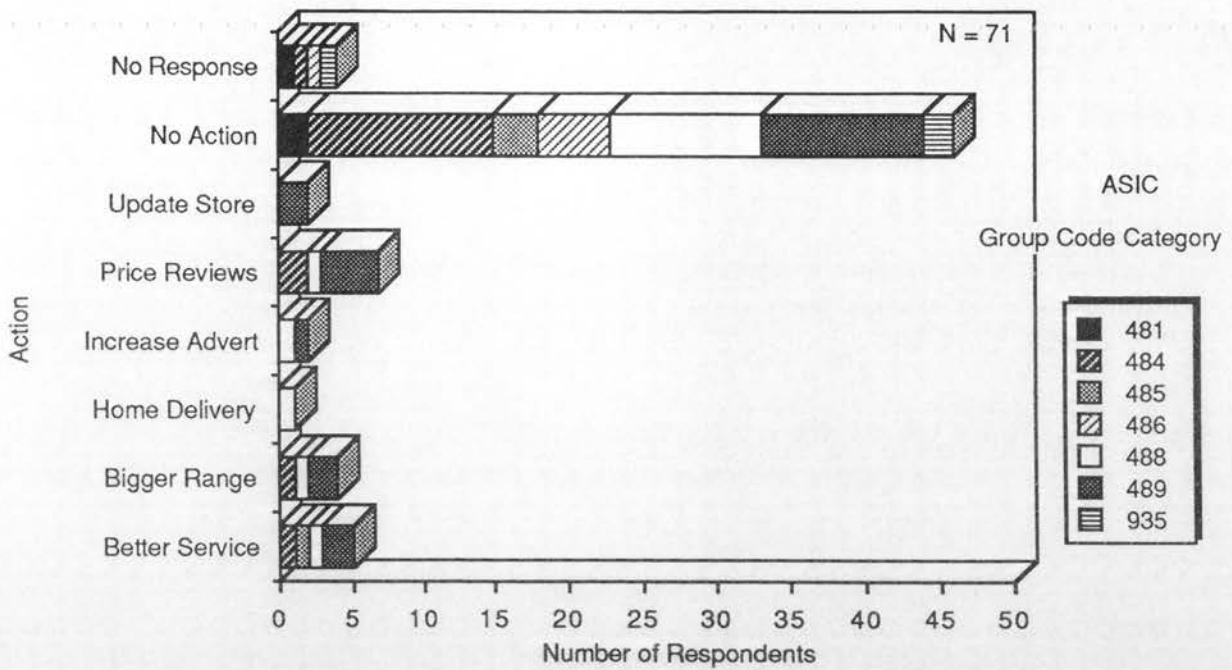


Figure 5.29 Actions that the Respondents would take to Counter the Influence the Woolworths Store will have on the Competition for Commodities

Figure 5.29 shows that again the greatest response was No Action with 65 percent of 71 responses, a reflection of the responses received in the first part of this question, as well as the casual business attitude already discussed. Some respondents, noticeably those who felt that the Woolworths store would offer 'Some' to 'A Great Deal' of competition on commodities, were prepared to take action. These actions included price reviews (10 percent of 71 responses), a bigger stock range (six percent) and better service (seven percent), as well as to a lesser extent updating the store (three percent), increasing advertising (three percent) and offering home delivery (one percent). It can be seen that not all of these actions are necessarily competition measures on the commodities themselves, but are measures to increase the attractiveness of the establishment overall. This can be directly related to the general perception that the 'impersonal' nature of the Woolworths store will enhance the custom to the other retail establishments (Field Notebook 1). Scott (1970:83) however, argued that recent shopping trends showed a decreasing patronage to single stores and for an increasing proportion of purchases to be spontaneous. This erosion of store loyalty stems primarily from increased competition, and promises to become pronounced in Katherine.

5.4.3 General Attitudes

The next question in this section of the survey questionnaire asked respondents what overall benefit they felt the Woolworths store will have on the retail sector in Katherine.

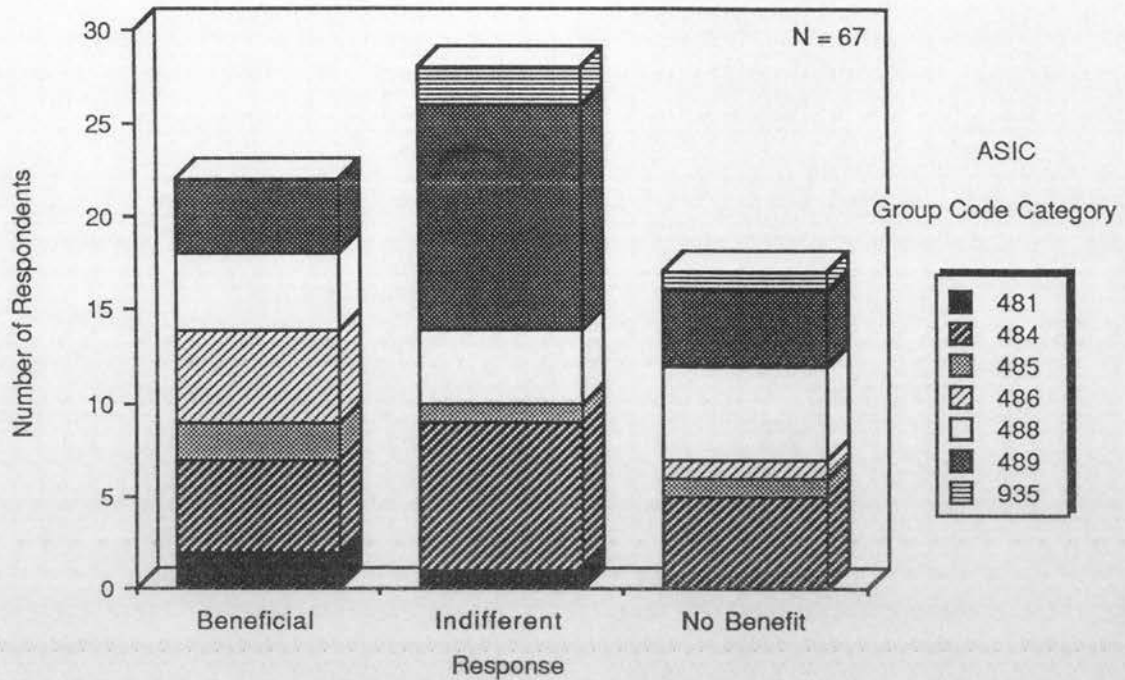


Figure 5.30 Perceptions of what Overall Benefit the Woolworths Store will have on the Retail Sector in Katherine

Figure 5.30 shows that 33 percent of respondents felt that the store would be beneficial, 25 percent felt that it would have no benefit, while 42 percent were indifferent. Those respondents in the No Benefit response category - although not showing any particular trend between ASIC GCC's - appear to be those respondents who perceived the greatest threat to their business from the establishment of the Woolworths store. The large proportion of respondents included in the indifferent response category are generally those who had difficulty in recognising what degree of competition on commodities the Woolworths store would have against their business - reflecting the afore-mentioned casual business attitude, and illustrated by the lack of responses in actions to counter this competition. Thus, indifference to any benefit the Woolworths store may have is generally shown by those respondents who have an attitude that 'if it happens it happens' (Field Notebook 1). This attitude was also illustrated in Section 5.3.3 where some respondents indicated that they were simply not interested in exploiting the business opportunities that they had perceived to exist as a result of the Tindal RAAF Base Development.

The 33 percent of respondents who felt that the Woolworths store will be of benefit to the retail sector appear to support a proposition that was initially put forward by the Woolworths management at the time when the project was seeking public support. This proposition deals with the large number of Katherine residents who prefer to do their shopping in Darwin - notably the Super K-Mart on the south-eastern outskirts of Darwin - a problem peculiar to Katherine. Informal conversations determined that family shopping trips to Darwin were conducted regularly, and in some cases as frequently as every month (Field Notebook 1). The benefits of this pilgrimage are a better range of goods at cheaper prices, as well as an opportunity to get away from town and a chance to experience different forms of entertainment. The Woolworths management estimated the proportion of buying dollars 'leaked' to Darwin to be in the order of 45 percent of Katherine's available spending dollars (Katherine Times Vol.4 Issue 47, 4 December 1986), and thus claimed that the establishment of the Woolworths store in Katherine would lessen this loss by providing an equally attractive local shopping alternative. Hence, the local spending dollar will remain in Katherine, not only to the benefit of Woolworths, but also to other establishments who offer commodities that Woolworths currently does not. It may be this belief, and indeed hope, that led to the feeling that the Woolworths store will be of benefit to the Katherine retail sector. At the time of opening, however, the Woolworths store will by no means be approaching the standard of shopping that the Super K-Mart in Darwin offers. Therefore, there is a serious flaw in the argument put forward by the Woolworths management justifying the establishment of the store. Yet, as the store has begun operations since the time of survey, the Woolworths company no longer sustains any risk, whereas the rest of the Katherine retail sector are having to reappraise any business decisions they may have made as a result of this belief. The proposition of encouraging spending dollars to remain in Katherine may become more valid in future years, if the Woolworths store is expanded to offer real competition to the Darwin market.

The second question in this section asked respondents whether they were happy with the establishment of the Woolworths store in Katherine, and for very much the same reasons as discussed above, 69 percent responded Yes, 15 percent No and 12 percent responded Don't Know. These responses reinforce the perceptions revealed and discussed through the last question.

The last question asked respondents whether they felt that the opening of the Woolworths store is the start of a trend toward larger retail establishments in Katherine.

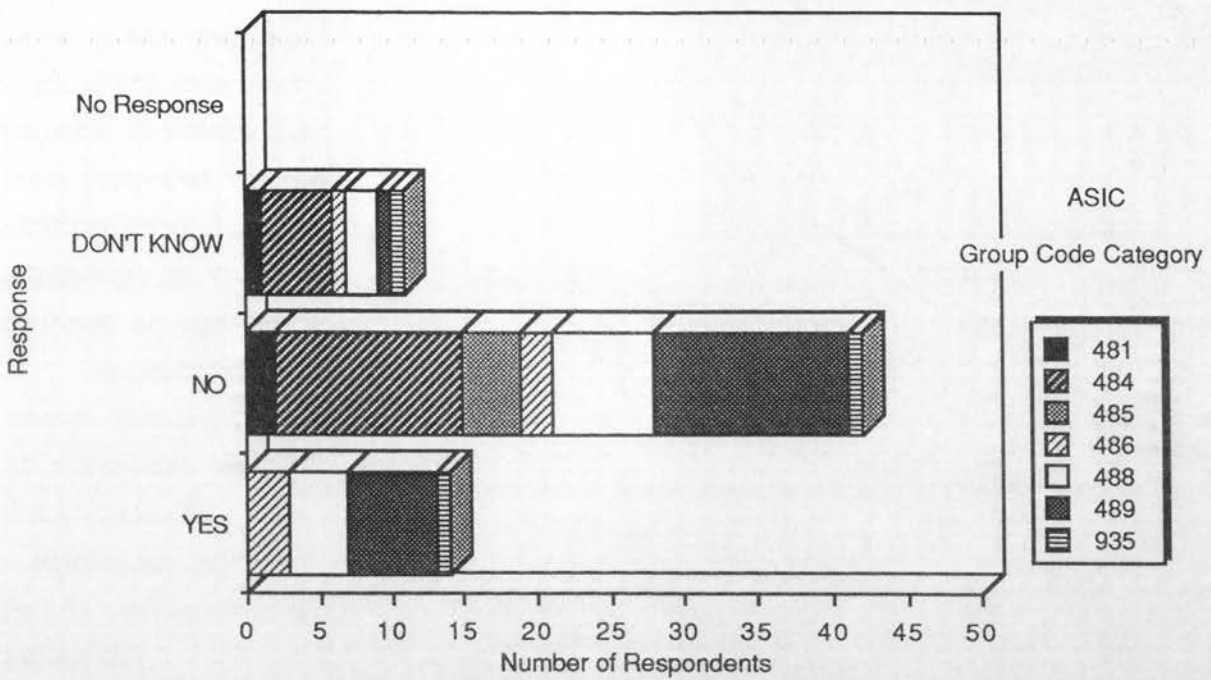


Figure 5.31 Responses to the Question of Whether the Respondent feels that the opening of the Woolworths Store is the Beginning of a Trend Towards Larger Retail Establishments in Katherine

Figure 5.31 shows that 16 percent of respondents felt they Didn't Know, while 21 percent felt that Yes it was. The majority of respondents (63 percent) felt that No it was not the start of a trend. When questioned why, those who responded Yes argued that historically as a town grows the larger retail establishments become more predominant even though small businesses will continue to develop. Those who answered No claimed that there was insufficient demand for larger retail establishments in Katherine at the present time, while augmenting that argument with the belief that the better service offered in smaller shops would ensure their survival over larger establishments. An argument presented by holders of both views was that irrespective of the size of the town, there would always be a place for small businesses in the retail community. This view is supported by Scott (1970:82) who suggests that "towns experiencing rapid growth would seem to create an environment relatively more conducive to entry by new firms and to the survival of independents than to an immediate expansion in multiple trading." Indeed, no one can say to what extent larger retail establishments will become present in Katherine as this is dependent on factors to do with the individual nature of the township itself.

In Summary, this section dealing with the Woolworths store and complex has brought to light some interesting findings. In terms of location, there

is a clear perception amongst the respondents that the Woolworths complex will shift the centre of shopping interest from central Katherine Terrace toward southern Katherine Terrace. There were, however, few respondents who were prepared to take actions to try and counter this effect and entice custom back to their present premises; indeed several respondents took advantage of this perceived shift and indicated that they would be changing current or opening additional premises in the Woolworths complex.

Perceptions of the amount of competition on commodities the Woolworths store would offer a respondents' business were hampered by an apparent lack of awareness about the commodities the Woolworths store would be handling. Subsequently, few respondents were prepared to take action to counter any competition offered, while some respondents indicated they would conduct price reviews and try to attract custom by making their business more personal.

Generally, the respondents felt that the Woolworths store would be beneficial to the Katherine retail sector, primarily because of the belief that the current leakage of local spending dollars to Darwin would be to some degree abated. The immediate amount of competition the Katherine Woolworths store will offer against the Darwin market, however, is likely to be very little, but promises to improve with time and demand.

5.5 Consultation and Information

The purpose of this section of the survey questionnaire was to briefly ascertain how respondents regarded the amount of consultation the Commonwealth Departments of Housing and Construction and Defence have had with the Katherine community as to the amount of impact the Tindal RAAF Base Development will have on certain aspects of the community (see Section 3.3). The section also addresses the amount of information that has been passed on to the respondents with regard to the Development and its impact. Due to the restrictions imposed on the length of this dissertation, discussion of this particular section will be limited to a summary of the information achieved.

The owners and/or managers of the Katherine retail sector do not have any definite attitude to whether there has been sufficient consultation as to the impact the Tindal Base will have on the retail sector. This can be most likely attributable to the transient nature of the survey population (and the Katherine population in general), where only a small proportion of respondents are likely to have come into contact with the Draft EIS and it's Supplement in 1983/84. Similarly, respondents displayed no particular trend

in attitude when asked whether they felt the information they had received on the impact of the Tindal Development had been sufficient or accurate.

There will be no further conclusions drawn on the results of the survey questionnaire and their discussion in this chapter, rather that is the purpose of Chapter Six. This will enable the bulk of the conclusions in this chapter to be drawn together for easier presentation and appraisal, as well as providing an opportunity to discuss the findings within the context of development in Northern Australia overall.

CHAPTER SIX

A SYNTHESIS OF FINDINGS

6.1 Introduction

As well as summarising the results of the survey questionnaire, this chapter will also introduce the concept of the development of Northern Australia, which will in turn lead to a discussion on the place of the Tindal RAAF Base in this developmental perspective. Hence, the findings of the survey questionnaire (Chapter Five) will be able to be summarised within this broader context, which will enable more relevant conclusions to be drawn in Chapter Seven with regard to the place of behavioural economic geography in modern society.

6.2 Development of Northern Australia

'Northern Australia' can generally be described as those lands north of the 26th parallel (NADC, 1986:29), and thus encompasses the entire Northern Territory, north-west and northern Western Australia, as well as north and far-north Queensland. Northern Australia since the time of white settlement has been regarded as the development 'frontier' of the country, due to the relative harshness of the land as well as its isolation from the southern Australian markets (Mackenzie, 1980:43). Holmes' "frontier philosophy" within sparsely populated regions in Australia describes a strong public bias in favour of "public intervention, with governments expected to take over the role of risk-takers, and catalysts for development, ensuring a favourable climate to attract private investment." (Holmes, 1981:101) (see also Bell, 1954:216-219,230; Anthony, 1982:301). The frontier philosophy is partly sustained by a strong element of rural fundamentalism, a belief among rural folk that they are the only producers of real wealth, whose unremitting efforts ensure that the rest of the nation achieves its present level of prosperity. This philosophy was discernible in Katherine at the time of the survey (Field Notebook 1), and often manifested itself as antagonism toward the southern States. These rural views are carried into State and Federal Parliaments, where rural political influence remains surprisingly strong, considering Australia is one of the worlds most urbanized nations (Boxer, 1973:81). In the Australian Federal system, the State and the Northern Territory administrations have little effective

control over their local economies, which form part of a wider national context. Public sympathy toward this frontier philosophy since white settlement in Northern Australia has resulted in a considerable amount of government funding being allocated to the purpose of developing this region (Kelly, 1966:51).

The development of Northern Australia by means of government assistance can be summarised in three broad chronological phases. The first phase was effective from the first white settlement in the region, in the late 19th Century, until the 1950's. Throughout this period, rural exploitation activities dominated the thrust of development opportunities in Northern Australia. This can be evidenced by several government funded projects related to rural development; the Overland Telegraph Line, the partially completed Darwin to Adelaide rail line (see Section 2.2.1), deals made with private firms (such as Vestey Brothers who agreed to build a meat works in Darwin in return for the government's extension of the rail line to Katherine in the early 1920's), as well as various schemes of special assistance to farming and grazing ventures (Skerman, 1954:68-93). Rural development was generally successful in northern Queensland, but failed in the Northern Territory and northern Western Australia (Scott, 1977:205). In the Northern Territory instance, remote decision-making on too large a scale, inability to appreciate climatic constraints, disregard for past experiences and poor planning all contributed to the failure of these development ventures (Mackenzie, 1980:55).

Since the 1950's, the second phase in the thrust toward developing Northern Australia has been through industrial projects (Mawby, 1954:33-36; Taylor, 1982:219). The government realised that the quickest way to specifically develop industry (including the tourist industry) in the North was to exploit its abundant natural resources as quickly and fully as possible (Hawke, 1982:172-177; Jackson, 1982:53). The typical arrangement is that the private organisation funds the resource exploitation itself, while the government takes responsibility for providing the social infrastructure to service the employees, and their families, involved in the project. The industrial development of such a vast and geographically remote area has prompted governments and entrepreneurs to think on a very large scale. Ventures such as the North-West Shelf Gas Project, the Alice Springs-Darwin Gas Pipeline, the Bauxite mines at Weipa and Gove, Argyle Diamonds, the Ranger Uranium Mine, the Ord River Scheme and the Mount Isa mines are a few examples of such large resource exploitation development measures. Such projects are significant in a national economic point of view by generating large federal revenues and having a major impact on the balance of payments

(Downing, 1973:42; Heilscher, 1982:120; Coulter, 1987:14-19). This heavy reliance on large resource exploitation projects can, however, have significant drawbacks, because the desired regional economic impact of such projects is frequently not very substantial, or long lasting, as a lot of the income generated by these projects flows out of the region straight away, or never enters it (Kelly, 1966:79). Some argue that while large resource exploitation projects may not contribute a great deal to regional incomes directly (Livingstone, 1972:224-226), the projects themselves and the infrastructure they develop do create substantial flow-on activity in other sectors of the economy (McFarlane, 1966:xvii; Jackson, 1982:58-60). This flow-on effect was argued by the government prior to the development of the Hammersley Iron-ore mines project in the Pilbara, but it did not materialise to any significant extent (Hawke, 1982:172-177). Similar empty claims have also been associated with other major resource exploitation projects (Gillett and Robertson, 1984:53; O'Faircheallaigh, 1987). Thus, while extremely important from a national perspective, large resource exploitation based projects on their own are unlikely to support the desired broadly based economic development in Northern Australia. There is also an increasing reluctance by the government to provide funds toward providing the social infrastructure development for the various projects (O'Faircheallaigh, 1987:4-22). The emphasis on large scale resource exploitation projects has also resulted in a concern over foreign investment being allowed to flow freely into the North; and indeed many of the existing exploitation ventures are in the strong interests of international monopolies and financial consortiums (McFarlane, 1966:xv). Recently there have been calls in the Northern Territory to abolish the controls administered to the Territory Government by the Federal Foreign Investment Review Board.

The rationale based on rural and industrial development opportunities has now partly lost its force, and has been partly broadened to include consideration of quality-of-life issues (Taylor, 1982:219-220; O'Faircheallaigh, 1987:24,25). These issues incorporate the strengthening of regional economies as well as reducing the inequities in the social infrastructure between Southern and Northern Australia. They represent a more personalised approach to the problem, where governments are expected to support an ever increasing variety of schemes designed to ensure near-parity in the price and quality of basic services irrespective of the costs involved. Australian society has been responsive to the argument that the locationally disadvantaged should receive compensatory assistance in the same way as do socially disadvantaged groups. Because of the relative

smallness of the Australian economy and the major dimensions of the task of upgrading a wide range of services in Northern Australia to city standards, and at city charges, there is a risk of substantial distortion of the nation's economy if goals of equity are pursued too assiduously. Federal Government measures to encourage the development of regional economies and the social infrastructure by changing costs, prices or profitability by subsidizing inputs through direct subsidies or cheap credits, by enhancing product prices (bounties or tariffs), by granting tax concessions, or by manipulation of the exchange rate cannot be effected in isolation and would have too great detrimental effect on southern industry to justify their implementation (Bell, 1954:219-232). As a compromise, the Federal and State Governments in addition to encouraging the exploitation of natural resources in Northern Australia have appreciated a requirement for 'manpower intensive' projects that will stimulate the development of the economic and social infrastructure by increasing the population to local regions (Coulter, 1987:43). Their logic proclaims that the increased and now relatively permanent population will increase the availability of local revenue as well as the demand for services (Sinden, 1972:4). Thus, the aim is to create an environment conducive to the growth and development of the private sector - specifically small-to-medium scale business. Yulara Village (see Figure 2.1) and Tindal RAAF Base are examples of such projects.

The Federal Government's decision to locate a Squadron of F/A-18 aircraft at Tindal RAAF Base is the first material step in a policy aimed at increasing the presence of the Australian Defence Forces (ADF) in Northern Australia (see Section 2.2.2). Other proposed actions include the relocation of a Regular Army Brigade to Darwin, the establishment of a naval facility in north-western Australia, the establishment of the Jindalee Over-The-Horizon Radar network, as well as the upgrading of the Learmonth and Derby airfields and the establishment of a bare base airfield on the Cape York Peninsula. Although the primary purpose of these Defence projects is toward the defence of the nation, their very existence achieves the secondary developmental aim due to their large manpower employment. Arguments have suggested that the under-populated and under-exploited regions are seen as a threat to national security, inviting potentially aggressive neighbours to utilise resources left idle by their current owners. In this way the government is virtually achieving two goals with the same expenditure (Coulter, 1987:44). The disadvantages previously discussed concerning the large resource exploitation developments may not be so readily apparent with these Defence Force projects or with the Yulara venture. The manpower and wages will remain in the region, local resources and services will be

continually required, and although no tangible product is produced for export, the benefit to the region will not have a foreseeable, and hence debilitating, date at which it will end. The Defence Force bases will also be effective trade stabilisers as their regional input is not affected by the trade demands which fluctuate the value of mining or industrial products (Franklin, 1986:234). The developmental application of these Defence projects can be regarded as a definite Federal Government response to the arguments presented by Northern Australian development protagonists (such as the NADC) who have called for a more effective and regionally beneficial means of Commonwealth assistance than the funding of large resource exploitation projects. The resource exploitation projects will undoubtedly continue, due of their immense benefit to the national balance of payments, but it must be remembered that measures such as these Defence projects are mostly proposed measures (except in the cases of the RAAF Base Tindal and the Derby and Learmonth airfields), and are subject to political and financial forces which may result in their possible postponement or abandonment.

The arguments toward northern development are particularly pertinent to the Northern Territory, which is disadvantaged over the other states in Australia because of the significantly inferior powers of their limited self-government, under the Northern Territory Self Government Act (Hatton, 1986a:2,3)(see Section 2.2.1). The Chief Minister for the Northern Territory, Steve Hatton, claims that the progress which the Territorians have shown can be achieved with limited self-government, could be amplified with the granting of Statehood (Hatton, 1986b:12). This would give the Northern Territory Government legislative control of all land in the Territory, as well as providing financial rights for the lending of funds from the Commonwealth, and allowing free trade with the other States (Hatton, 1986a:9). It would also reduce Commonwealth control restrictions over other borrowing (Whalan, 1980:213), and would allow the Northern Territory Government to make its own economic decisions - on mining, national parks, on land rights...all those subjects which are taken for granted by the southern States as a consequence of their sovereignty (Hatton, 1986a:4,9). Thus, the goals of economic development and social equity with the southern States could be more easily achieved, and the pressure on the Federal Government for assistance be lessened (Coulter, 1987:39-43).

Regional economic development is expected to take the form of small-to-medium scale private economic activity through the increased demand for services. The dominant view of successive Commonwealth Governments has been

that small business is best assisted by providing a strong, stable, and growing economy in which the private sector can flourish (Pickup, 1986:32). It has become apparent to the policy-makers in Northern Australia that they will have to pay considerable attention to the promotion of small to medium scale economic activity initiated and controlled by northerners themselves. Limitations to the development of 'small business' in Northern Australia include the limited local markets of demand, high freight costs, restricted access to managerial and financial expertise, as well as access to finance itself.

In Katherine, the limited market aspect appears to have been temporarily alleviated by the establishment of the Tindal RAAF Base, yet in the retail sector at least, managerial and financial expertise seems to be severely lacking, as is the availability of funds for the exploitation of business opportunities. External catalysts such as the Tindal RAAF Base, can at best only create a climate conducive to development and success, but they cannot themselves realise it. That is the responsibility of the individual. Federal Government assistance schemes for small business aimed, at improving management and financial skills, and encouraging diversification, have been established. The Commonwealth and Territory Governments differ in opinion with the Northern Development protagonists, who believe that federal reassessment of tax rates and sales tax on freight costs, most easily brought about for the Northern Territory by granting Statehood, would be of greater benefit toward developing the North than would the above mentioned assistance schemes, which are not necessarily effective, or always able to be employed.

In summary, this section has shown that the key to the Development of Northern Australia, in an economic and social sense, is by a delicate balance between two government assisted actions:

- a. the continued exploitation of natural resources instigated by the Federal Government and effected by Australian or limited foreign investment; and
- b. the stimulation of local economies by the implementation of manpower intensive federal projects, such as the Defence Force projects described.

In the case of the Northern Territory, development is also dependent on the reassessment of the position of the Northern Territory in its quest for statehood in the near future. The remainder of this chapter will go on to summarise the findings of this study within the context of the development of Northern Australia.

6.3 Perceptions of Business Opportunity in the Katherine Retail Sector

The Operational Phase of the Tindal Development, in the space of a few months, will increase the present Katherine permanent population, with service personnel and their families, by approximately 33 percent. When compared to the establishment of a Regular Army Brigade in Townsville (Franklin, 1986:234-250), where the population increase by service personnel was only 8.6 percent, the impact on the social and business communities in Katherine promises to be somewhat more dramatic. This study has concentrated on the impact that the Base has had and will have on the business community in Katherine, and specifically examined the perceptions of the decision makers in the retail sector.

It was found that nearly three quarters of the retail establishments in Katherine felt that the tourist season caused an increase in their yearly turnover. Because of the great volume of tourists through Katherine (over 110,000 per season - see Section 2.3.3), the 700 RAAF personnel and their families (totalling approximately 2000 persons) are not likely to significantly add to the increased turnover due to the tourist season in these establishments. They will, however, have a great impact on the trading volume during the tourist off-season, in both the retail and services sectors, and will also have an immense impact on those establishments for whom the tourist influence is not that strong.

The central aim of this study, to identify perceptions of business opportunity within the owners and/or managers of the Katherine retail sector, was achieved, with 78 percent of the 67 respondents indicating that they felt that a business opportunity (for their establishment) had presented itself as a result of the Construction and/or Operational Phases of the Tindal RAAF Base Development (see Sections 5.3.2 and 5.3.3). More respondents identified a business opportunity arising from the Operational Phase than the Construction Phase, which can be mainly attributable to the future context of the perception as well as an optimistic attitude that exists toward that Phase. These perceptions of a business opportunity were brought about despite an apparent lack of information and awareness on aspects of the Development Project. It appears that these perceptions were based on a general awareness of the project in conjunction with public-relation statements telling of opportunities to be taken up in the business community, rather than through personal logical assessments by the decision-makers to the same conclusion (Harrison, 1975:24).

Actions that the respondents selected to exploit their perceived business opportunity can be regarded as 'soft' measures involving little capital outlay, or any great element of risk in their success (see Sections

5.3.2 and 5.3.3). It should be kept in mind, however, that some proportion of these perceptions would have existed prior to the decision to establish the Tindal RAAF Base. The selection of these actions can be attributable to two likely aspects. First, finance in the township is scarce, experienced and long-term labour is difficult to secure, and 'red tape' in obtaining council approval for extension and redevelopment are idiosyncrasies of the township that each contribute toward the respondent's selection of these softer, and more easily achievable options. The second aspect regards the uncertainty associated with the demand for goods in the region. Despite the promising business atmosphere generated by both the unusually high growth rate for the township (see Section 2.3.2), a great deal of uncertainty was generated by a lack of awareness and information on the Operational Phase of the Tindal Development, especially what demands the RAAF personnel would be having on the Katherine retail sector. In addition, and more immediately, the establishment of the Woolworths store appears to have temporarily quashed any confidence and motivation the respondents have in exploiting the business opportunities they have perceived. Moss (1981) defined uncertainty as a..."lack of confidence in one's own judgement of the likely consequences of commitments undertaken in the present" (Moss, 1981:31). This was strongly reflected in both the generally low chances for success they associated with these actions, and the respondents desire to have more time before committing themselves toward exploiting the business opportunity they had perceived. Competition by the Woolworths store in terms of location was easily identified by the respondents, who generally perceived that the centre of shopping interest would be shifted from central Katherine Terrace toward the southern end of Katherine Terrace. This caused little concern amongst the respondents, and generated little counter action, mainly because the small physical extent of the spatial distribution of the retail establishments in Katherine does not offer any great advantages (see Section 5.4.2). Conversely, the competition on commodities offered by the Woolworths store generated a more complex perception. This can be directly attributable to the respondents awareness of the range of stock that the Woolworths store would be offering. At the time of survey, most of the respondents were still under the impression that the Woolworths store in Katherine would be offering a direct source of competition to the Super K-Mart in Darwin. This impression was due, again, mainly to the public-relations statements justifying the stores establishment on the basis of a reduction in the leakage of spending dollars to Darwin (see Section 5.4.1). Yet, because of low awareness of what stock the Woolworths store would be handling, most respondents incorrectly assumed that the store would carry approximately the

same range of goods as the Super K-Mart (Field Notebook 1). Therefore, despite the respondents public-relations induced perception that that the Woolworths store will be beneficial to the Katherine retail sector, by its retention of Katherine spending dollars (and indeed it will have for those establishments in ASIC GCC's who are assured that the Woolworths store will not offer any competition on commodities they offer - such as motor vehicles, hairdressers and some specialty shops), the establishment of the Woolworths store appears to have cancelled out the respondents motivations toward exploiting perceived business opportunities. This has been brought about because some respondents feel that the Woolworths store will cause too much competition to their establishment, creating a major element of uncertainty within the retail sector. This phenomenon of the respondents' perceptions being so dramatically affected by secondary sources of information is mainly attributable to the small town nature of Katherine, where 'disinformation' and rumour are abundant. The lack of substantiation by respondents seeking accurate information first hand (Harrison, 1975:30) illustrates either misguided faith in the accuracy of the local press and other sources of information, or a lack of motivation to seek confirmation. This uncertainty and lack of motivation to substantiate information is also evident with the level of demand the RAAF personnel and their families will make on the retail sector. This element of uncertainty manifested itself in several areas of the survey questionnaire, such as in the indication of a lack of motivation or desire to exploit the business opportunities (see Section 5.3.3), a degree of No Responses, low scores in the awareness questions (see Section 5.3.1), and what has been described throughout Chapter Five as a casual business attitude. Partial explanation of this casual business attitude can be attributable to the degree of uncertainty generated in the retail sector by the establishment of the Woolworths store, and with the demands of the service population, but I feel that it is linked more with the Northern Australian casual attitude to life overall (ie. in comparison to southern Australian societies). The respondents apparent complacency is best explained by the satisficing criterion (Walmsley and Lewis, 1984:56,57) described in Chapter One, where the business man no longer strives for maximum profits alone, but strives for security, power, prestige and personal satisfaction. This criterion can be identified within the respondents, and is another reason business opportunities in the Katherine retail sector are not being fervently taken up; thus reinforcing the views of Katona (1977:193) and VanRaaJ (1980:13) in their studies.

When first hand information regarding Woolworths' opening range of stock was obtained, it became obvious that the Woolworths store would in no

way be able to offer any immediate direct competition to the Super K-Mart in Darwin. The management had future plans for the expansion of the store to Big-W status, but even at this stage, competition with the Super K-Mart will not be substantial. Once the Woolworths store opened for trading, the local retailers would realise that their perceptions of the Woolworths store's potential were innaccurate. This will result in respondents from certain GCC's feeling less threatened by the competition the store will pose, but it will probably also dash the hopes of spending dollars being retained in Katherine. This aspect provides an interesting opportunity for further research. The gradual process of upgrading the Woolworths store to Big-W standard will maintain the level of uncertainty surrounding the stores overall effect on Katherine. This will continue to cause a certain degree of uncertainty among the respondents about decisions to exploit any perceived business opportunity. Prior to the Woolworths store opening, the competition between establishments was clearly definable, but this will no longer be the case for a great proportion of the retail establishments. It was not possible to ascertain what demands the RAAF personnel and their families would be placing on the Katherine retail sector.

Some of the uncertainty displayed by the respondents can also be attributable to the Northern Territory's quest for Statehood (see Sections 5.2.3.1 and 6.2). If Statehood were to be granted, the hopes of reassessment of tax concessions, of the state obtaining finance through the Commonwealth, and the possibility of reduction in tariffs, may come to fruition. The most efficient means of running a business requires that the decision-makers anticipate the magnitude, timing and duration of changes, such as the attainment of statehood, and synchronise their actions with appropriate transition phases. However, it is often only possible to identify these parameters when they are actually occurring; hence much economic management takes the form of responses rather than pre-emptive action (Sant, 1982:78). Therefore, any business opportunity that may be exploited in Katherine now could be 'jumping the gun' and result in unnecessary expenditure that could be avoided by a period of waiting. The risk involved in exploiting a business opportunity can be theoretically reduced by reserving the final decision until the last moment or even after the event has taken place. In this instance the respondents appear to be taking into consideration the commencement of the Operational Phase, the opening and upgrading of the Woolworths store, as well as the attainment of Statehood. However, any wise owner and/or manager should realise that with time any one of these considerations in their decision making process may disappear, yet in the same time any number of other considerations may also become apparent. Thus,

the decision to exploit a business opportunity will in many instances be put off indefinitely, and it is this reasoning that the respondents generally do not appear to have grasped (Proshansky et al., 1970:558). The respondents can be considered as "prisoners of the perspective of their time" (Woolmington, 1972:182). Thus, influences on the degree of uncertainty among the respondents include the level of demand the RAAF personnel and their families will be placing on the retail sector, the imminent granting of Statehood to the Northern Territory, as well as the apparent complacency generated by the satisficing criterion.

Evidently, the establishment of the Woolworths store has severely affected the motivations to exploit the business opportunities perceived primarily as a result of the Tindal RAAF Base Development. The result is the delay or failing of the Katherine retail sector to take up the business opportunities presented to them, to the detriment of regional economic development. This result in the retail sector is an isolated incident - indeed it still appears that the service sector and the social infrastructure of Katherine will continue to expand under the influence of the Base. The secondary considerations of regional economic development in the establishment of the Base appears to have been undermined in this instance, because the profits realised by the Woolworths store will be consolidated under its national organisation. Thus, the initiative of developing the regional economy through the encouraged expansion of regional small business has been temporarily usurped - in the retail sector at least. The responsibility for allowing the Woolworths store to be established in Katherine was not able to be isolated, but the mayor is reputed to have a very strong grip on all but a few of the decisions passing through the council chambers (see Section 2.5.2) (Field Notebook 1). The amount of consideration given to the decision cannot therefore be ascertained, yet this study has shown that a more personalised investigation into the costs and benefits of the Woolworths store and complex, coupled with a more responsible utilisation of the local media, could have produced a more beneficial solution to the development of the township's economy.

It was noted earlier that the Katherine township and region had no significant manufacturing industry (see Section 2.4). Developers acknowledge that this gap in the structure of Katherine's regional economy is the likely key to achieving development at the desired rate. The lack of manufacturing industry is a result of the isolation of the location, the costs involved in establishment and transportation, access to materials and viable markets, as well as the availability of reliable manpower. The establishment of manufacturing industry of some description in the Katherine township would

provide the necessary impetus to the service oriented economy to ensure rapid economic development. An enterprising respondent had aspirations of involving the wives of the RAAF personnel in some form of manufacturing venture, yet this only allievates one of the major drawbacks of the region. The manufacturing aspect could, perhaps, comprise part of the government's future assistance to the region - if necessary.

6.4 Assessment of the 'Official' Perceptions

The Kinhall-Stearns population projections (see Section 3.3.1) seem to be reasonably accurate, with the 1986 census population figure of 5691 falling midway between the central and upper population projections. This can be explained by the increase in the natural population growth in the Territory overall since the Draft EIS was completed. As the prediction of population figures is closely linked to the provision of public services in the community, then it is important that these figures are not underestimated.

Socially, the EIS's revelations regarding the adjustments to the existing social network and attitudes appear at this stage to be being fulfilled. There is, however, an apparent lack of public awareness of the Operational Phase of the Tindal RAAF Base (Field Notebook 1), which will tend to heighten the shock of impact by the RAAF personnel on the Katherine community. In Townsville, despite public relations 'softening-up' of the local population before the influx, it still took many years before the Army was accepted and assimilated into the community (Franklin, 1986:240-250). The large size of the Tindal Base compared to the Katherine population may witness an even more difficult transition period - especially when the small town nature of Katherine is added to the considerations. The inevitable friction and necessary adjustments between the civilian and service populations in Katherine could be lessened by information being passed onto the community, and conversely information on Katherine onto the RAAF personnel. Yet, the last serious effort to achieve this was in November 1983 - in the form of a six page newspaper supplement, when the project had been given Federal approval to proceed.

The Kinhall-Stearns Draft EIS assessment of the economic impact of the Tindal RAAF Base can now be briefly assessed. The proportion of flow-on economic effects from the Construction Phase to Katherine (64 percent) appear to have been exaggerated (Field Notebook 1). Similarly, the proportion of flow-on economic effects for the Operational Phase to Katherine (75 percent) and Darwin (25 percent) also appears to be somewhat overestimated. Implementation of the Tindal Development since the time the

EIS was completed in 1983/84 has shown that civilian tenders regarding the operation of the Base can only be fulfilled by businesses outside the Katherine region - and in several instances only by national companies. Examples include the provision of aviation fuel and the provision of foodstuffs, rumoured to be being tendered to the Woolworths company. The 'official' perception of immense benefit to the local retail economy seems to have been tarnished with reality over time - especially in the retail sector with respect to the unforeseen Woolworths store. Although not covered in the scope of this study, it superficially appears that the services sector is, as hoped, experiencing strong development due to the Tindal Base catalyst. In the context of topics regarded by this study, it is apparent that the 1983/84 Kinhall-Stearns Draft EIS is not so much incorrect as being shallow and out of date in its investigation. This reinforces the conclusions drawn in Chapter Three, where it evidently became necessary to conduct impact reassessments immediately before each phase of the Development - especially with such a large and long-term project such as the Tindal RAAF Base Development.

In addition, the study also ascertained that the transient nature of the Katherine population necessitated the need for consultation with the community to be regularly updated, and more importantly for information regarding the development to be continually presented to the public. This aspect has only recently been appreciated by the Joint Consultative Committee which is responsible for generating the 'Tindal Update' articles in the two local newspapers, as well as providing public relations presentations on the site of the Development (see Section 5.3.1). The most worrying awareness problem lies with the state and federal public servants who regularly rotate their positions interstate (Field Notebook 1). However, in terms of information flow, there can be varying perspectives on how well acquainted the public are with development plans, their environmental impact and future management. Opinion varies on the type, amount and form of information required to be transmitted to the public (Day and Day, 1984:142). In many cases, information given about the Tindal Development has not been sufficiently comprehensive or useful for decision-makers in the community to apply it. Conversely, there is little information on the Tindal Development that is not available by some means - which justifiably places the responsibility back onto the decision-makers involved.

6.5 Conclusion

This chapter has outlined arguments for the development of Northern Australia, and applied the findings of this study to that broader context. Idiosyncrasies within the Katherine township have been shown to be generating a high level of uncertainty in the retail community. Factors responsible for generating this level of uncertainty include the lack of awareness on what amount of competition the Woolworths store will offer on commodities, what level of demand the service population will be making on the retail sector, and whether the Northern Territory will be granted Statehood in the near future. Subsequently, a strong display of the satisficing criterion within the retail community has been generated - which superficially appears as a casual attitude to business by the respondents. The immediate development of the Katherine retail sector has been undermined by these uncertainty generating idiosyncrasies. The desired stimulus of the Tindal RAAF Base toward developing the Katherine regional economy has been tarnished by this phenomenon in the retail sector. Fundamentally, the development of the Katherine regional economy seems dependent on the manufacturing industry - which has many major factors restricting its possible implementation in Katherine.

CHAPTER SEVEN

CONCLUSION

7.1 Introduction

The previous chapter summarised the perceptions of business opportunity in the Katherine retail sector, as well as discussed and evaluated the findings in the broader context of Northern Australian development. In this chapter, the aim and objectives of the study will be restated, and their achievement assessed. The limitations of the study will be outlined, along with some suggestions for further research. Finally, the relevance of the study will be assessed, and conclusions on the thesis will be drawn.

7.2 Aims of the Study: An Assessment

The central aim of this dissertation was to examine the perceptions of business opportunity that may have evolved within the Katherine retail sector as a result of the Tindal RAAF Base Development. Within the limitations which were experienced, as discussed in Section 7.3, this aim was achieved. The topic of behavioural economic geography was shown to be a complex subject in itself - encompassing the academic disciplines of psychology, economics and theory on the decision-making process.

The first objective, to ascertain the nature of the Katherine retail sector was also effectively achieved, and much information that could not be determined by other means was gained. This initial investigation enabled the uniqueness of the township to be appreciated, and proved to be an important consideration toward the central aim in later discussions.

Two other objectives - to examine attitudes toward the Woolworths store and perceptions of the scale and effectiveness of the federal consultation with the Katherine community - were also successfully achieved. These results suggested that, for most respondents, uncertainties within the retail community were undermining their motivations to exploit perceived business opportunities.

The research methodology, primarily centred on the survey questionnaire and supplemented with informal discussions and secondary data sources, successfully revealed the relevant perceptions and provided much additional information. Hence, the effectiveness of survey techniques in behavioural economic geography as a research design has been reinforced.

7.3 Limitations of the Study

Although the aim and objectives of the study were seen to be achieved, the major limitation of the dissertation is that only selected attitudes were ascertained by the survey questionnaire - although follow up investigation by informal interviewing generally validated any anomalies in responses. As was discussed in Chapter One, and again in the introduction to Chapter Five, human perceptions, motivation and behaviour are so complex that a subjective selection of the significant factors in real human decisions must be made. Thus, all behaviour was not recorded and the findings of this study are not complete as such. This limitation is particularly important because the study was conducted in Katherine, a small town with many behavioural idiosyncrasies that were worthy of a more detailed investigation. Unfortunately, these could only be briefly referred to within this study.

The implementation of the 'drop and collect' survey questionnaire technique greatly reduced any limitations due to non-response by achieving responses from 90 percent of the survey population. Still, subjectivity or bias in the interpretation of collected data adds another source of possible error in the study, although analytical biases were minimised by concentrating on the results of the survey questionnaire and supplementary findings with secondary data sources, or with field notebook material.

Stratification of the perceptions attained by categorisation into ASIC GCC's was to some extent hampered by the limited size of the sample population (63 establishments), and also by stronger representation in particular categories over others. When analysis by GCC's did not produce any relevant trends, however, other stratifications were implemented to produce more meaningful results.

The continuation of the Tindal RAAF Base Development after June 1987 provides a temporal limitation to this study, because the perceptions of opportunity ascertained and explained in this dissertation will change. The temporal aspect generates a scope of opportunities for further research - and these will be discussed in Section 7.5

7.4 Relevance of this Study

This study has relevance in both applied and academic contexts. First, in an applied sense, this study in its entirety has elicited information that is of importance to several organisations. The first of these organisations are the Confederation of Industry and Commerce Pty. Ltd. and the Katherine Chamber of Commerce. These are two independant advisory bodies who consolidate the interests of the business community, represent

them when necessary, and who also offer an advisory service with regard to employment and arbitration matters. The description of the Katherine retail establishments, the characteristics of their owners and/or managers, as well as their perceptions of business opportunity should be of interest to these two organisations, who are both lacking in information on these aspects (Field Notebook 1). The information would enable these organisations to better appreciate the nature, aspirations and trepidations of their current and prospective members. More importantly, it would enable these organisations to isolate concerns within the retail community that may be alleviated by their organisations. A clear example of this application would be to ease the shock impact and uncertainty generated within the retail community by the Woolworths store.

The information about the spatial and locational preferences of the respondents, as well as their business aspirations, have particular relevance to the Town Planning Section of the Katherine Town Council in their developmental considerations. The inventory of the retail establishments would also provide a useful source of information to them and the council in general.

The findings of this study will also be of applied relevance to the Joint Consultative Committee (JCC) (see Section 3.2), and subsequently the federal authorities involved in the Tindal Development Project. The problems in consulting and informing the community about the impact of the Development are particularly pertinent now prior to commencement of the Operational Phase. The smoothness of transition and integration of the two populations is very much dependent on the education of each population on the others lifestyle, aspirations and nature. The importance of efforts to achieve this education is heightened by the relative size of the service population associated with the Tindal Base, and the responsibility mainly lies with the JCC and the Tindal RAAF Base Advance Party. The study has clearly illustrated the need for more consultation with the community onto which a particular development project is going to have an impact. The quality of the developers' decisions can be improved by the provision of better information on how people perceive and react to their environment (Saarinen, 1976:9). In the interests of good planning and environmental management, assessment of these personal considerations could generate savings in monetary and social costs. Also illustrated by the study was the need for regular reassessment of these considerations - especially within a population with a high degree of transience. It is a consideration that has been for too long neglected and now warrants investigation - especially when

such manpower intensive developments are concerned, such as the Tindal RAAF Base.

Secondly, in an academic sense, this study has relevance in that it has broken new ground in the field of behavioural geography. The future context of the perceptions gained is an approach little before investigated. This dissertation has shown that such perceptions and aspirations can be successfully ascertained, and a broad understanding of their derivation achieved. 'Understanding' the responses achieved in this study involved an interesting interaction of the past, present and future perceptions, attitudes and motivations of the respondents that could not have been appreciated without this future context. In turn, this has reinforced the application of the survey questionnaire as a research methodology in behavioural studies.

The inventory of the Katherine retail sector provides a good source of information for some historical geographical studies, while the spatial distribution of the retail establishments has a direct application to economic geography (see Chapter One for definition).

Most importantly, as a study in behavioural economic geography this thesis has proved to be a valuable case study. It has been shown that the individuality of the research site (Katherine) has a great influence on the economic behaviour of the decision-makers in the Katherine retail sector. In doing so, the study has supported the views of Katona (1977:12,15) and deVaus (1986:7) who argued for case studies of observed economic behaviour to be produced before models or statements of behaviour could be derived. This study has shown that Katherine cannot be considered in anywhere near the same context of economic behaviour as any other urban centre. The uniqueness of the township (see Section 2.1.1) is reflected by the uniqueness of the economic behaviour of its retail sector. This study highlights the criticism of traditional micro-economic models based on the assumption of economic man, yet also illustrates the difficulty in deriving statements of generality in a behavioural economic context.

7.5 Suggestions for Further Research

This study has provided a detailed insight into the nature of the establishments and decision-makers in the Katherine retail sector, the decision-makers' attitudes and aspirations, as well as determining how their perceptions are influenced by elements of their environment - such as the Tindal RAAF Base and the Woolworths store. Even within the information discerned in this study, there is scope for more detailed research. The individual motives behind the respondents' attitudes and aspirations could

be studied in greater depth. This would involve more psychological analysis of motivations, possibly using interactive interviewing to extrapolate responses already gained from a survey questionnaire. The results could be directly related to decision-making models within the business firm - a topic which has already been given considerable attention. There is also scope for study investigating the decision-making process within the Katherine Town Council. However, this may be a controversial topic beyond the capabilities of a research project. The study would probably centre on those currently in office, and is not likely to discover much more than what is already conjecture amongst the townsfolk of Katherine. Another possibility for investigation has to do with the flow of information associated with the Tindal Development; how it is generated, disseminated, received and utilized, and to what extent it is distorted by the media or other forms of transmission.

The continuation of the Tindal RAAF Base Development provides a wealth of business opportunities for further temporal comparative studies, especially with perceptions of opportunity. A major influence on the respondents motivations to exploit business opportunities, discussed in the last chapter, was the awareness the respondents had on the stock that was being handled by the Woolworths store. The opening of the store one month after the time of survey, would have had a profound effect on the attitudes and motivations of the owners and/or managers in the Katherine retail sector. This provides great opportunities to ascertain what influence this lack of awareness (or distorted perception) had on the respondents' motivations to exploit the business opportunities generated by the Tindal RAAF Base. A temporal comparison of this nature was unfortunately beyond the timeframe available for this study once the influence of the Woolworths store was identified through the questionnaire.

The broader Northern Australian development context of this study also comprises a substantial subject for investigation within itself. The interaction and conflict between the State and Federal authorities would be a topic for political analysis; yet more specifically, the influence of Holmes' 'frontier philosophy' (1981:101) on political decisions would be an interesting behavioural study. This could be approached in either a historical or a perceptual context.

7.6 Conclusion

On the basis of the evidence presented in this study the following conclusions may be made:

1. The Katherine retail community is unique by virtue of its isolated location, limited market, lack of diversification, and the difficulties it experiences in implementing plans for expansion despite the rapid growth of the township.
2. The Construction Phase of the Tindal RAAF Base Development is currently generating increased trade for the retail and services sectors. This has motivated some owners and/or managers to exploit a perceived business opportunity, but must be considered in association with a degree of background motivation that existed prior to the announcement that the Development would proceed.
3. The Operational Phase of the Tindal RAAF Base Development generated an even greater degree of motivation to exploit business opportunities within the Katherine retail sector. Some degree of this optimism, however, can be attributable to the future context of these perceptions, and it is likely that in reality a lot of these plans will not eventuate.
4. Motives to exploit the perceived business opportunity associated with the Operational Phase were undermined by a large element of uncertainty within the retail community. This uncertainty was mainly attributable to the establishment of the Woolworths store and complex. Other lesser causes included the level of demand the service population will be making on the retail sector, the Northern Territory's attainment of Statehood, a lack of awareness and information on all relevant matters, a lack of motivation to seek information, and a strong display of the satisficing criterion within the respondents.
5. The expected development of the Katherine regional economy as a result of the Tindal Development has been tarnished within the retail sector due to idiosyncrasies in the township.
6. The findings of this study will change dramatically, due to short and long term influences on perceptions, attitudes and motivations. For example, the opening of the Woolworths store one month after the survey was conducted, will cause respondents to become aware of what stock the store will be handling, thus greatly reducing one of the elements of uncertainty within the retail community.
7. The subjective selection of the Woolworths store and the amount of information the Federal Authorities have passed onto the Katherine retail community, appear to have been issues that have enabled a good understanding

of the responses gained toward the perceptions of business opportunity in the Katherine retail sector. There are, however, an infinite number of elements which were not considered to achieve a 'total' understanding. This aspect is true for all perception studies.

8. The development of the Tindal RAAF Base appears to be successfully promoting the development of Katherine's social infrastructure. The Federal Government's thrust toward developing the regional economies in Northern Australia by means of man-power intensive projects appears to be well founded in the Tindal instance, despite the lack of desired stimulus on the retail sector.

9. It was shown that consultation with the community on which the development project is going to have an impact, is an important consideration that can no longer afford to be ignored in future environmental impact studies. It was also recognised that such consultation should also be regularly updated throughout the course of the development - especially in consideration of a transient population such as Katherine's.

10. This study has contributed to behavioural economic geography by undertaking a unique Australian case study specifically oriented toward perceptions of business opportunity, and the way in which perceptions are affected by external influences.

11. The continuation of the Development Project - especially into the Operational Phase - provides a wealth of opportunities to study what a large impact the Tindal RAAF Base will have on the township and community of Katherine.

12. The objective criticisms derived through this dissertation illustrate the important role that geographers can play in improving awareness and bettering the controlled development of the physical and social environments.

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APPENDIX I

THE LETTER OF INTRODUCTION AND THE QUESTIONNAIRE



University College
The University of New South Wales
Australian Defence Force Academy

Department of Geography
and Oceanography

Dear Sir/Madam

You have been chosen to take part in a survey examining the Katherine retail community and it's attitudes toward the development of the Tindal RAAF Base.

We do hope you will spare a little of your time to answer some questions to reflect your experiences and opinions. You have been chosen on a scientific basis, and it is important that everyone who is chosen does take part so that we achieve a true cross-section of viewpoints.

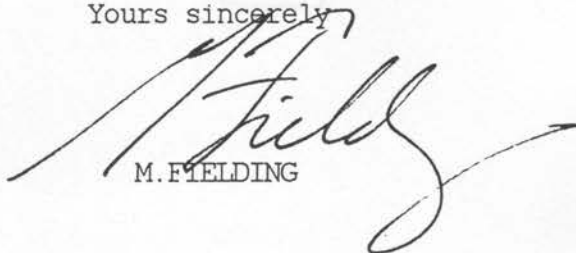
Please do not pass this form onto anyone else - it is your answers we need.

The information you give will be strictly confidential , and only statistical totals will be used in the study.

Mr. Les Reed , The Head of the Katherine Chamber of Commerce , has reviewed the aims of this survey and wishes to encourage each of the persons to be interviewed to faithfully complete the questionnaire in the interests of the Katherine business community.

Thank you very much for your co-operation. If you have any questions about the study, please ask me when I come to collect your completed questionnaire on the date at the bottom of this sheet. You will note that this should allow you about seven days to complete the questionnaire.

Yours sincerely



M. FIELDING

Questionnaire Number.....

To be collected on.....

SECTION A. THIS ESTABLISHMENT.

A.1. How many years has this present retail establishment been in operation?
(please tick the appropriate box)

☐ 1 year
 ☐ 2 years
 ☐ 3 years
 ☐ 4 years
 ☐ 5 years
 ☐ 5-10 years
 ☐ 10-20 years
 ☐ 20+years

A.2. What type of establishment is this? (please tick the appropriate box)

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A.3. How many staff does this establishment employ? (excluding yourself)
(please place figures in the boxes provided)

full-time staff ☐ part-time staff ☐

A.4.a. Which of these product classifications does this retail establishment sell or belong to?

(please tick the appropriate box - boxes if applicable - in column a. only)

	a.	b.	c.	d.
Food and Dairy Products.....	☐			
Eating and Drinking place....	☐			
General Merchandise.....	☐			
Motor Vehicles and access- ories.....	☐			
Petrol Service Station.....	☐			
Clothes and accessories.....	☐			
Timber and Building materials.....	☐			
Chemist Store.....	☐			
Furniture and House furnishings.....	☐			
Hardware and farm equipment...	☐			
Household appliances ,TV, radio , stereo.....	☐			
Shoe store.....	☐			
Jewelry store.....	☐			
Retail Florists.....	☐			
Dry Cleaners/cleaners.....	☐			
Bottle Shop.....	☐			
Barber/Hairdresser.....	☐			
Specialty.....	☐			

↙ please specify.....

A.4.b. For those products you have indicated on the previous page to be selling in your establishment , what percentage does each product go towards making up your total stock. For example , Food and Dairy products 75% and Clothes and accessories 25%.
(please write in the spaces provided in column b.- to the right of commodities listed on the previous page - your percentage breakdown of the total stock.)

A.4.c. Please indicate the major source of supply for each of the products on the previous page that you have indicated.
For example Adelaide , Brisbane , Darwin , Katherine.
(please write in the spaces provided in column c. - to the right of your responses for the questions above.)

A.4.d. Please also indicate the the freight method by which you have these products brought to Katherine from the sources you have indicated in A.4.c. . For example road , air freight. If the supply source is Katherine then leave the space blank.
(please write in the spaces provided in column d. - to the right of your responses for the questions above.)

A.5.a. What was your turnover for the last financial year?
(please tick the appropriate box)

\$0 - \$1 000	☐	☐	\$1 000 - \$10 000
\$10 000 - \$50 000	☐	☐	\$50 000 - \$100 000
\$100 000 - \$150 000	☐	☐	\$150 000 - \$200 000
\$200 000 - \$250 000	☐	☐	\$250 000 - \$300 000
\$300 000 - \$350 000	☐	☐	\$350 000 - \$400 000
\$400 000 - \$450 000	☐	☐	\$450 000 +

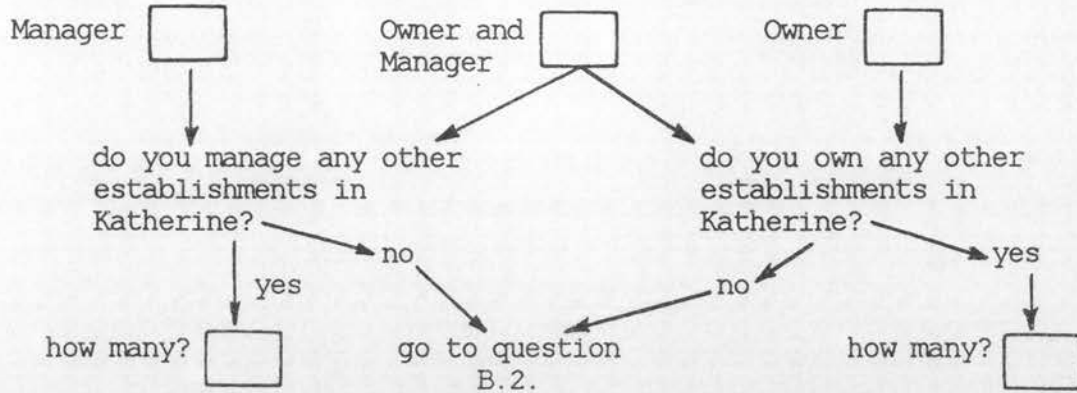
A.5.b. What rough percentage of this figure was due to the tourist season?
For example 20% , 70%. (please place figure in the box)...

A.6. During the height of the tourist season what number of customers do you estimate this establishment would serve in an average day?
(please place figure in the box).....

A.7. During the off-tourist season ie. during normal trading with the Katherine community , what number of customers do you estimate this establishment would serve in an average day?
(please place figure in the box).....

SECTION B.

B.1. Are you the owner or the manager of this particular retail establishment? (please tick the appropriate box)



B.2. What is your reason for maintaining this particular establishment? (please tick the appropriate box(es))

- ☐ inherited the business from parents
- ☐ business venture / monetary gain
- ☐ a vocation / job

B.3. How many years have you been living in Katherine?

(please place figure in the box).....

B.4. How many years have you been living in the Northern Territory? - including the time you have been living in Katherine.

(please place figure in the box).....

B.5. How many years have you spent in your present job?

(please place figure in the box).....

B.6. How many years have you been involved in the retail industry?

(please place figure in the box).....

B.7. What age group are you in? (please circle the appropriate group)

18-24

25-34

35-44

45-54

55-64

65+

B.8. Sex (please circle the appropriate)

Male

Female

B.9. Education level? (please tick the appropriate box)

- ☐ primary
- ☐ intermediate or school certificate
- ☐ leaving or HSC
- ☐ technical college
- ☐ university
- ☐ university - post graduate

C.1. Out of all the possible retail locations existing in Katherine and East Katherine how would you rate the site of this establishment in comparison to all the other sites on a scale of 1 to 5?
(please mark the scale with a cross (X))

C.2. Which site in Katherine or East Katherine do you feel would be the best possible retail site?
(please give the street name and end or intersection , and if applicable the name of the establishment already occupying this location)

Yes ☐

↓

go to question
C.4.

No ☐ 

which other retail establishments
in Katherine offer competition to the
commodities you sell?
(please name them)

.....

.....

.....

Jan Feb Mar Apr May Jun Jul Aug Sep Oct

continued... | | | |
 | | | |
 Oct Nov Dec Jan

C.5. How do you feel the tourist season affects your business?
(please tick the appropriate box)

- ☐ no effect
- ☐ very little effect
- ☐ some effect
- ☐ of great effect
- ☐ essential to the survival of this business

PLEASE TAKE A FIVE MINUTE BREAK , AND THEN CONTINUE WITH
THE REMAINDER OF THE QUESTIONNAIRE.

SECTION D.

D.1.a. How many married quarters do you believe are going to be eventually built for married RAAF personnel in Katherine East?
(please tick the appropriate box)

200 ☐

179 ☐

230 ☐

Other ☐
(please give).....

379 ☐

Don't Know ☐

D.1.b. How or where have you come across this figure? (please explain)

.....
.....
.....

D.2. Which of these facilities are you aware of being built actually on the Base at Tindal? (please tick the appropriate box(es))

Snack Bar..... ☐

Child Care facility..... ☐

Hairdressers..... ☐

Postal facility..... ☐

Bakery/Cake store..... ☐

Bottle shop..... ☐

Book store..... ☐

Family store/food store..... ☐

Clothes store..... ☐

Fuel outlet for private vehicles... ☐

Banking facility..... ☐

Dry-cleaning collection facility... ☐

SECTION E.

E.1. Please rank the five most important concerns/problems that you feel are affecting Katherine at the moment. Here are some headings from which to choose...
(please place your answers in descending order from the most important at number one.)

- Crime
- Inflation
- Federal Politics
- Poverty
- Development
- Racism
- Disease
- Drug Abuse
- Isolation
- Unemployment
- Pollution
- Exploitation of the Environment
- Fuel Shortages
- Agriculture
- State Politics
- Tourism
- Drought
- Tindal RAAF Base
- Aboriginal Welfare
- Others (please specify)

Rank	Concern/Problem
1.	
2.	
3.	
4.	
5.	

(please place your answers in descending order from the most important at number one.)

Aesthetics

Economic Effects

Strategic Risk to Katherine

Land Use Impact

Soil Erosion

Agricultural Effects

Others(please specify)

NAME _____ COINCIDENT FLOSIEM _____

Concern/Problem

5.

NAME	CONCEPT/PROBLEM
...	...

Concern/Problem

5.

E.3. What overall effect do you feel that the Tindal RAAF Base will have on the retail community in Katherine?
(please mark the scale with a cross (X))

detrimental |----|----|----|----| beneficial

The next 2 questions have to do with the construction phase of the Base.

E.4. How has the construction phase of the Tindal development affected your business?

.....

.....

.....

.....

.....

E.5. Do you feel that the construction phase of the Tindal Base has created an opportunity by which you could expand this business?

no
↓
go to question
E.6.

yes

Which do you feel would be the best way to exploit this opportunity?
(please tick the appropriate box(es))

- ☐ increase staff
- ☐ increase advertising
- ☐ increase prices
- ☐ increase stock range
- ☐ change current premises
- ☐ open additional premises
- ☐ decrease prices

What percentage chance for success do you think this/these action(s) would have? For example 20% , 100%
(place figure in box)....

%

The next 5 questions are to do with the operational phase of the Base.

E.6. When Tindal RAAF Base is fully operational , how do you feel it will affect your business?

.....

.....

.....

.....

.....

E.7. Do you feel that when Tindal is operating fully there will exist an opportunity by which you could expand this business?

no
↓
go to question E.9.

yes → Which do you feel would be the best way to exploit this opportunity?
(please tick the appropriate box(es))

- ☐ increase staff
- ☐ increase advertising
- ☐ increase prices
- ☐ increase stock range
- ☐ change current premises
- ☐ open additional premises
- ☐ decrease prices

What percentage chance for success do you think this/these action(s) would have? For example 20% , 100%
(place figure in box).....

%

E.8.a. Assuming you are actually going to go ahead with this business expansion , how much money would you spend , and when would you like to see the project completed?

.....

.....

.....

E.8.b. For what reasons (if any) would you not go ahead with this project?
(please tick the appropriate box(es))

- ☐ too great a risk
- ☐ not enough capital
- ☐ too much trouble with red tape
- ☐ need more time to finalise decision
- ☐ other reason (please specify)

E.9. When Tindal is fully operational how do you think the variation in your business that normally results from the tourist season will be affected?

(please tick the appropriate box)

- ☐ will lessen the variation in business volume by a large amount
- ☐ will lessen the variation in business volume by a small amount
- ☐ will have no effect at all
- ☐ will increase the variation in business volume by a small amount
- ☐ will increase the variation in business volume by a large amount

E.10. Do you see any business opportunities for any other forms of retail establishment in Katherine?

yes no → Why? (please explain)

.....
.....
.....

Which ones? and Why?

.....
.....
.....
.....
.....

E.11. How do you feel the Woolworths store will affect your business with respect to the following?

(please mark the scale with a cross (X))

a. The location of your establishment:

will cause a lot more
customers to come to
my location

|----|----|----|----|

will cause a lot less
customers to come to
my location

b. The competition for the commodities you sell:

will be a great deal
of competition

|----|----|----|----|

will be of no
competition at all

E.12. What actions are you going to take to counter the influence that the Woolworths store will have on the following?

(please explain or mark the box)

a. The location of your establishment.

.....
.....
.....

☐

no action

b. The competition for commodities.

.....
.....
.....

☐

no action

E.13. What overall benefit do you feel the Woolworths store will have on the retail sector in Katherine?

great benefit |----|----|----|----| no benefit

E.14. Are you happy with the establishment of the Woolworths store in Katherine? (please tick the appropriate box)

Yes ☐

No ☐

Don't Know ☐

Why? (please explain)

.....

.....

.....

E.15. Do you think that the opening of the Woolworths store is the beginning of a trend toward larger retail establishments and the end of the small business in Katherine? (please tick the appropriate box)

Yes ☐

No ☐

Don't Know ☐

Why? (please explain)

.....

.....

.....

SECTION F.

F.1. When does the Katherine Chamber of Commerce usually conduct it's meetings with the public? (please tick the appropriate box)

- ☐ the second Thursday of every month
- ☐ the first Tuesday of every month
- ☐ the first Wednesday of every month
- ☐ Wednesday night every second week
- ☐ whenever the meetings are advertised

F.2.a. Has the Katherine business community received sufficient information on the affect of the Tindal development?
(please tick the appropriate box)

Yes ☐ No ☐ Don't Know ☐

F.2.b Do you feel that this information has been accurate?
(please tick the appropriate box)

No ☐ Don't Know ☐ Yes ☐

F.3. Do you feel that there has been enough consultation with the Katherine community in relation to the following impacts of the Tindal Base?
(please tick the appropriate boxes)

a. The social impact:

Yes ☐ No ☐ Don't Know ☐

b. The business requirements in general:

No ☐ Yes ☐ Don't Know ☐

c. The retail requirements specifically:

Don't Know ☐ Yes ☐ No ☐

F.4. Do you feel that you have enough chances to consult with the Katherine Chamber of Commerce?

Yes ☐ No ☐ Don't Know ☐

THANKYOU VERY MUCH FOR YOUR CO-OPERATION AND TIME.

THANKS VERY MUCH FOR YOUR CO-OPERATION AND TIME.

Please keep hold of your completed questionnaire. I will return during the working hours of the day written on the cover page to collect the questionnaire and answer any questions you may have.

Please use this space for any general comments you may have.

[illegible]

APPENDIX II

AUSTRALIAN STANDARD INDUSTRIAL CLASSIFICATION 1978 EDITION

"This 1978 edition of the Australian Standard Industrial Classification (ASIC) has been prepared by the Australian Bureau of Statistics (ABS) for use in the collection, compilation and publication of its statistics. The ABS encourages other organisations to use this Classification in their own statistical work in order to improve the comparability and usefulness of statistics generally." (ABS, 1978:vii)

"The basic principle underlying ASIC classes is that they should reflect as realistically as possible the way in which activities are actually organised within establishments." (ABS, 1978:3)

"The main purpose of ASIC is to provide a standard framework for classifying establishments and other statistical units in industry in official statistics." (ABS, 1978:24)

The remainder of this appendix summarizes the relevant sections of the 1978 ASIC Classification.

DIVISION F: WHOLESALE AND RETAIL TRADE
SUBDIVISION 48: RETAIL TRADE

Group	Class	Title and Description
481		<u>Department and General Stores</u>
	4814	Department Stores. This class consists of establishments which have a significant proportion of retail sales in commodities primary to at least four of the following six headings and which employ fifty or more persons. (i) Furniture and floor coverings (Classes 4848, 4849) (ii) Fabrics and household textiles (Class 4847) (iii) Clothing (Classes 4843, 4844) (iv) Footwear (Class 4845) (v) Household appliances, musical instruments and phonograph records (Classes 4855, 4856) (vi) China, glassware and domestic hardware (Class 4853)
	4815	General Stores. This class consists of establishments which have a significant proportion of retail sales in commodities primary to at least four of the following headings, and which employ less than fifty persons. (i) Groceries, smallgoods and tobacco products, fruit and vegetables, confectionary, bread, cakes and pastries (Classes 4881, 4883, 4885) (ii) Furniture and floor coverings (Classes 4848, 4849) (iii) Fabrics and household textiles (Class 4847) (iv) Clothing (Classes 4843, 4844) (v) Footwear (Class 4845) (vi) China, glassware and domestic hardware (Class 4853)

DIVISION F: WHOLESALE AND RETAIL TRADE
 SUBDIVISION 48: RETAIL TRADE

Group	Class	Title and Description
484		<u>Clothing, Fabrics and Furniture Stores</u>
	4843	Mens and Boys Wear Stores. This class consists of establishments mainly engaged in retailing mens or boys clothing accessories. This class also includes establishments mainly engaged in mens custom tailoring or in repairing or altering mens or boys clothing
	4844	Womens and Girls Wear Stores. This class consists of establishments mainly engaged in retailing womens, girls or infants clothing or clothing accessories. This class also includes establishments mainly engaged in womens custom dressmaking, or in repairing or altering womens or girls clothing.
	4845	Footwear Stores. This class consists of establishments mainly engaged in retailing boots, shoes or other footwear.
	4846	Shoe Repairers. This class consists of establishments mainly engaged in repairing footwear.
	4847	Fabrics and Household Textile Stores. This class consists of establishments mainly engaged in retailing fabrics, furniture, drapery, or household textiles, or in making or installing curtains (except shower curtains).
	4848	Floor Covering Stores. This class consists of establishments mainly engaged in retailing household floor coverings (except ceramic floor tiles).
	4849	Furniture Stores. This class consists of establishments mainly engaged in retailing household furniture, blinds or awnings.
485		<u>Household Appliance and Hardware Stores</u>
	4853	Domestic Hardware Stores. This class consists of establishments mainly engaged in retailing domestic hardware (except builders supplies), china, glassware or garden tools, or in the repair or maintenance of lawn mowers or locks, or in providing key duplicating services.
	4854	Watchmakers and Jewellers. This class consists of establishments mainly engaged in retailing or repairing watches, clocks or jewellery.

DIVISION F: WHOLESALE AND RETAIL TRADE
SUBDIVISION 48: RETAIL TRADE

Group	Class	Title and Description
485 cont.	4855	Music Stores. This class consists of establishments mainly engaged in retailing musical instruments, sheet music, phonograph records or magnetic or pre-recorded tapes, or in repairing musical instruments.
	4856	Household Appliance Stores. This class consists of establishments mainly engaged in retailing or hiring household appliances, radio or television receiving sets, or in repairing non-electric household appliances n.e.c.
	4857	Electric Appliance Repairers N.E.C. This class consists of establishments mainly engaged in retailing or installing household ofr electric appliances n.e.c.
486		<u>Motor Vehicle Dealers; Petrol and Tyre Retailers</u>
	4861	New Motor Vehicle Dealers. This class consists of establishments mainly engaged in wholesaling or retailing new motor vehicles (including trucks or commercial motor vehicles but not motor cycles), in retailing new motor vehicle parts or accessories (except for motor cycles), in leasing or hiring motor vehicles (which they physically handle) for periods of one year or more (without drivers), or in motor vehicle (except motor cycle) repair (other than motor vehicle smash repair or motor vehicle engine reconditioning).
	4862	Used Motor Vehicle Dealers. This class consists of establishments mainly engaged in wholesaling or retailing (by auction or private treaty) used motor vehicles (including trucks and commercial vehicles but not motor cycles) or used motor vehicle parts (except motor cycle parts or accessories or reconditioned tyres or batteries).
	4864	Service Stations. This class consists of establishments mainly engaged in retailing petrol or lubricating oils or in motor vehicle servicing.
	4865	Smash Repairers. This class consists of establishments mainly engaged in repairing, panel beating or spray painting smashed motor vehicles.
	4866	Motor Cycle Dealers. This class consists of establishments mainly engaged in wholesaling or retailing new or used motor cycles or scooters, or parts and accessories for motor cycles (except tyres, tubes or batteries), or in repairing motor cycles or scooters or in assembling from imported "knock-down kits".

DIVISION F: WHOLESALE AND RETAIL TRADE
SUBDIVISION 48: RETAIL TRADE

Group	Class	Title and Description
486 cont.	4867	Boat and Caravan Dealers. This class consists of establishments mainly engaged in wholesaling or retailing boats, outboard motors or caravans, in hiring caravans, in repairing and reconditioning marine outboard motors or in hiring boats n.e.c.
	4868	Tyre and Battery Retailers. This class consists of establishments mainly engaged in retailing motor vehicle tyres (new or reconditioned), tubes or batteries, or in repairing (except retreading, recapping or rerubbering) motor vehicle tyres and tubes.
487		<u>Milk and Bread Vendors</u>
	4878	Bread Vendors. This class consists of establishments mainly engaged in retailing bread by home delivery service.
	4879	Milk Vendors. This class consists of establishments mainly engaged in retailing milk by home delivery service.
488		<u>Food Stores</u>
	4881	Grocers, Confectioners and Tobacconists. This class consists of establishments mainly engaged in retailing groceries, smallgoods, tobacco products or confectionary, whether or not the selling is organised on a self service basis.
	4882	Butchers. This class consists of establishments mainly engaged in retailing fresh meat.
	4883	Fruit and Vegetable Stores. This class consists of establishments mainly engaged in retailing fresh fruit or vegetables.
	4884	Liquor Stores. This class consists of establishments mainly engaged in retailing beer, wine or spirits for consumption off the premises only.
	4885	Bread and Cake Stores. This class consists of establishments mainly engaged in retailing bread, cakes or pastries from fixed premises, or in both baking and retailing cakes or pastries.
	4886	Fish Shops, Take Away Food and Milk Bars. This class consists of establishments mainly engaged in retailing fresh fish, take away fish and chips (ready to eat), sandwiches, ice cream or soft drinks (for immediate consumption), or other ready to eat

DIVISION F: WHOLESALE AND RETAIL TRADE
SUBDIVISION 48: RETAIL TRADE

Group	Class	Title and Description
488 cont.	4886 cont.	take away foods such as chicken, hamburgers, hotdogs or pizza.
489		<u>Other Retailers</u>
	4891	Pharmacies. This class consists of establishments mainly engaged in retailing perscription drugs or patent medicines, cosmetics or toilet preparations.
	4892	Photographic Equipment Stores. This class consists of establishments mainly engaged in retailing photographic equipment or supplies, or in hiring or repairing photographic equipment.
	4893	Sports and Toy Stores. This class consists of establishments mainly engaged in retailing, hiring or reapaing sporting goods, bicycles, toys or hobby equipmnet.
	4894	Newsagents, Stationers and Booksellers. This class consists of establishments mainly engaged in retailing books, periodicals, newspapers, stationery or religious goods.
	4895	Second Hand Goods Dealers. This class consists of establishments mainly engaged in retailing (by auction or private treaty) antiques, second hand goods (except motor vehicles) or armed services etc disposals.
	4896	Nurserymen and Florists. This class consists of establishments mainly engaged in retailing cut flowers, or horticultural goods such as seeds, seedlings, shrubs, trees or other nursery stock, or in hiring shrubs or trees.
	4897	Retailing N.E.C. This class consists of establishments mainly engaged in retailing goods n.e.c.

DIVISION L: RECREATION, PERSONAL AND OTHER SERVICES
SUBDIVISION 93: PERSONAL SERVICES

Group	Class	Title and Description
935		<u>Hairdressers, Beauty Salons</u>
	9531	Mens Hairdressers. This class consists of establishments mainly engaged in mens hairdressing.
	9532	Womens Hairdressing and Beauty Salons. This class consists of establishments mainly engaged in womens hairdressing, or in furnishing beauty treatment services.

APPENDIX III

AUSTRALIAN STANDARD INDUSTRIAL CLASSIFICATION GROUP CODE CATEGORIES
USED IN THIS STUDY

(TO BE USED IN CONJUNCTION WITH CHAPTER FIVE - PLEASE FOLD OUT)