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An Application of Butler's (1980) Tourist Area Life Cycle Theory to the Cairns Region, Australia, 1876-1998

Thesis submitted by

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in July 2000

for the degree of Doctor of Philosophy in the
School of Tropical Environment Studies and Geography
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Abstract

Butler's (1980) Tourism Area Life Cycle (TALC) model is applied to the Cairns Region of North Queensland, Australia. Briefly, the theory states that the economy of resort regions will follow a life cycle characterised by six stages: "exploration", "involvement", "development", "consolidation", "stagnation" and then either "decline" or "rejuvenation". Butler suggested that tourist numbers be used for the "S"-shaped life cycle curve. Each stage is recognisable by a number of criteria.

The objectives of the project included further testing the model, particularly in relation to its use as a conceptual framework for analysis, for forecasting purposes and as a strategic planning tool. In addition, the research aimed to: significantly add to the body of empirical knowledge on TALC theory, especially in relation to the Cairns region; determine the timing of Butler's (1980) stages in the study region; and, work towards a more universal and streamlined approach for the general application of the model. In contrast to much of the TALC research in recent years, this project was designed to utilise Butler's original stages with no additions or subtractions. As a separate exercise, some of Haywood's (1986:161) and Cooper's (1990:63) suggestions were used as leading indicators to supplement TALC's forecasting ability and to verify its findings. Finally, the study addressed a number of criticisms and so-called "shortcomings" of Butler's theory (Haywood 1986; Getz 1992; Choy 1993; Williams 1993; Agarwal 1994).

The study covers the years 1876-1998, with the major emphasis on 1976-1998, a period of rapid tourism industry expansion in the region. The study boundaries are the coastal shires of Cairns and Douglas and the tableland shires of Mareeba and Atherton. The basic "S"-shaped TALC curve was constructed using existing accommodation takings data. An unusual but successful questionnaire technique was used to obtain time-series information from the tourism industry for the period 1976-1998. Other data sources were an historical search covering the period prior to 1976, a newspaper search and published statistics for the period after

1976. Analysis followed a stage by stage format starting with Butler's (1980) "exploration" stage.

Butler's (1980) theory was found to be an excellent framework for analysis which, in conjunction with leading indicators, could be used for forecasting and strategic planning. The study contributed significantly to the body of TALC knowledge especially relating to Far North Queensland. The "exploration" stage in the region started in 1889 and continued until evidence of local involvement signified the start of the "involvement" stage in 1912. The latter stage was terminated by the opening of the Cairns International Airport in 1984 when the resulting influx of outside capital heralded the start of the "development" stage. The point of inflection of the TALC curve marked the start of the "consolidation" stage, which lasted until 1993 when "stagnation" stage criteria became dominant. By the end of the study period the TALC curve had just reached a peak, a necessary criteria of that stage. At that time, however, a number of "rejuvenation" stage criteria already existed, such as a large regional beautification project. There were also some "decline" stage characteristics, such as ownership and management reverting back to local control. In addition, critical factors such as the international airport which contributed to growth in the region were identified along with two major elements, without which substantial "rejuvenation" is unlikely to occur.

Contrary to previous TALC studies, this research found that the original model could be standardised and computerised to make it applicable to a wide range of applications. Suggestions were put forward from which specifications could be developed for a competent systems analyst to design an automated TALC model. The former included data collection and analysis methods and a technique to determine the timing of the stages according to Butler's (1980) theory. The main recommendation of this research is that the opportunity to implement these suggestions be taken up, thus providing a versatile model which will have global implications.

Table of Contents

1. INTRODUCTION 1

1.1 Background to the Research 1

1.2 The Research Problem 6

1.3 Why Cairns? 8

1.4 Study Objectives 9

1.5 Chapter Outlines 10

2. LITERATURE REVIEW 13

2.1 INTRODUCTION 13

2.2 TOURISM REGIONS: STABILITY, DECLINE AND REJUVENATION 14
2.2.1 Tourism regions of long-term stability 14
2.2.2 Tourism regions which have declined 20
2.2.3 Rejuvenated tourism regions 22

2.3 THEORISING ABOUT TOURISM REGIONS 27
2.3.1 Life-cycle Theory: Its Origins, and Use in Other Disciplines 35
2.3.2 Butler's Tourist Area Cycle of Evolution 41
2.3.3 Implications of Butler's Model 44

2.4 TESTING BUTLER'S MODEL 45
2.4.1 Chronological overview of existing TALC research 52
2.4.2 Criticisms of Butler's Model and Suggestions for Improvements 55
2.4.3 Dependency and control 71
2.4.4 Australian TALC Research 74
2.4.5 Does Butler's model reflect the real world? 76

2.5 FURTHER RESEARCH SUGGESTIONS 78

2.6 CONCLUSION 80

3. THE STUDY AREA 81

3.1 INTRODUCTION 81

3.2 BOUNDARIES 81

3.3 THE PHYSICAL SETTING 83
3.3.1 Topography and Geology *83*
3.3.2 Climate *88*
3.3.3 Flora and Fauna *92*
3.3.4 Great Barrier Reef *94*

3.4 BRIEF HISTORY OF THE STUDY REGION 95

3.5 RECENT ECONOMIC PROFILE 103
3.5.1 Primary Industry *104*
3.5.2 Secondary Industry *105*
3.5.3 Tertiary Industry *105*
3.5.4 Recent Economic Trends *106*

3.6 RECENT SOCIO-ECONOMIC PROFILE 106
3.6.1 Introduction *106*
3.6.2 Population Size and Growth *110*
3.6.3 Age-sex Characteristics *110*
3.6.4 Ethnicity *115*
3.6.5 Education *116*
3.6.6 Personal Income *118*
3.6.7 Professional Profile *123*
3.6.8 Employment and Unemployment *125*
3.6.9 Social Welfare *127*
3.6.10 Housing Costs *128*

3.7 RECENT TOURISM INDUSTRY PROFILE 130

3.8 SUMMARY 137

4. METHODOLOGY 137

4.1 OVERALL RESEARCH DESIGN 137

4.2 DATA AND INFORMATION GATHERING 138
4.2.1 Early Tourism in the Region Prior to 1976 ..... *139*
4.2.2 TALC Curve Data, 1978-1998 ..... *140*
4.2.3 Questionnaire Design *144*
4.2.4 Rationale for the Questions *149*
4.2.5 Newspaper Search *157*

4.3 EXISTING STATISTICAL DATA 164

4.4 STRENGTHS AND WEAKNESSES OF DATA COLLECTION TECHNIQUES 165

4.5 ANALYSIS 167

4.6 SUMMARY 169

5. IDENTIFYING BUTLER'S STAGES 171

5.1 INTRODUCTION 171

5.2 ESTABLISHING THE EXISTENCE OF THE LIFE-CYCLE CURVE 171

5.3 TESTING CRITERIA FOR THE "EXPLORATION" STAGE (1889-1912) 174

5.4 TESTING FOR THE "INVOLVEMENT" STAGE (1912-1984) 174
5.4.1 Involvement by Local People in the Provision of Tourist Facilities 175
5.4.2 Organisation of Tourist Travel Arrangements 183
5.4.3 Advertising to Attract Tourists 185
5.4.4 An Initial Market Area can be Identified and a Tourist Season Emerges 187
5.4.5 Attitude to Visitors 189
5.4.6 Pressure on Government to Provide Tourism Infrastructure 192
5.4.7 Summary - "Involvement" Stage 192

5.5 TESTING FOR THE "DEVELOPMENT" STAGE (1984-1991) 193
5.5.1 Well-defined Tourist Market Area and Heavy Advertising 193
5.5.2 Natural & Cultural Attractions Marketed, Supplemented by Human-made Facilities 195
5.5.3 Local Involvement and Control of Tourism Declines 195
5.5.4 Changes in the Physical Appearance of the Study Region 203
5.5.5 Regional and National Involvement in Planning and Provision of Facilities 207
5.5.6 Number of Visitors will Exceed Locals in Peak Periods. 207
5.5.7 The Use of Imported Labour 208
5.5.8 Auxiliary Industries (eg. laundries) will Start to Appear 208
5.5.9 Type of Visitor 208
5.5.10 Summary - "Development" Stage 209

5.6 TESTING FOR THE "CONSOLIDATION" STAGE (1991-1993) 212
5.6.1 The Rate of Increase in Visitor Numbers Starts to Decline. 212
5.6.2 Visitors will Exceed Permanent Residents. 212
5.6.3 A Major Part of the Economy is Tied to Tourism. 213
5.6.4 Advertising More Wide-reaching and Efforts to Extend Tourists Season. 213
5.6.5 Major Franchises and Tourist Chains will be Represented. 214
5.6.6 Opposition & Discontent About Large Number of Tourists & Facilities. 214
5.6.7 Recreational Business District. 214
5.6.8 Old, Poor or Second-rate Facilities 215
5.6.9 Summary - "Consolidation" Stage 218

5.7 TESTING FOR THE "STAGNATION" STAGE (1993-1998) 218
5.7.1 Peak Numbers of Visitors Reached 220
5.7.2 Capacity Levels Reached - Environmental Problems 220
5.7.3 Capacity Levels Reached - Social Problems 224
5.7.4 Capacity Levels Reached - Economic Problems 225
5.7.5 Well Established Image But no Longer Fashionable 229

5.7.6 Heavy Reliance on Repeat Visitation, Conventions and Gambling. 231
5.7.7 Surplus Bed Capacity Will be Available 232
5.7.8 Strenuous Efforts Needed to Maintain the Level of Visitation 235
5.7.9 Percentage of Mass Tourism. 236
5.7.10 Natural and Cultural Attractions Superseded by Man-made Attractions. 236
5.7.11 The Resort Image is Divorced from its Geographic Environment 236
5.7.12 New Development Occurs but Peripheral to the Original Tourist Area 237
5.7.13 Existing Properties Likely to have Frequent Changes of Ownership 237
5.7.14 Summary - "Stagnation" Stage. 237

5.8 TESTING FOR THE "DECLINE" STAGE 239
5.8.1 Increased Competition from Other Resort Areas 239
5.8.2 The Viability of Tourist Businesses Becomes Questionable 241
5.8.3 Local Involvement in Tourism will Increase 241
5.8.4 Summary - "Decline" Stage 242

5.9 "REJUVENATION" STAGE 242
5.9.1 Government/Private Efforts & Encouragement of Special Interest Groups 243
5.9.2 Human-made Attractions such as Casinos and Theme Parks 243
5.9.3 Take Advantage of Previously Untapped Natural Resources 244
5.9.4 Change of the Attractions on which Tourism is Based 244
5.9.5 Beautification/Urban Renewal 244
5.9.6 Summary - "Rejuvenation" Stage 245

5.10 TESTING FOR LEADING INDICATORS 245
5.10.1 Haywood's (1986:161) "Stagnation" Stage Leading Indicators 245
5.10.1.1 A Declining Proportion of First-time Visitors 247
5.10.1.2 Declining Profits of the Major Tourist Businesses 247
5.10.1.3 Tourism Industry Over-capacity 247
5.10.1.4 Appearance of New and Accessible Destinations 247
5.10.1.5 Decline in Advertising Elasticity 248
5.10.1.6 Summary: Haywood's (1986:161) Leading Indicators 248
5.10.2 Cooper's (1990:63) Threats Facing Cold Water Resorts 249
5.10.2.1 Political Interference on Decisions 249
5.10.2.2 Diminishing Domestic Market Share. 250
5.10.2.3 Traffic Problems 254
5.10.2.4 Poor Access 254
5.10.2.5 LGA Amalgamation 257
5.10.2.6 Confidence in Tourism 260
5.10.2.7 Demands for Greater Efficiency in Local Government 260
5.10.2.8 Lack of Professional, Experienced Staff. 263
5.10.2.9 Growth in Low-spend Visitors 263
5.10.2.10 Lack of Wet Weather Facilities and Out-of-season Activities 266
5.10.2.11 Summary - Cooper's Threats 266

5.11 SUMMARY AND CONCLUSIONS 268

6. CONCLUSIONS AND IMPLICATIONS 272

6.1 FURTHER TEST BUTLER'S MODEL 272
6.1.1 Conceptual Framework for Analysis 272
6.1.2 Forecasting 274
6.1.3 As a Strategic Planning Tool 276

6.2 TO EXPAND THE BODY OF EMPIRICAL KNOWLEDGE ON TALC 277

6.3 THE APPLICABILITY OF TALC TO THE CAIRNS REGION 278

6.4 A MORE STREAMLINED APPROACH TO TALC 279
6.4.1 Testing Selected Threats (Cooper 1990:63) 279
6.4.2 Testing Selected Leading Indicators of Stagnation (Haywood 1986:161) 280
6.4.3 Criticisms and so-called "shortcomings" of Butler's (1980) Theory. 280
6.4.4 A Computerised Version of Butler's (1980) Model is Possible 283

6.5 IMPLICATIONS OF TALC GENERALLY 285

6.6 SUGGESTIONS FOR FURTHER RESEARCH 286

6.7 SUMMARY OF THE RESEARCH CONTRIBUTION 287

6.8 CONCLUDING OBSERVATIONS 288

List of Figures

Figure 1-1: Location of Capital Cities and Main Tourism Destinations in Australia, 1998. 2

Figure 2-1: Examples of regions in the decline, rejuvenation and long-term stability categories. 15
Figure 2-2: Relationships between theories, authors and the Tourism Resort Life Cycle Theory of Evolution. 28
Figure 2-3: Plog's distribution of psychological segments 32
Figure 2-4: Identification of Product Life Cycles. 40
Figure 2-5: Hypothetical Evolution of a Tourist Area. 42
Figure 2-6: Tourist Area Life Cycle with sequential entry to three market segments. 58
Figure 2-7: Difference Types of Tourist Area Life-Cycles. 60
Figure 2-8: Identifying Tourist Area Life Cycle Stages. 61

Figure 3-1: The Study Area: Local Government Boundaries, 1997. 82
Figure 3-2: Major Physical Divisions of the Cairns District. 84
Figure 3-3: Great Barrier Reef showing the Marine Park and the World Heritage Area. 85
Figure 3-4: Wet Tropics World Heritage Area 86
Figure 3-5: Structural Zones within the Hodgkinson Formation, Cairns and Surrounding Regions. 87
Figure 3-6: Average Monthly Rainfall & Number of Raindays, Cairns City. 90
Figure 3-7: Average Monthly Temperatures, Cairns City. 91
Figure 3-8: Vegetation Communities of Cairns and Surrounding Regions at the time of European Settlement. 93
Figure 3-9: Total Air Passenger Movements at Cairns International Airport, 1978-1995. 107
Figure 3-10: Cairns International Airport Passenger Movements (Excluding Transit Passengers) January 1996 to May 1999, Percentage Change Over the Same Month of the Previous Year. 108
Figure 3-11: Cairns Post Index of General Economic Activity, July 1992 to October 1998: Growth Over the Same Month Previous Year. 109
Figure 3-12: Relative Weekly Income: Cairns, Gold Coast & Australia, 1996 Census. 119
Figure 3-13: Relative Income: Douglas, Gold Coast & Australia, 1996 Census. 119
Figure 3-14: Relative Income: Atherton, Gold Coast & Australia, 1996 Census. 120
Figure 3-15: Relative Income: Mareeba, Gold Coast & Australia, 1996 Census. 120
Figure 3-16: Relative weekly personal income: Cairns, Douglas, Atherton & Mareeba Shires, 1996 Census 121

Figure 4-1: Time Lines for Data Available on Accommodation Takings. 143

Figure 5-1: Inflation Adjusted Accommodation Takings Quarterly, ($'000) 1978 - 1989. Cairns Region (Base year = 1978) 172
Figure 5-2: Annual Change, Inflation Adjusted Accommodation Takings Quarterly, ($'000) 1978 - 1989, Cairns region. 172
Figure 5-3: Fairyland, Kuranda, circa 1930 176
Figure 5-4: Mirror Pool, The Maze, Kuranda, circa 1930 176
Figure 5-5: The Maze, Kuranda, circa 1930 177
Figure 5-6: Whitecars on the Range Road between Cairns and the Atherton Tablelands, circa 1930 177
Figure 5-7: The Range Road Between Cairns and the Atherton Tablelands. 179
Figure 5-8: Passenger Steamer Leaving Cairns Harbour, circa 1930. 180
Figure 5-9: Green Island, circa 1930 182
Figure 5-10: The Location of the Cairns Region Railway Network 184
Figure 5-11: Results of Question 8.6 - Advertising and Promotion as a Percentage of Total Expenditure. 188
Figure 5-12: TTNQ Annual Expenditure - Advertising and Promotion as a Percentage of Total Expenditure 188
Figure 5-13: Letters-to-the-Editor and Articles Indicating Attitude to Tourists. 190
Figure 5-14: Results of Question 8.5 - Attitude Towards Tourists. 190
Figure 5-15 Map of Cairns Area Showing Completion Year of Major Developments. 196
Figure 5-16: Major Projects, Starts and Announcements; Cairns Post Letters-to-the-Editor and Articles. 197
Figure 5-17: Annual Number of Available Bed Spaces Cairns, Douglas, Mareeba and Atherton LGAs 197
Figure 5-18: Response to Question 8.1 - Local/Outside Ownership of Tourism Resources (Derived from Table 5-3). 200
Figure 5-19: Results of Question 8.2, Local Versus Outside Sourced Management of Tourism Resources. 201
Figure 5-20: Results of Question 8.9 of the Business Questionnaire - Origin of Bookings. 202
Figure 5-21: Environment Under Threat? - Cairns Post Newspaper Search 204
Figure 5-22: Results of Question 8.11 - Percentage of Group Travellers (All Business Categories) 210
Figure 5-23: Letters-to-the-editor and Articles Referring to Evidence of Change in the Central Business District. 216
Figure 5-24: Results of Question 8.7, Percentage of Respondents Registering Zero Profits or Less 228
Figure 5-25: Response to Question 8.13 - Profit Margin per Customer/client 230
Figure 5-26: Results of Question 8.10 - Percentage of First-time Visitors 233
Figure 5-27: Results of Question 8.8 - Occupation Rates for Accommodation Providers. 233
Figure 5-28: Bed Occupancy Rate (Quarterly) 234
Figure 5-29: Results of Question 8.12 - Degree of Competition from Outside the Region 240
Figure 5-30: Results of Question 3.1 - Degree of Political Influence on Decision Making. 251

Figure 5-31: Traffic Problems - Cairns Region 256
Figure 5-32: Results of Question 5.3 - Airline Access from Major Markets 258
Figure 5-33: Results of Question 3.2 - Effect of Amalgamation of Local Government Areas on Respondent Organisations. 259
Figure 5-34: Confidence in Tourism. 261
Figure 5-35: Results of Question 8.4 - Level of Confidence in Tourism 262
Figure 5-36: Demands for Greater Local Government Efficiency 262
Figure 5-37: Results of Question 4.4, Visitor Spending (with Normal Distribution for Comparison) 264
Figure 5-38: Average Visitor Spending on Accommodation per Day - CPI adjusted, base = 1978. 265
Figure 5-39: Summary of Application of Butler's (1980) Theory to the Cairns Region - Major Criteria Only. 269

List of Tables

Table 2-1: *Summary of major Tourism Life Cycle Studies following Butler's Model* 46

Table 3-1: *Population of LGAs in the Study Area, 1886-1996* 111

Table 3-2: *Age Range data for Cairns, Douglas, Atherton, Mareeba, Gold Coast and Australia* 112

Table 3-3: *Type of Educational Institute Attending, 1996.* 114

Table 3-4: *Age Left School, 1996 Census* 117

Table 3-5: *Grouped Mean and Modal Incomes for the Study Area, Gold Coast and Australia in 1996* 122

Table 3-6: *Unemployment and Participation Rates for the Study Area, Gold Coast and Australia, 1996* 126

Table 3-7 *Travel and Tourism Industry in Oceania and South East Asia showing GDP contribution, Employment & Investment March, 1999* 133

Table 3-8 *Australia - Top 10 Tourism Regions- Visitor Expenditure* 135

Table 4-1: *Respondents by Industry (Category 7, Industry Organisations and Government Bodies Excluded).* 150

Table 4-2: *Questionnaire Relevancy Summary* 152

Table 5-1: *Summary of Cairns Region's Compliance with Butler's (1980) "Exploration" Stage Criteria* 175

Table 5-2: *Summary of Cairns Region's Compliance with Butler's (1980) "Involvement" Stage Criteria* 194

Table 5-3: *Results of Question 8.1, Degree of Outside Ownership.* 200

Table 5-4: *Results of Question 8.2 of the Business Questionnaire, Degree of Outside Management* 201

Table 5-5 *Results of Question 8.9 of the Business Questionnaire - Origin of Bookings.* 202

Table 5-6: *Summary of Cairns Region Compliance with Butler's (1980) "Development" Stage Criteria* 211

Table 5-7: *Response to Question 5.1, Most Frequently Cited Examples of Worn-out or Out-of-date Facilities* 217

Table 5-8: *Summary of Relevance of Butler's (1980) Consolidation Stage Criteria to the Cairns Region* 219

Table 5-9: *Results of Question 2.1 of the Business Questionnaire - Is the Original Physical Attraction of the Region Threatened in Any Way?* 221

Table 5-10: *Results of Question 4.1 - Is Budgeting Getting Tighter?* 226

Table 5-11: *Results of Question 8.7 of the Business Questionnaire, Profit as a Percentage of Capital Invested* 227

Table 5-12: *Results of Question 6.1, Fashionability of the Region* 231

Table 5-13: Summary of Responses to Butler's (1980) "Stagnation" Stage Criteria. 238
Table 5-14: Summary of Responses to Butler's (1980) "Decline" Stage Criteria 243
Table 5-15: Summary of Responses to Butler's (1980) "Rejuvenation" Stage Criteria 246
Table 5-16: Summary: Haywood's Leading Indicators of "Stagnation". 249
Table 5-17 Results of Question 3.1 of the Business Questionnaire- Degree of Political Influence on Decision Making. 251
Table 5-18: Degree of Political Control over the Decision Making Process. 252
Table 5-19: Far North Queensland's Share of the Domestic Market 253
Table 5-20: Far North Queensland's Share of the International Market. 255
Table 5-21: Results of Question 5.3 of the Business Questionnaire, Airline Access to the Region from Major Markets. 258
Table 5-22: Results of Question 3.2 of the Business Questionnaire- Effect of Amalgamation of Local Government Areas on Respondent Organisations 259
Table 5-23: Results of Question 4.4 of the Business Questionnaire - Visitor Spending 264
Table 5-24: Summary of Responses to Cooper's "Threats" (Cooper, 1990:63).... 267
Table 5-25: Summary of Overall Compliance of the Cairns Area with Butler's (1980) Model, Haywood's (1986) Leading Indicators of "Stagnation" and Cooper's (1990) Threats to Cold-Water Resort Regions. 270

Acronyms

ABS	Australian Bureau of Statistics
ABM	Australian Bureau of Meteorology
AIHP	America's Industrial Heritage Project
ATC	Australian Tourist Commission
ATO	Australian Tax Office
BTR	Bureau of Tourism Research
CAERA	Centre for Applied Economic Research and Analysis
CAUTHE	Council for Australian University Tourism and Hospitality Education
CBD	Central Business District
CDTL	Cairns and District Tourism League
CEO	Chief Executive Officer
C&TPA	Cairns & Tableland Publicity Association
DTM	Domestic Tourism Monitor
FIT	Free in Transit
FNQ	Far North Queensland
FNQDL	Far North Queensland Development League
FNQPB	Far North Queensland Promotion Bureau
FNQRPAC	Far North Queensland Regional Planning Advisory Committee
FNQSD	Far North Queensland Statistical Division.
IVS	International Visitor Survey
JCU	James Cook University
LDC	Less Developed Countries
NQEA	North Queensland Engineers and Agents
PLC	Product Life Cycle
QGTB	Queensland Government Tourist Bureau
RBD	Recreational Business District
REIQ	Real Estate Institute of Queensland
TALC	Tourism Area Life Cycle
TDAP	Tourism Development Action Plan
TTNQ	Tourism Tropical North Queensland (formerly FNQPB)

Statement of Sources

Declaration

I declare that this thesis is my own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given. Where required, all research procedures in this thesis received the approval of the relevant Ethics Committees.

Signature

19/02/01
Date

1. Introduction

1.1 Background to the Research

The growth in tourism has been a worldwide phenomenon during the 1980s and 1990s (Waters 1998:4). Australia has not been immune from such trends, with an average annual increase in overseas visitors of 13% between 1985 and 1995 (Chai and Jones 1996:1). Nationwide by 1990/91, export earnings from tourism exceeded those from traditional export commodities such as coal, meat, wool and wheat, and contributed $7.2 billion in foreign exchange towards the nation's balance of payments. During the same year, tourism accounted for 5.4% of Gross National Product and 5.8% of the 8 million people in the workforce (Commonwealth Dept of Tourism 1992:12-13). Growth in visitor numbers continued during the early 1990s, so tourism's contribution to foreign exchange earnings had reached $9.32 billion by 1997 (Waters 1998:119). Tourism is also considered to be a significant contributor to Australia's regional economies, with 60% of domestic tourism and 20% of international tourism expenditure occurring outside the major urban centres and generating economic activity of more than $12 billion in 1994 (Commonwealth Department of Tourism 1994:6). At the same time, this rapid growth in the tourism industry poses many challenges for decision-makers, governments and local communities.

Tourism-generated development has been concentrated in particular regions around Australia. Before 1970, tourists tended to visit areas such as Sydney, and the nearby Blue Mountains and the Hunter Valley regions (see Figure 1-1). Other tourism areas included the Barossa Valley near Adelaide, Uluru (Ayers Rock) in the centre of Australia and the Gold and Sunshine Coasts near Brisbane. Since 1970, the Cairns/Port Douglas region, Kakadu in the Northern Territory and Cable Beach near Broome in Western Australia have become popular destinations. These localities have tended to be further away from the main population centres than the older tourism areas.

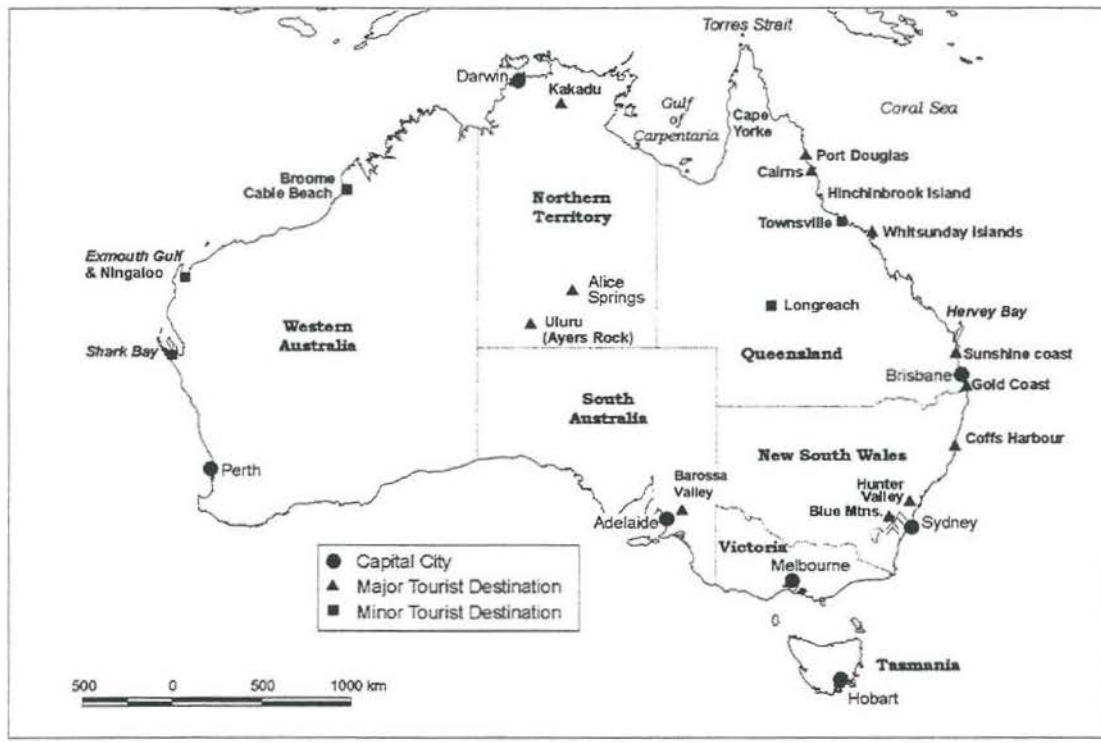


Figure 1-1: Location of Capital Cities and Main Tourism Destinations in Australia, 1998.

In Far North Queensland, the Cairns region's rapid growth has been underpinned by tourism. Most Cairns residents would agree that the building of the new international and domestic airport in 1984 was the single most important factor contributing to the establishment of Cairns as a major tourism destination. During the 1987/88 year, after only four years of operation, the airport was responsible for the creation of 8,935 new jobs and generated $166 million in revenue (Australian Bureau of Statistics 1996; National Centre for Studies in Travel and Tourism. April 1989:27). Gary Schofield, in an article entitled "The Cairns Airport Saga - A Story of Rags to Riches", states that prior to the existence of the present airport, potential visitors were put off by the "circuitous airline routes and associated costs of accessing what was seen as a rich man's Mecca". Up to the mid-1970s, the region was serviced by a "tired" old airport with a "few drab buildings", which serviced a purely domestic market and usually planes called in at Townsville and other places on the way to Cairns. The city's "weary" old airport was "robbing" a potentially thriving tourism industry of realising its potential (Schofield 1990:1). Repeated attempts to secure Federal Government funding for an international airport facility failed, with Townsville being the Government's preferred location. Eventually, the locally-controlled Cairns Port Authority took over responsibility and raised the necessary funding to build the airport, but not without much opposition and controversy from locals and the Federal Department of Transport (Concerned Ratepayers 1980).

Even after the new airport was opened, the Federal Government refused to give permission for international flights to land in Cairns until later the same year. The airport was a success and recorded an almost tenfold increase in passenger movements from 344,722 in 1978 to over three million in 1996. By November 1996, there were direct flights to or from Hong Kong, Singapore, Japan, Korea, New Zealand, Malaysia, Solomon Islands (freight only), Indonesia and PNG (Cairns Air and SeaPort Authority 1997; Dept of Transport and Regional Development 1996).

Just as the airport facilitated rapid growth, the domestic pilots' strike had the opposite effect. This strike from August 1989 to June 1990, which was over a pay

claim by domestic pilots, effectively isolated the Australian tourism industry from its clientele. A significant feature of the strike, which is of relevance to this thesis, was its effect on the region's economy. The Cairns airport almost came to a standstill. Services gradually returned to normal over the period of the strike with the help of Royal Australian Air Force and overseas charter planes, the latter using imported crews. International arrivals into Cairns were also greatly reduced, perhaps because travellers were afraid of getting stranded. The effect on the $166 million revenue and 8,935 jobs generated in the previous year by the airport has never been calculated (National Centre for Studies in Travel and Tourism. April 1989:27). At a national level, by September 13th 1989, little more than a month into the strike, the Bureau of Tourism Research estimated that the tourism industry was losing $35 million a day. Total losses to the industry were between $400 and $600 million (Norington 1990:145-149, quoting the Bureau of Tourism Research, January 1990, Canberra). Thousands of people in the tourism industry were "either stood down without pay or lost their jobs irretrievably" (Norington 1990:81). The actual number of business closures caused by the strike in the Cairns region is difficult to calculate because there was no recovery at all between the end of the pilot's strike and the beginning of the "recession we had to have"[1]. This particularly deep and prolonged recession added to the problems caused by the strike.

Another factor that is important background to this research is the tendency towards deregulation in recent years at both national and international level, which has to some extent allowed the Cairns region to develop its tourism industry (Kanter 1995: 11). Financial deregulation and the relaxation of foreign investment guidelines in 1986 has allowed tourism industry development funds to enter the region more easily than would have been possible in previous times (Edgington 1990:253-4). In the case of Cairns, which traditionally has a high proportion of Japanese tourists, deregulation has facilitated a significant degree of "horizontal" and "diversified"

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[1] This phrase was coined by the then Federal Treasurer, Paul Keating, to explain why Australia had a recession six months before the rest of the world. After his retirement in 1996, he admitted the decision to artificially cause mortgage rates to rise to over 17% (new and existing mortgages included) and plunge the country into prolonged recession was a mistake. At that time interest rates were controlled by the Prime Minister and Treasurer and became part of the political armoury, a practice no longer continued.

ownership of tourism businesses by Japanese companies (Forsyth and Dwyer 1992:26-29). On numerous occasions, local business people have complained of unfair competition, because overseas companies own and/or operate local companies that supply the needs of the inbound tourist, including the hotel, the cruise operation, the golf course and the dive shop (Forsyth and Dwyer 1992:28; *Cairns Post* 28 September 1987:1; 30 September 1987:6; 11 November 1987:6; 20 February 1988:20). On the other hand, the region has benefited enormously from the marketing effort put in by the overseas owner in the country of origin (Forsyth and Dwyer 1992: 73; Waters 1998: 119).

Exchange rate deregulation from a fixed to a floating system, in both Australia and Japan, has allowed the Yen to revalue and the Australian dollar to devalue against other currencies (Edgington 1990:13). The Yen went from roughly 400 to 70 or 80 Yen to the Australian dollar between 1975 and 1993, making Australia a much cheaper place to visit for the Japanese. During the same period, the Australian dollar halved in value against the US dollar, from US$1.5 to less than 70 US cents (McTaggart, Findlay and Parkin 1996:744). Ironically, these forces will work against the Cairns region if the Australian national economy ever recovers to the point where the local dollar returns to anything like its former strength in relation to the Yen and the US dollar.

Airline deregulation has also played its part in allowing airfares to come down, so that holidays in the long-haul regions from the major markets in Europe, the USA and Japan are now more affordable. Cairns is considered a long-haul region by the travel industry, so it has benefited from this deregulation. In addition, the Commonwealth government abandoned its two-airline policy, which until then had not allowed new domestic airlines to operate on the main intercity routes. The ill-fated Compass Airlines (versions one and two) were a direct result of airline deregulation and the dismantling of the Two-Airline Policy. The cheap airfares which were a consequence of competition between the airlines, and which eventually sent the new airline(s) bankrupt, were of great benefit to the Cairns region

(Australian Department of Transport and Communications 1992; McKanna-Guy 1992).

This background information is not complete without mention of some of the larger tourism investments that have helped make the region what it is today. One of the better-known, but older, investments is the Kuranda Train which takes passengers on a scenic ride up the range from Cairns to Kuranda and continues to be a major attraction. Newer assets include the Japanese-owned Ramada Reef at Port Douglas, a luxury resort which has been host to such people as the US President, Bill Clinton and his wife in November 1996, and the German Chancellor a few weeks later. This development spurred a large number of smaller projects and service industries around Port Douglas. Another tourism investment in Cairns City is the $220 million Reef Casino Complex, including a 128-room 5-star hotel which opened in January 1996. Other investments include the $36 million Convention centre which opened in July 1996, the 300-room Convention Centre Hotel and $200 million Cairns Central shopping mall and theatre complex. Also of note is the 7.5 kilometre Smithfield to Kuranda Sky Rail cable car which was opened in 1995, and has been very successful in attracting tourists to the area. The cableway is the longest of its kind in the world and gives visitors a close-up view of the rainforest with very little environmental impact. Right next door to Sky Rail is the highly successful Aboriginal cultural attraction and major investment, Tjabukai. Close by is another new tourism venture, the Australian Woolshed. Despite all the development, and a regional population growth rate of four times the national average between 1976 and 1996, resort regions such as Cairns are not immune from economic decline.

1.2 The Research Problem

The perceived socio-economic instability of resort regions has for some time attracted the interest of respected academics such as Christaller (1963), Cohen (1972), Plog (1972, 1991) and Butler (1980). The success of a tourist region can depend to a large extent on the whims of the market and whether or not the area is in fashion. Some tourist destinations such as Rome and Athens with their old ruins and

other cultural attractions, and Switzerland with its extensive leisure industry, have never gone out of fashion. On the other hand, some regions thrive for a relatively short time and then fade back into obscurity, leaving behind boarded-up hotels, ruined businesses, high unemployment and the attendant social and human traumas that go hand-in-hand with economic decline. Some well-documented resort region failures are the Isle of Man (Cooper and Jackson 1989), Coney Island (Snow and Wright 1976) and Malta (Oglethorpe 1984). Other resort regions such as Atlantic City, Bournemouth and Nice have declined but then managed to rebuild their economies (Stansfield 1978; Soane 1993).

In an attempt to understand the apparent fluctuations in the prosperity of resort regions, R.W. Butler proposed a Tourism Area Life Cycle theory of Evolution (TALC) (Butler 1980). Briefly, this theory states that tourist numbers, when graphed over the life of a resort, will form an "S" shaped curve which can be broken into six stages. The stages, which are discussed in greater detail in Chapter Two, commence with the "Exploration" stage and go through to either the "Decline" or "Rejuvenation" stages. So far the theory has not been found to be easily applicable to any given situation without adjustment to suit a region's unique characteristics (Choy 1992; Hovinen 1981:284). Consequently, numerous hybrid versions of Butler's original theory have been developed, but none have been adopted as universally applicable. Researchers have, therefore, tended to revert back to Butler's original theory, as the basis for their own work and this thesis is no exception. Perhaps one of the reasons for the acceptance of Butler's conceptual approach is that of all the models, it is not very specific. The theory has an "overall simplicity" which makes it applicable to a larger than otherwise number of situations (Haywood 1986:154).

Since 1980, TALC studies have been done on Lancaster County (Hovinen 1981), Loon Lake, (Ontario), (Helleiner 1983), the Scottish Highlands (Butler 1985), Grand Cayman Island (Weaver 1990), Antigua (Weaver 1988), selected Pacific Islands (Choy 1992) and Sri Lanka (O'Hare and Barret 1993). There is little uniformity, however, between the studies. Methodology varies from subjective comparison of vague criteria at one extreme, to the use of statistical techniques at the

other. Moreover, not all this work has agreed with Butler's (1980) theory. Choy (1992) found that most of the resort islands in the South Pacific did not fit into the theory, whilst others have added to and attempted to refine the model (Haywood 1986; Williams 1993).

Given the lack of agreement amongst scholars about the usefulness of TALC theory, the model requires further testing, and there needs to be a larger body of empirical knowledge about resort regions to make it more useful as a management tool (Getz 1992:752; Cooper, 1994:345; Prosser, 1997:312). The body of TALC evidence relating to Australia is very small and on the Cairns region it is non-existent. By attempting to test the theory on the Cairns region, this thesis addresses both the need for further testing and the dearth of evidence on TALC in Australia, and the Cairns region in particular.

1.3 Why Cairns?

Cairns is one of a number of Australian regions which prospered in the 1980s and 1990s because of tourism, and its geographic location makes it relatively easy to isolate factors relating to the tourism industry. Another reason for the selection of Cairns is its proximity to the rapidly growing areas of Southeast Asia from which it draws much of its international tourism clientele. Cairns is six hours flying time from Tokyo to the north and four hours from Melbourne to the south. Whilst this is not exactly the mid-point between the two cities, it does serve to illustrate the degree to which Cairns is a convenient destination for our northern neighbours and a potential first port of call into Australia. At the same time, the area is still frequented by domestic tourists. The real growth markets for the region, however, have been the fast growing so-called "Tiger Economies", whose citizens are increasingly finding themselves with more disposable income. Unfortunately, the recent Asian economic crisis effectively reversed the growth in international passenger numbers at Cairns International Airport during the latter part of 1997 and most of 1998. During that period, air traffic from Japan was down and direct flights to Korea ceased altogether (Cummings 1998). Direct flights with the USA, the world's biggest and richest

market, were ceased by Continental Airlines in 1991 and by Quantas in 1994 (*Cairns Post*, 5 July 1991; 16 December 1993).

The Cairns region is already exhibiting many of the characteristics associated with the latter stages of Butler's tourist area life cycle theory. Much of the tourism industry in the region is controlled by companies and agents based in the tourists' home country, and a newspaper search uncovered some evidence of local hostility towards tourists. Environmental conflicts such as the building of Sky Rail, Port Hinchnbrook and the Cairns mudflats development are also present. Accordingly, saturation point (or tourist carrying capacity) of natural attractions, such as the Great Barrier Reef and local rainforests, is closely monitored by the various interested parties (Commonwealth Department of Tourism 1995).

1.4 Study Objectives

This study aims to address the problem outlined above by applying Butler's (1980) TALC theory to the Cairns region. More specifically, the project has four main aims:

1. to further test Butler's Tourism Area Life Cycle (TALC) theory, particularly in relation to its use as a conceptual framework for analysis, for forecasting purposes and as a strategic planning tool;
2. to expand the body of empirical knowledge on TALC theory in general, and in particular to address the dearth of TALC-related empirical evidence about Australian tourism regions;
3. to test the applicability of TALC theory to the Cairns Region and to determine timing of the stages in relation to the study region; and
4. to work towards a more universal and streamlined approach for the application of the TALC model by: testing selected threats to resort region survival (Cooper 1990:63); testing selected leading indicators of stagnation (Haywood 1986:161); and, addressing some of the criticisms and so-called "shortcomings" of Butler's (1980) theory (Haywood 1986; Getz 1992; Choy 1993; Williams 1993; Agarwal 1994).

The few studies that have been conducted on Australian tourism regions include an honours thesis on Coolangatta (Russell 1996) and a masters thesis on a number of resorts in Queensland (Keys 1985). The results of this thesis will help avoid the likelihood of decline in the Cairns area, only if the results, and the applicability of the model to the region, are accepted by those concerned.

1.5 Chapter Outlines

Chapter Two contains an overview of the literature associated with TALC. It starts by classifying tourism regions into three categories: areas which exhibit stability; those in decline; and districts which have declined but are showing signs of rejuvenation. The reasons for the stability, decline and/or rejuvenation of selected regions are then reviewed. The chapter then includes a discussion of some pre-Butler (1980) tourism work, and the concept of the Product Life Cycle is introduced. The latter concept leads into a thorough explanation of Butler's Tourism Area Life Cycle theory. Special attention is given to how the work of earlier researchers and authors was used by Butler to formulate his theory. Critics of Butler's work are discussed along with the work of those that supported and added to his work. Attention is paid to the themes and findings of existing TALC research, particularly the little research that has been done on Australian regions. Chapter Two finishes with a review of suggestions made by the various authors as to the directions further TALC research should take. This thesis is based to a large extent on these suggestions.

Details about the study area are provided in Chapter 3. Topics covered include the physical setting, including topography and geology, climate, flora and fauna and the Great Barrier Reef. The political boundaries used throughout the thesis are explained, so that the geographical limitations of the research are made clear from the start. The chapter also includes a brief history of the region and a socio-economic profile. The latter includes details on population, ethnicity, education, income, professional resources, and housing costs.

The research methodology used in the thesis is explained in Chapter 4. Data collection was divided into a number of specific steps. First, the alternatives for the "core" data were examined. The data considered most suitable was then plotted and a number of statistical techniques were used to see if it could be considered "S" shaped in accordance with Butler's (1980) theory. The next step was to establish the presence or otherwise and timing of Butler's criteria, some of Haywood's (1986) criteria and Cooper's (1990:63) "threats". Some statistical techniques, including regression, correlation and measures of central tendency were used at this stage. The most reliable data came from the questionnaire, which was designed to extract time series data from tourism related-businesses over a twenty-year period. The emphasis of the questionnaire was on rapid, subjective responses rather than obtaining historical data, which after a number of years may not be available or just too hard to find. The questionnaire results were checked against the results of a newspaper search over the same twenty-year period. Data for the period before that covered by the questionnaire and the newspaper search were obtained through an historical search which went back to the 1880s, not long after the first settlers arrived. The preferred software used for data analysis was SPSS, but in the event Microsoft Excel proved to be more useful, particularly for presentation purposes.

Chapter Five provides details about the results of the data analysis. A short history of early tourism in the region, from the beginning of the twentieth century to around 1976, is used to identify the earliest stages of the TALC. The year 1976 was selected because there is very little statistical data available prior to that date, but there is an ample collection of historical documents. Between 1976 and 1998, statistical data on tourist numbers, arrivals and departures, and accommodation takings exists. Some of this data was used to construct the basic "S" curve. The curve, the newspaper search results, the questionnaire results and some existing statistical data, were then analysed according to the methodology described more fully in Chapter Four. The chapter finishes with a stage by stage analysis of the region, from the "Exploration" stage through to the end of the cycle.

The sixth chapter examines the implications of this research. There are also some suggestions for further research and how both industry and academia can use the results of this research. Importantly, there are some suggestions for the development of an easy-to-use commercial model.

2. Literature Review

2.1 Introduction

Tourism has existed since Roman times. Roads were good throughout the empire and peace was maintained, so consequently tourism in some regions was a thriving industry. Reasons for travel include pleasure, religion (pilgrimage), art, culture, war or business. After about 400 AD, following the gradual collapse of the Roman Empire, bandits, bears, wolves and bad roads, kept travel to a minimum and so there was little or no tourism until the end of the Dark Ages about 900 years later. The first groups of "tourists" after the Dark Ages were pilgrims to the Holy Land who came from all over Europe. After the pilgrims, tourism generally remained the province of the well-to-do until the mid-1800s, when the steam engine brought cheap train and ship travel to the ordinary working-class people of the newly industrialised nations. For the first time, these people were able to travel to holiday destinations which had hitherto been out of the reach of horse drawn vehicles. Entrepreneurs responded by building hotels, boarding houses and other infrastructure in coastal towns throughout countries such as the USA, England, Europe and Australia. The next big milestone in tourism came with the automobile and then in the 1970s and 1980s, an even bigger milestone occurred with the advent of affordable air travel. The latter brought long distance travel within reach of ordinary people, who could now travel across the world in the same time it used to take them to travel to a coastal resort on the same continent (Feifer 1986).

This chapter contains an examination of selected literature relevant to the concept of a resort (or destination area) life cycles. The latter is known as the Tourism Area Life Cycle (TALC) and it postulates that these regions go through specific, predictable stages (Butler 1980). The theory recognises that tourism areas can enjoy varying levels popularity at different times. Sometimes the changing fortunes of a region are related to a change in transport technology such as those discussed above, but often there are other causes. Some destinations, such as Rome, Jerusalem or Athens, however, remain popular *ad infinitum.* Others only last a short time and may, or may not become popular again through a process of rejuvenation.

2.2 Tourism Regions: Stability, Decline and Rejuvenation

Tourism regions can be classified broadly into three groups: regions of stability; regions that suffer a decline in tourism; and regions which have declined, but become popular again. Some of the more perennial locations may be areas of religious or cultural significance, have scenic beauty, or benefit from being close to a major market, such as a large metropolitan area. There are also regions that are situated *en route* to somewhere else such that there is a constant flow of traffic passing through. Other regions may contain a high proportion of holiday homes or time share units that serve to encourage their owners to frequent the area. On the other hand, there are resort regions that have become unfashionable and have experienced a drop in tourist numbers, leading to high rates of bankruptcy and unemployment, mortgage foreclosures and family breakdown. This section also contains discussion about resort areas that have experienced decline and have then managed to rejuvenate either through tourism or some other industry. Figure 2-1 shows some of the resorts in each of the three categories.

2.2.1 Tourism regions of long-term stability

The most prominent types of resorts in this category are those with religious and/or cultural significance and include Rome, Israel (ie. The Holy Land) and Athens. The former was a tourist destination during Roman times because it was the centre of the Empire. Subsequently, it became a cultural and religious centre and still is today. The city contains many of the most significant remains of the Roman civilisation, which are so important to modern European culture. Rome also houses the Vatican, containing the residence of the Pope, and the headquarters of the Roman Catholic Church.

There is little doubt that tourism numbers to Rome, or anywhere else for that matter, suffered a serious drop during the Dark Ages. During the Middle Ages, when Rome was in a very dilapidated state of repair due to centuries of neglect, tourism underwent a revival (Fridgen 1991: 9-11). In the fifteenth century, there were over one thousand lodging houses and inns in Rome, many of which were devoted to

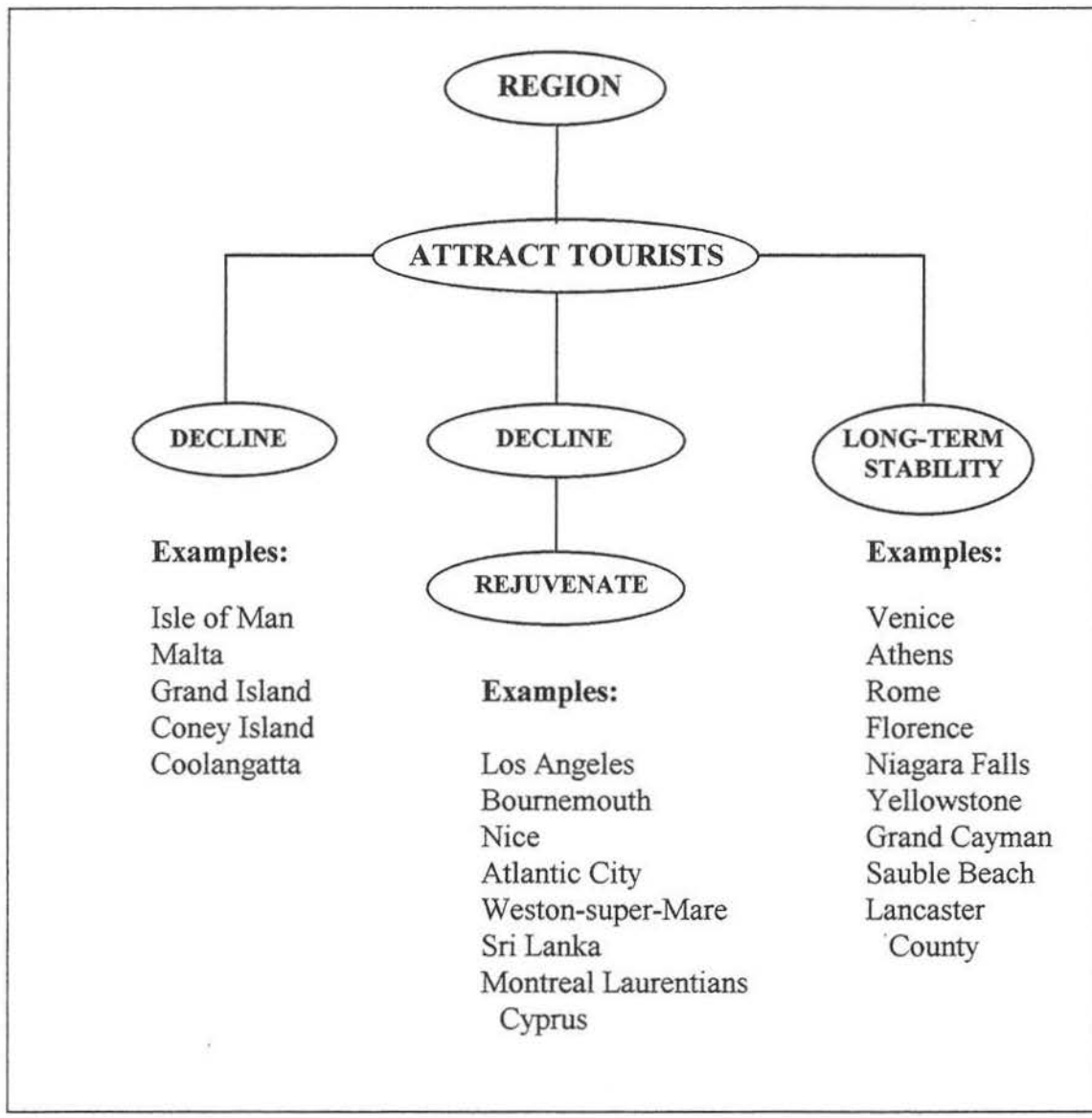


Figure 2-1: Examples of regions in the decline, rejuvenation and long-term stability categories.

Source: Author's Impression.

catering for specific nationalities. "Attractions" included a thousand or so churches and cathedrals boasting such things as Judas Iscariot's hanging rope, the stone that St Peter cried upon and many body parts which had belonged to people of religious significance. Other examples include "Aaron's rod, Moses' tablet, the Arc of the Covenant, John the Baptists hair-shirt, the Virgin's tunic, the magical five loaves and two fishes, the grey-bearded head of St Peter, the red-bearded head of St Paul, and, in an oil-filled, gem-encrusted crucifix, the umbilical cord and foreskin of Christ" (Feifer 1986:45). The latter two items where also at Reading Abbey in England, three French churches, one Belgium church and the Vernicle in Rome. Like modern tourism facilities, these "attractions" were rated, but in those days it was according to religious significance. To stand before the Vernicle was worth seven thousand years of indulgence for Romans, ten thousand for Italians, right up to fourteen thousand for an English pilgrim, the difference being because of the extra effort required to come the longer distance. Tourists also enjoyed passion plays and Papal processions complete with finery, gleaming swords and pure white horses (Feifer 1986:chap 2).

Venice and Florence also developed significant tourism industries during this period, and still continue to attract millions each year. Venice, the city of canals, was a rich commercial city, but had its fair share of religious attractions, just like Rome. The first ever all-inclusive package tour appeared in Venice, in the late 1400s. The instigator of the tours was one Agostino Contarini, who organised tours from Venice to the Holy Land and back again for the equivalent of £1,650 (English) at 1980 values (Feifer 1986:48-49). The tours included all transport, including shipping from Venice to Jaffa in the Holy Land, and return on a Venetian government licensed boat which had to undergo regular safety inspections, even though the accommodation was generally smelly and lice and vermin infested. The ships had around 250 ton cargo capacity and were powered by sail and galley slaves, who expected a tip from the passengers. Other items included in the price were all meals, guided tours throughout the Holy Land, fees, tolls and bribes (Feifer 1986:chap 2).

Once ashore in the Holy Land, pilgrims would have to go through customs and pay numerous fees which would vary frequently, usually upwards, and endure complex bureaucratic requirements. The associated expenses were paid by Contarini because it was an all-inclusive tour. Not surprisingly, he was eventually forced out of business and the package tour industry came to an abrupt end. The Pilgrims would then make their way to Jerusalem, another enduring centre of tourism. The entrance fee was one gold coin and once inside the pilgrim could visit more churches containing "attractions". Guided tours were also available to places of interest outside Jerusalem such as the Mount of Olives and the Garden of Gethsemane (Feifer 1986:chap 2).

The overland journey to the Holy Land from western European countries was subject to attack from marauding bandits. Even so, there was enough travel in 1357 for Sir John Mandeville to publish his classic best-seller *Travels,* which was translated into nine languages. The book became effectively equivalent to the modern travel guide. Tourism to the major, perennial destinations discussed so far in this section was encouraged by the church which gave pilgrims "mileage points" in terms of pardons from sins. A journey from Wales to Rome, for example, followed by 395 high masses was worth ninety-two years of pardon from sin. The destinations were also supported by a system of charitable hospices that catered for pilgrims *en route,* but they were generally very spartan and vermin infested. Travellers were given floor space on which to sleep and food to keep them going, at no charge. The better-off pilgrims contributed to the local economy by staying at inns that charged a modest amount and provided accommodation, food, alcohol, entertainment and prostitutes. Pilgrims usually travelled in informal groups for safety purposes, even though the church placed more virtue on a lone pilgrimage. The English Government also supported travel to these major religious destinations by issuing Pilgrim Shipper's Licences in 1394. By 1428 there were 925 ships in operation (Feifer 1986:chap 2). Passengers were also institutionalised by the government. From 1388 English pilgrims were required to carry travel permits, the forerunner of the modern passport (Gee, Choy and Makens 1984:20).

Another region with a strong, continuous tourism industry is Egypt. Even in Roman times, this country was an area of cultural and religious significance because of the presence of the Sphinx and the Pyramids. The Roman tourist could rent a boat and visit such places as Memphis, which had the shrine of Ptah, and the sacred bull of Apis, that would be taken out and paraded for tourists. Further travel up the Nile river would take him to Arsinoe with its sacred crocodiles and the shrine of the crocodile god Suchus. The Priests would feed the crocodile for the tourists. Finally, the Roman tourist could visit the Valley of Kings and the talking statue of Memnon at Thebes (Feifer 1986:chap 1).

Another factor contributing to the long-term stability of certain tourist regions (other than religious or cultural significance) is scenic beauty. Places of scenic significance such as Niagra Falls, the Lake District (UK), the Blue Mountains (NSW) and Yellowstone National Park (USA), have enjoyed steady and reasonably continuous popularity. A number of these destinations are examined in more detail later in this chapter, so further discussion at this stage is not necessary except to emphasise that scenic beauty, like religion and culture, is also a valid reason for continued visitation of a resort area. Loss of scenic beauty through over-visitation, however, can lead to regions losing their appeal.

The existence of holiday homes is a third factor contributing to long-term stability. An example of this category of destination are the so-called "cottage communities" in Canada that have evolved around lakes used for recreation purposes. Often these settlements were facilitated by the advent of the railway or a new road, which opened the area up for settlement (Helleiner 1983). These resort towns and areas are relatively resistant to rapid economic decline and have reasonably stable economies because the holiday makers have a financial investment in their accommodation. On the other hand, once they have reached carrying capacity, they are unlikely to grow greatly unless the type of tourism changes from cottage tourism to some other kind of tourism involving the use of hotels or resorts. According to a study of Sauble Beach, Ontario, by Strapp (1988:506), even if the number of holiday "cottagers" declines, it is compensated with an increase in

permanent residents as "cottagers" retire from work and take up permanent residence in their converted holiday home. The reduction of tourists is balanced by the increase in the permanent population. The effect on the local economy can, therefore, be expected to be positive. To make matters even more confusing when measuring the level of tourism activity, Strapp (1988:507) found that before people become cottagers, it is "common" that they are often ordinary tourists in the first place. Strapp's (1988:510) point is that in the progression from tourist, to cottager, to resident, tourism numbers would show a decline, but the actual economy would still be on the increase. He suggests using "person-days" of all residents with appropriate adjustments to allow for working residents, as a measure of the level of tourism activity.

Another factor aiding long-term stability in resort regions is the use of time share units to get potential holiday makers more financially involved in the region. Several people are brought together, usually through an estate agent or developer, to purchase the right to occupy a unit for two or three weeks per year each. In other words, for a set, up-front purchase fee, and an annual management fee, a person has the right to spend a set period every year at a particular resort without having to pay rent. This continues until the time share is sold or ownership ceases for some other reason such as death. As a result, the visitor is tied to that resort, which in turn has a guaranteed market. Time share units are now common throughout the world, as is evidenced by the numerous web sites such as "www.timesharevacations.com". Concentrations of time share units can be found in places like the Gold Coast and Hawaii.

Close proximity to a major market can also be an important factor in the survival of a resort area. Where a resort is close to a large metropolitan area, it has access to the "day tripper" market. Even if the resort becomes unfashionable as a place where holiday makers stay, it will still get some visitors purely because of its proximity to the city and may not suffer the serious decline experienced in some other places. The Gold Coast, which is less than one hours drive south of Brisbane along a new eight lane highway, is in a good position to utilise this market. Coney

Island, New York, survived as an entertainment area for day-trippers until it was eventually absorbed by the metropolitan area it served (Snow and Wright 1976). Other examples in Australia include the Sunshine Coast, north of Brisbane, the Barossa Valley, north of Adelaide, the Blue Mountains, south west of Sydney and the Dandenongs, north of Melbourne.

Some resorts are strategically positioned *en route* to another locality, and this relationship also contributes to the resort's long-term stability. Lancaster County in Pennsylvania, for example, has the advantage of being very accessible. The region is located within two hours drive of the large metropolitan areas of New York, Philadelphia, Washington DC, Baltimore and Harrisburg, and is on the way to the New Jersey sea shore, Independence Hill and the Gettysburg battlefield. Even so, there has to be a reason for people to stop for a while on the way through the region. Lancaster County has considerable natural beauty, as well as the cultural attraction of the Amish communities with their highly visible traditional lifestyles (Hovinen 1981).

2.2.2 Tourism regions which have declined

A limited number of resorts are documented as experiencing declining visitor numbers to the point where the region's economic base is under threat. Various authors have put forward reasons for declining visitor numbers in a general sense (Butler 1980; Cooper 1989; Mathieson and Wall 1982), but perhaps the most comprehensive is a list of "threats" put forward by Cooper (1990:63). Although the list was compiled for the so-called "cold water resorts" of England and Europe, most of the points are equally valid for any resort facing decline. Cooper identified the following factors (although this is not the complete list):

- Growth in low-status, low-spend visitors and day visitors
- Competition from holidays abroad
- Over dependence on long-holiday market
- Limited appeal to overseas visitors
- Highly seasonal destinations

- Outdated, poorly maintained accommodation and amenities
- Local opposition to tourism as resorts' residential role increases
- Lack of professional, experienced staff
- Local government reorganisation creating amalgams of resorts and diluting political power of resorts in larger authorities
- Demands for increased operational efficiency and entrepreneurial activity in local government
- Shortage of research data.

The Isle of Man is one resort which has had its decline in popularity studied. Initially, it became a popular resort as a result of increased accessibility due to steam-powered ships and trains linking the island with markets in England in the mid 1800s. Peak visitor numbers were reached around 1915 and remained relatively stable (despite minor ups and downs) until 1980. Since then, numbers have declined, and the resort region has entered a decline stage (Cooper and Jackson 1989:384). During its heyday, the island appealed to the mass tourism market. This market consisted of working-class people who, due to increased earnings and regular annual holidays, could afford to go there. By 1980, following the promotion of affordable air holidays in more exotic locations such as the Mediterranean, the decline of the island's tourism industry commenced. Unlike other resorts on the mainland, the island was not really a viable destination for day trippers, and so had to look at other alternatives to attract visitors, including attracting investors and financial service providers by making itself a tax haven. The island is also hampered because the low profitability of the tourism sector precludes, to a large extent, the repair and replacement of existing tourism infrastructure (private and public), much of which is now over 100 years old. Also, profitability is not helped by the short, ten week, tourism season which sees 47% of visitors arriving during July and August (Cooper and Jackson 1989:392).

Another resort region that has declined is Malta. Its initial development, like the Isle of Man, was facilitated by cheap, affordable air transport. Malta's eventual problem was that the island became heavily dependant on the British market. In

1980, 76% of tourists to Malta were British (Oglethorpe 1984:152). When the Maltese government attempted to remedy the situation by launching publicity campaigns in other markets, British tour operators responded by taking out mass bookings so that they would not be left with nowhere to send their clients. The result was an increase in the British share of Maltese market (Oglethorpe 1984:152). When the country eventually became unfashionable with British tourists, the industry had no alternative markets to turn to, and suffered decline as a result.

2.2.3 Rejuvenated tourism regions

The definition of the word rejuvenated in this context could mean that the area has returned to its old status as a thriving tourism centre or that the region has returned to its former level of economic activity, but dominated by another, or a combination of other, industries. In some cases, resort areas faced with declining popularity in their main product (tourism), will try to diversify into other areas of enterprise. The examples discussed below include Los Angeles, Bournemouth and Nice, which were all initially heavily dependent on a tourism industry that eventually declined (Soane 1993).

Los Angeles started life as a sea side resort town, and it never really completed its cycle sufficiently to be faced with decline. During the Cold War period, the region's economy diversified as the aviation, electronic and shipbuilding industries - supported by military contracts - grew rapidly. Labour was attracted by new employment opportunities and the availability of cheap mortgages from the Federal Housing Association. As a result, the population rose from about 4 million in 1950 to 7 million in 1980 (Soane 1993:255-257). A similar strategy was adopted by Nice, where industrial zones were established near the town to take advantage of the government-sponsored science industries in the nearby town of Sophia Antipolis. By the early 1990s, 19% of occupations in Nice were industrial, many connected in some way to the science industries (Soane 1993:271-272).

The Weston-super-Mare resort cycle as described by Brown (1985), differs slightly from Los Angeles and Nice and is on a much smaller scale (Soane 1993). As

tourism declined, the town's proximity to the rapidly expanding and prosperous city of Bristol has caused rapid suburbanisation and some industrial diversification. As a result the town experienced rapid population growth to over 55,000 in 1995. Initially, the town's tourism industry was greatly facilitated by the advent of steam power, both railways and steamer services, the former arriving in 1841. The improved transport technology had the effect of increasing the size of the market to the West Midlands, whereas previously it had centred around the nearby cities of Bath and Bristol. In latter years, however, cheap air transport has brought increasing competition from continental Europe (Brown 1985:367; Cooper and Jackson 1989).

Bournemouth, on the other hand, had a declining population during the same period, and by 1972 was facing further economic contraction and population reduction unless it found an alternative to the traditional holiday and retiree markets. In an effort to address the problem, the city built a very large conference centre and successfully encouraging financial and insurance companies to establish head offices in the town. The town also gained population in later years by making itself attractive and available as a dormitory area for some of the surrounding industrial towns such as Poole (Soane 1993:271-272).

Another well-documented rejuvenation is the case of Atlantic City, which initially grew to a busy sea side resort over fifteen years, following the establishing of railway connections with Philadelphia in 1856. The city was designed from the ground up as a tourist resort catering for pedestrian traffic which arrived by train from Philadelphia, being the major market. There was no road bridge to the island until 1870. The railway company, which was responsible for most of the development, did not encourage vacationers to bring their own transport but rather designed and built a sea front pedestrian promenade instead of the usual vehicular road. Patronage of Atlantic City was mainly working and middle-class people who could not possibly have come to the resort city without relatively cheap and fast rail transport (Stansfield 1978:239-245).

After World War I, as motor vehicles became more common and made other recreation areas accessible, Atlantic City started to attract a higher proportion of the lower economic groups and less of the upper middle class (Stansfield 1978:245). Attractions and leisure preferences changed to include more "mechanical amusements, cheap vaudeville theatres and garish entertainments which (so) thrilled the working-classes" (Stansfield 1978:245). At the same time the physical capital of the city deteriorated, and the high class hotels and restaurants lost patronage. As a result, they were not maintained as well as they otherwise would have been. As roads got better and faster, and as motor vehicle ownership became commonplace, people started not only to go to places that the railway did not reach, but also those who did visit Atlantic City could stay at a cheap hotel or motel on the mainland and drive to and from the resort on a daily basis (Stansfield 1978:246).

Between 1964 and 1969 Atlantic City lost about 6000 hotel and guest house rooms (mostly to demolition), and only gained 100 motel rooms. The remaining stock was becoming older. To add to the region's problems, the marine environment became seriously polluted by raw sewage from pleasure craft. The increase in the popularity of air traffic meant that people could fly to Florida for almost the same cost and in almost the same time (relatively) as they could go to Atlantic City (Stansfield 1978:247). At this point, Stansfield states that the resort could have changed its emphasis to its "historical and cultural uniqueness rather than its deteriorated, less-attractive physical site amenities" like some other resorts such as Cape May to the South. He goes on to say, however, that Atlantic City is not yet old enough to attract the attention of "preservationists and nostalgia buffs" and already so many of the sea front buildings are missing that he does not think that this approach is appropriate (Stansfield 1978:247).

In an attempt to revitalise the economy, local authorities tried to get the State to legalise gambling. Travel agents throughout the regions routinely organised tours to Las Vegas or the Bahamas so that residents could indulge in the past-time, and so it seemed reasonable to introduce casinos to selected New Jersey sites such as Atlantic City. Objections to the proposal were that it would attract organised crime

and the scheme was subsequently defeated in a referendum in 1974. A 1976 statewide ballot suggesting that gambling be restricted to Atlantic City was won, but Stansfield (1978:250) concluded that a casino would not revitalise the economy and that an "artificial amenity", presumably a Disney-style theme park was needed.

With the passage of time, gambling turned out to be a huge success. In the two decades following the granting of the first casino licence in 1978, $5 billion of investment was attracted to the city. Capital works included 12 casino hotels and there were extensive renovations to the historic boardwalk. Gambling also funded regulatory bodies and social services to the aged and disabled. As a result of these measures, rejuvenation occurred (Braunlich 1996).

Atlantic City is not the only resort region to have had more than one distinct life cycle. Sri Lanka has had a similar experience, but under much different circumstances. Initially, the Sri Lankan tourism industry benefited from improvements in air transport accessibility as a result of improvements to infrastructure. The international airport was built in the mid-1960s and the national airline, Air Lanka, was established in 1979. At the same time the government was, and still is, very active in the accommodation industry, conducting regular inspections for grading purposes and setting tariffs to be charged to tourists. Graded accommodation has increased from 770 rooms in 1966, to 4,600 in 1976 and 9,680 in 1991 (O'Hare and Barret Hazel 1993:438).

Another very important factor in the development of the Sri Lankan tourism industry was its geographical location in relation to air routes between Europe, Africa, the Far East, and Oceania (including Australasia). Following the example of Hong Kong, Singapore and Thailand, the country attracted stop-overs from scheduled flights between major capital cities at very little extra marginal cost to the traveller, making for a very low fare structure for long-haul flights to the country. By the time civil unrest broke out in the Northern province and around Jaffna in 1982, tourist numbers had reached 400,000 per year (O'Hare and Barret Hazel 1993:438).

Tourism was badly affected after the blowing up of an Air Lanka jet on the runway at Columbo airport by Tamil rebels in May 1986 and the invasion of the Northern province, and subsequent destruction of Jaffna (with the agreement of the Sri Lankan government) by the Indian army between July 1987 and the end of 1989. By 1986, occupancy rates were down to 31%, a situation which lasted for three years before any signs of improvement. To make matters worse, for the first three years of the decline, the building of accommodation establishments continued, although at a decreasing rate (O'Hare and Barret Hazel 1993:439).

With the return of relative political stability since 1989, the tourism industry recovered to the point where by 1992 it was almost back up to the level of the 1982 peak. One point worthy of mention, however, is that while the tourism industry was in recession, other industries, particularly textile manufacturing, had taken over the role of foreign currency earner. In 1982, tourism receipts contributed 14.4%, of the total value of exports when tourism numbers were around 400,000, but only 7.5% in 1991 when tourism numbers were around 320,000 (O'Hare and Barret Hazel 1993:441).

Another resort area that has had multiple cycles involving a rejuvenation process is the Montreal Laurentians which is "one of Canada's oldest and most intensively developed tourist and recreation regions" (Lundgren 1983:96). The significance of this area is that it has had three distinct cycles. The first two cycles declined to the point where buildings and plant were left abandoned and derelict. Like many other areas, the Montreal Laurentians were initially opened up by the introduction of the railway into the region in 1890. The region's tourism industry catered predominantly for the needs of the summer visitors. By the 1920s, trade had declined and plant and equipment was becoming old and dated. The second cycle was also based on rail transport initially, but later on catered for people using motor vehicles. The cycle involved the introduction of a winter ski season as well as the summer trade, thus giving the region a longer overall tourist season. This cycle lasted from the mid 1920s to about 1970. The current cycle involved very substantial investment in plant and equipment for the ski trade, and the convention and vacation

trade, and was still going strong at the time Lundgren (1983) published his work. A significant feature of Lundgren's (1983) work is that he linked the core/periphery model of tourism development with the tourist area life cycle concept (Cooper 1992).

2.3 Theorising about Tourism Regions.

The concept of a tourist area life cycle has evolved over a number of years and been contributed to by academics such as Christaller (1963), Cohen (1972), Snow and Wright (1976), Stansfield (1978), Butler (1980), Hovinen (1981), Haywood (1986), Cooper and Jackson (1989), Williams (1993). Some authors have combined concepts from other theories with resort life cycle theory. Williams, for example, used dependency/external control theory, put forward by Perez (1975) and Oglethorpe (1984). On the other hand, Butler (1980:6) utilised established product life cycle theory, as used in marketing, combined with Cohen's (1972) earlier work concerning the sociology of tourism. The product life cycle concept involves slow initial sales followed by a rapid increase in sales for a period of time, after which sales stabilise and then decline. Similarly, resort life cycle theory postulates that visitors will come to a resort area in small numbers at first, followed by rapidly increasing numbers until a peak is reached. Then comes a period of stability, followed by either decline or rejuvenation. Figure 2-2 summarises the chronological sequence of some of the work in this area, with the seminal works appearing in a heavier frame. Butler (1980) is placed in a central position to illustrate how he collected his ideas from a wide spectrum of theorists and to put them together in one theory.

The starting point in TALC theory is Walter Christaller, a German economic geographer, who was probably one of the earliest authors to write about the concept of a tourist resort cycle, even though it was only one paragraph in a paper about peripheral regions. He speculated that painters are the first people to discover a future resort area in that they seek out untouched unusual places to paint and the place then slowly develops into an artist colony. The artists are then followed by poets, cinema people and gourmets and the area becomes fashionable. Existing

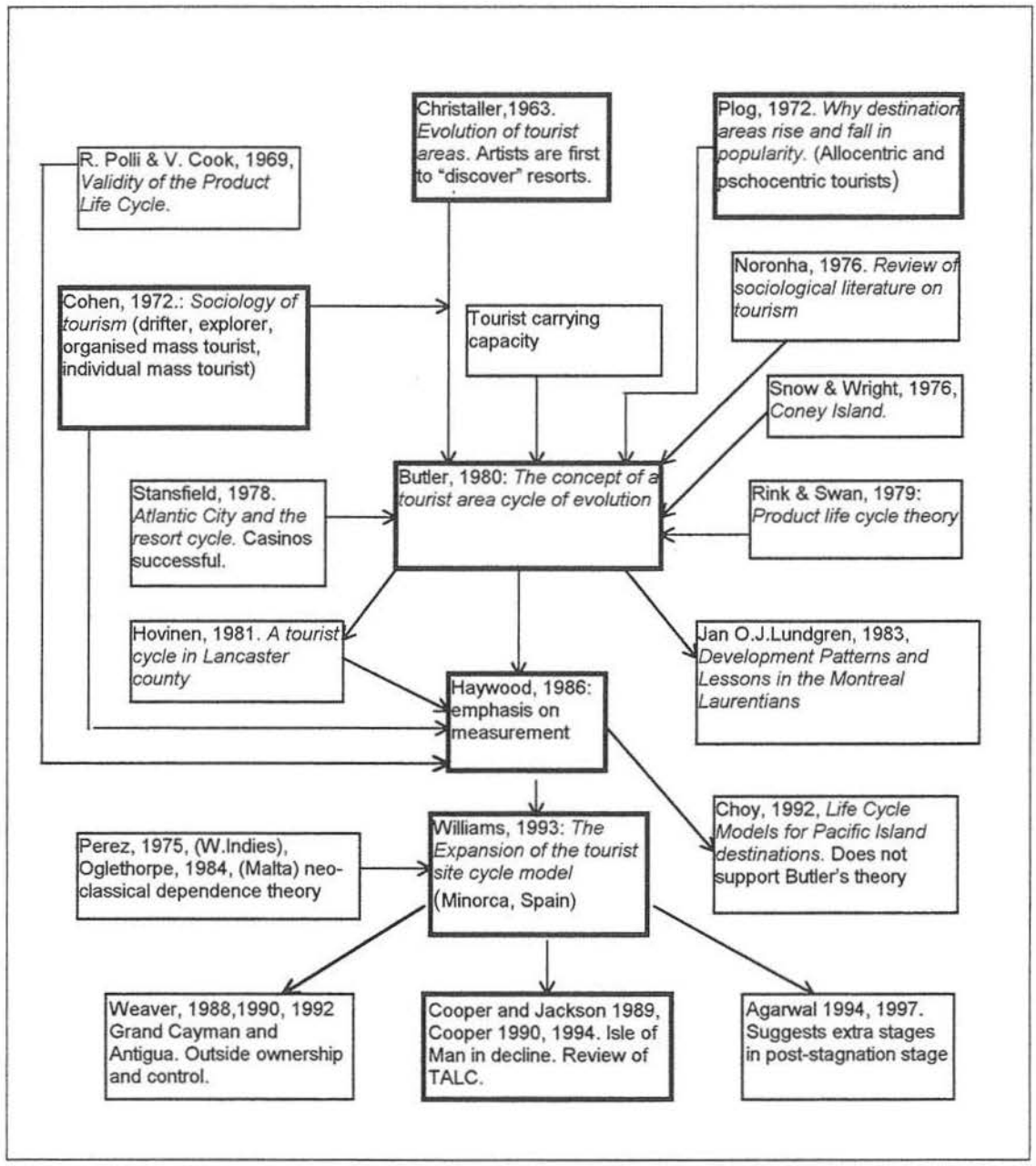


Figure 2-2: Relationships between theories, authors and the Tourism Resort Life Cycle Theory of Evolution.

Source: Author's Impression

buildings then become converted to accommodation for tourists and the artists leave for another peripheral region. More and more townspeople visit and package tours are arranged. The gourmets then move on because of the crowds and after a while the place goes out of fashion, and the crowds then also leave and go elsewhere (Christaller 1963:103). Whilst Christaller's approach to the concept of a resort cycle is subjective and almost incidental to his main topic of peripheral development it is significant in that subsequent resort cycle theorists such as Butler (1980:5), Haywood (1986:154) and others have cited and expanded on this research.

A decade later, Cohen (1972) categorised tourists into character types, and although his work was more to do with psychology than resort cycles, it is relevant here because Butler (1980) used Cohen's ideas in the formulation of his famous resort life cycle theory. Cohen identified four character types: drifter; explorer; individual mass tourist; and organised mass tourist.

The tourist who Cohen (1972) classified as the "drifter" ventures furthest away from the beaten track and from his or her own culture. This traveller is unwilling to be associated with the tourism industry, for this type regards the tourist experience as phoney. They have no itinerary, tend to take work when they need money, and live the way the host culture lives, sharing their shelter, food and habits (Cohen 1972:168). The late 1960s and early 1970s hippy travellers would come close to this description. These people became associated with the so-called "Hippy Trail" from India and Nepal to Europe. Before civil war made Afghanistan too unsafe for travel, and before the fundamentalist revolution in Iran, there was a steady stream of Cohen's (1972) drifters on this route. Butler (1980) associated this type of tourist with the initial stages of the tourist area cycle of evolution.

Cohen's (1972) "explorer" tourists are similar to the "drifter" in that they arrange their own trip and they like to get off the beaten track as much as possible. This type of person, however, likes to stay in more comfortable accommodation and looks for more reliable and better transport than the "drifter". They try to meet with locals as much as possible and try to learn their language (Cohen 1972:168). In

Butler's (1980) model these people would come after the "drifters", but still in the initial stages.

Cohen's (1972) "individual mass tourists" do not arrange their own trip, but use a tourist agency. They live in a "environmental bubble" of their home country and only venture outside this familiar territory occasionally. They differ from the organised mass tourist (discussed below) because they are not totally organised, do not travel in groups and the tour is not totally pre-planned (Cohen 1972:167-168). In Butler's (1980) model these people would be in the "development", "consolidation" and "stagnation" stages, but predominantly in the "consolidation" stage. In contrast, Cohen's (1972) "organised mass tourist" is the least adventurous of all, for they travel with groups of people from their own culture and stay within an "environmental bubble" of their culture and isolated from the local community. Local transport is in air-conditioned buses and boats, insulated from the outside environment. Accommodation is in air-conditioned hotels that are micro-environments of their home country. They arrive in an air-conditioned aeroplane at an air-conditioned airport. They are met by somebody who speaks their language and are provided with guides on all tours who not only speak the language but are often expatriates themselves. They are ushered into shops that are familiar with their needs and wants, and where the salespeople speak their language. The itinerary is all planned in advance and an all-inclusive fare is paid in the country of origin (Cohen 1972:167). These are the tourists that Butler (1980) puts at the end of his cycle, particularly in the "stagnation" stage, and to a lesser extent in the "consolidation" stage.

The significance of Cohen's (1972) work is that later resort cycle theorists acknowledged and built on his work in the formulation of their own theories. Butler (1980), for example, accepted Cohen's character types and associated each with a specific stage of his resort life cycle (Butler 1980:7). The main difference is that Cohen (1972) worked within a sociological paradigm, whereas Butler's paradigm was that of an economic geographer.

Like Cohen (1972), Plog's approach, first published in 1972 and expanded upon in later works, considered the character types of travellers, although that is where the similarity ends. Whereas Cohen used such terms as, "drifter", and "explorer", Plog used the term "allocentric", which refers to people who are outgoing and self confident and prefer to be "venturesome" and "exploring in their choice of travel destinations" (Plog 1991:64). These people like to experience new places and cultures, prefer to take long holidays away from other tourists, and spending time getting to know the host culture. Destinations are sought where they feel they are amongst the first tourists to discover the region, long before it gets spoiled by heavy tourism development. Plog used the term "allo" from the Latin root word for someone whose interests are rich and varied. The word "centric" refers to the centring of personal interests. "Allocentric", therefore, literally means a person whose thoughts are centred on interests which are rich and varied (Plog 1991:65). Those people who tend towards being allocentric, but are not completely at that end of the spectrum, Plog called "near allocentric". Tourists at the other end of the spectrum were referred to by Plog as "psychocentric". These people equated to Cohen's (1972) "mass tourists" and like the familiar. They prefer destinations which are "tried and true" and with all the comforts of home. The word is a combination of the words "psyche", meaning "self", and "centric", meaning the centring of much of one's thoughts on the small problems of daily life (Plog 1991:64). Between the two extremes of allocentric and psychocentric, Plog put the "mid-centrics" with a distribution roughly described in Figure 2-3.

The significance of Plog's (1991) work is that it describes a tourism cycle, not so much in terms of the resort itself, or the people who run the resort, but in terms of the tourists themselves. The reason for this approach was his concern with airline marketing and he needed to identify a target market. The best way was to identify the character traits and interest patterns of the various market segments so that advertising campaigns could be designed accordingly. His findings were based on a number of telephone surveys involving 1,600 respondents (Plog 1991).

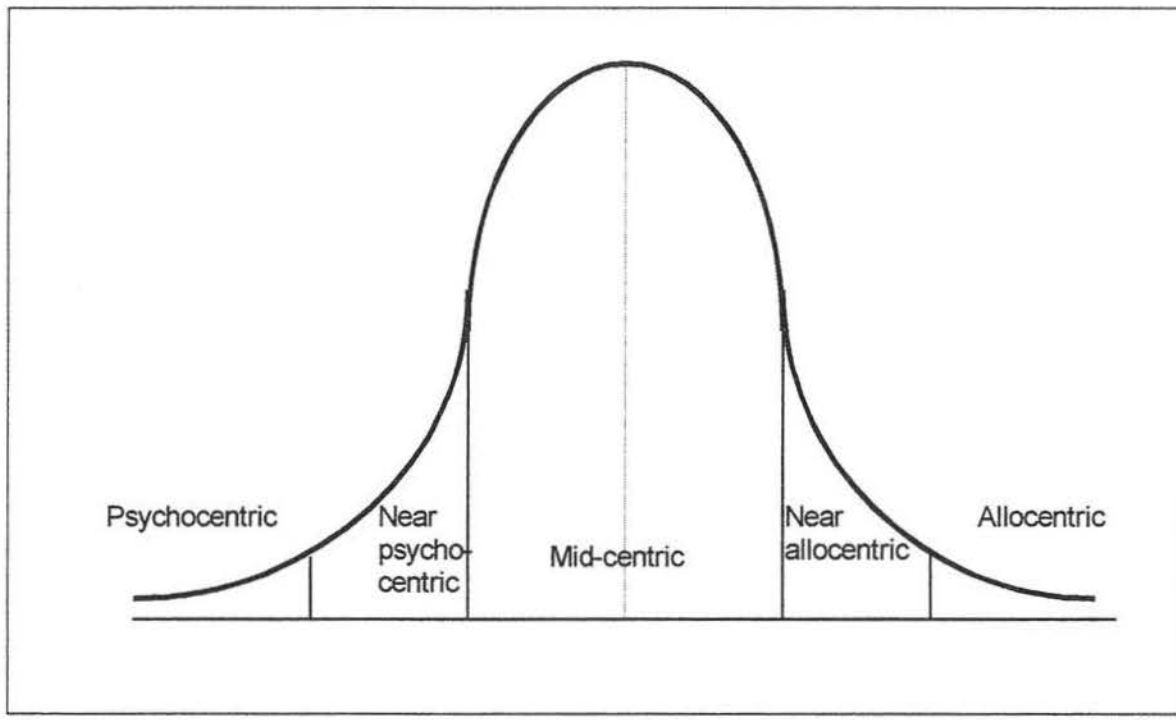


Figure 2-3: Plog's distribution of psychological segments

Source: Plog, S. 1991. "Why People Travel and Why They Don't: The Concept of Allocentrism and Psychocentrism." pp. 59-74 in *Leisure Travel: Making It a Growth Market...Again!* New York: John Wiley & Sons, Inc. p. 68.

Yet another approach was taken by Doxey (1975), whose work stemmed from two resort region studies, one on Barbados and the other on Niagra-on-the-lake (Doxey and Associates 1971; Doxey and Associates 1974). Both studies confirmed the hypothesis that there were "reciprocating impacts" between tourist and residents which can be measured as varying degrees of "irritations" (Doxey 1975:195). At first glance, this work would not seem to be relevant to resort life cycle theory. The study, however, is an accepted contribution because it is an early attempt to show that there is a cycle involved in tourist/resident relations in a resort area. The concept of this changing relationship was later used by Butler (1980) as one of criteria for resort life cycle stage identification.

Doxey developed an irritation index ("Irridex") consisting of four stages. Stage One is called "Euphoria" and it is associated with the early stages of the development of the tourism in a particular location. Visitors and investors are welcome, but at the same time there is little planning or control exercised (Doxey 1975:195). Stage Two is called "Apathy". During this period tourists are taken for granted and relations between the two tend to be formal. Doxey states that most planning is concerned with marketing (Doxey 1975:195). Stage Three is "Annoyance" and this phase occurs as saturation points are reached. Residents start to question the presence of tourists and the need for a tourism industry but authorities are concerned with increasing the level of infrastructure in the region (Doxey 1975:195). Stage Four is called "Antagonism" and refers to a period when irritations against tourists are overtly expressed both physically and verbally, while planning consists of how to increase the level of promotion of the region to overcome any negative image being created by the antagonism (Doxey 1975:195).

Doxey (1975) used surveys to obtain a wide spectrum of economic, social, cultural, environmental and psychological variables which were weighted according to importance. Methodology was then developed to arrive at conclusions regarding the level of irritation. The basic methodology of the first study (Barbados) was to test the many impressionistic views of tourism. The conclusions mostly confirmed that the impact of tourism was generally detrimental "as it tended to be an extension of

the slave-plantation syndrome". The latter was a reference to the poor treatment of the African slaves by the plantation owners in the early days of colonisation and the perceived poor treatment of modern Barbadians by tourist operators (Doxey 1975:195).

Doxey (1975) then goes into some detail to explain his methodology which consisted of three phases. Phase One is "Problem Identification" and refers to the selection of the area for study. The basic criterion is that the area has to be undergoing some structural change in connection with its tourism industry. The region has to be entering the industry for the first time or going through an expansionary stage. Doxey suggests a large amount of pilot fieldwork is necessary at this stage. Phase Two involves the research procedures and is sub-divided into background research, observational research, sample surveys and selection of the research personnel. Phase Three is the data analysis and interpretation stage which Doxey found difficult because of the open-ended nature of the questions in the questionnaires. Doxey avoided the use of computers for this reason. To increase the degree of reliability, however, he suggested the use of dual measurements. For future studies, Doxey suggested a more scientific approach using multivariate statistical procedures for measuring the distance between the "ideal tourist" or "the ideal type of industry" and the empirical evidence (Doxey 1975:195).

Doxey (1975) concluded that irritants do exist and that they depended on the degree of compatibility between the residents and the "outsiders". Compatibility was determined by sheer numbers of visitors as well as racial, cultural and nationality characteristics, although to a lesser extent. Unless the desires and wishes of both visitors and residents were taken into account at the planning stage, irritation levels would continue to rise with "long term disastrous effects" to the total environment of the tourist area, and to the tourism industry (Doxey 1975:195).

Another work which appeared to influence Butler's 1980 model was a case study describing the life cycle of Coney Island Resort (Snow and Wright 1976). Despite its name, the "island" is actually a peninsula located close to New York City

and is situated on what was originally a sand bar. Snow and Wright (1976) divide the resort life cycle into the following stages:

1. the Beach Era, 1829-1875;
2. the Hotel and Midway Era, 1876-1896;
3. the Enclosed Amusement Park Era, 1897-1910; and
4. 1911 to 1976, a long period of increasing crowds and eventual decline (Snow and Wright 1976:964).

As the title of the first stage suggests, visitors came to the region to enjoy the beach and the sea air. By the 1850s there were a number of hotels and from the mid 1860s there was primitive public transport to the Island. Some very large and lavish hotels with their own railway connections were built during the second era and visitor numbers increased rapidly. By this time the resort catered for all classes of people, including the criminal and prostitution element. The third stage heralded the building of three fully enclosed, family oriented (and slightly educational) amusement parks, by 1904. Coney Island started to become famous for the rather tactile and sensory experience that was consistent with amusement parks and mechanised leisure in general (Snow and Wright 1976:968). Visitor numbers at the resort peaked around 1910 (Snow and Wright 1976:968). The arrival of the New York subway system in 1920, however, meant that day trippers could visit for the cost of a subway ticket and numbers started to pick up again, but this time with low spending day trippers. By 1970, the resort was just another part of the New York metropolitan area and had undergone a rapid decline as a resort destination in its own right (Snow and Wright 1976:968).

2.3.1 Life-cycle Theory: Its Origins, and Use in Other Disciplines

Life-cycle theory has its origins in biology. The human life-cycle, for example, includes birth, adolescence, middle age/maturity and death (Ayers and Steger 1985). The concept was adopted by product researchers in an effort to explain the process of growth, plateau and decline observed in product sales and profit levels

(Birou, Fawcett, and Gregory 1997:1). The resulting theory, the product life-cycle (PLC), was originally developed as a marketing tool to facilitate the coordination of marketing strategies appropriate to each stage (Birou, Fawcett, and Gregory 1997:1). The first person to identify the existence of a PLC was Berenson in 1967, however, a 1977 study by Fox and Rink developed a list of purchasing operations using the theory as a basis. Fox and Rink also considered the model for use as a strategic planning tool in much the same way that this thesis looks at TALC (Berenson 1967; Fox and Rink 1977).

The stages and characteristics of the PLC vary according to the author, however, a typical cycle consists of five stages, "Design", "Introduction", Growth", "Maturity" and "Decline". The "Design" stage involves the development and test marketing of the product or service. There are also research and development expenses and the preparation of a marketing plan. The "Introduction" stage is characterised by low sales and profits, exposure to attack from competitors, few distributors, inexperienced staff, product debugging and heavy promotion expenditure. The "Growth" stage is marked by increased sales of more than one percent monthly. During this phase there are substantial profits, many more distributors, manufacturing overtime and the addition of new product lines stage (Birou, Fawcett, and Gregory 1997:9).

The market success of a new product critically depends on the marketing strategy adopted during the introductory stage of its PLC. Different strategies can then be used during subsequent stages. There is also evidence to suggest that marketing strategies vary in relation to the financial leverage of the company during each phase of the cycle. Companies which are more highly geared (a higher debt to equity ratio) are likely to be more aggressive in the market, which may lead to a reduction in the price of the product (Reisinger 2000).

The PLC has been associated with a single product, for example a particular model of motor vehicle, or the whole market for a particular type of product, say, Video Cassette Recorders. Applied to the latter, there is evidence to suggest that the

survival of firms can be affected by the stage at which they enter the product market. Early entrants enjoy a higher survival rate than entrants in later stages. Changes in technological activity and competitive intensity also affect the survival rate of firms. (Agarwal 1997).

Life-cycle theory has also been applied to industries. Company exit, entry, survival, innovation and structure has been studied in relation to the industry life-cycle (Klepper 1997). Ayers (1997) likened this application of life-cycle theory to the so-called "Kuznets curve" which relates to the growth of industrial sectors and strongly suggests an aging phenomenon. The author questions whether the life-cycle analogy is sufficiently general to constitute a set of stylised facts around which a theory could be developed, a situation familiar to TALC researchers. Research by Audretsch and Feldman (1995) suggests that innovation, which occurs during the early stages of the industry life-cycle, plays a more important role than geographic location. Traditional industry formation theory favours the latter.

Work has also been conducted on the Environmental PLC which focuses on the environmental impact of a company or industry at different stages of its life-cycle. Some work focuses on environmental impacts associated with a specific technology over the life of the industry or company. A more complex and sophisticated approach, however, involves the optimisation of materials accounting and operations research techniques in order to assess environmental impacts during the life-cycle (Weaver et al. 1997). The latter acknowledges the roll of accounting in the choice of production technology, investment priorities, industrial structure and international trade patterns.

Perhaps one of the more common uses of life-cycle theory is as a costing technique applied to plant, machinery and other product development expenses. The first stage includes acquisition costs such as planning, installation and start-up of new equipment. The second stage consists of depreciation, maintenance and repairs and the third stage involves increasing maintenance and repairs and eventual scrapping of the equipment. Labour costs have likewise been viewed using the life-

cycle paradigm. The first stage involves the cost of recruiting, introduction and training of new employees. The second phase consists of wages and labour-related over-heads and the third stage involves additional costs for absenteeism, rehabilitation and pensions as the employee ages. By analysing costs of both labour and capital in this way, in more accurate picture of production costs is calculated (Dahlen and Bolmsjo 1996).

Hill (1996) postulates a life-cycle based, deterministic model to calculate production company stock replenishment schedules. Changing demand patterns associated with various stages of the PLC are used to determine stock replenishment schedules which minimise the total discounted cost of batch set-up and stock holding. The latter costs are usually associated with interest or opportunity costs of capital tied up in stock plus any rent or the opportunity costs of rent on the space taken up by the stock.

Finally, a number of authors have suggested the use of the PLC as a financial management tool including Gup et al. (1996) and Rink et al. (1999). The latter combine of a number of PLC models and theories to form a more integrated and effective tool for financial management called the PLC-FS model. The "FS" stands for financial strategies, of which 126 are included in the model. The PLC-FS consists of five stages, pioneering, introduction, growth, maturity and decline. Financial strategies are arranged according to 14 intra-departmental, intra-company and external financial relationships. The latter includes investment strategies, capital budgeting, financing, capital structure, working capital and financial structure.

Butler (1980:6) used the concept of the product life cycle in the formulation of his theory, but does not cite any specific work. The concept, however, was discussed in an influential work by David Rink and John Swan (1979) a year before Butler produced his seminal work. Rink and Swan discussed a number of product life cycle curves, such as "cycle-recycle", "classical", (similar to the shape adopted by Butler (1980)) and the "growth-decline-plateau" (Rink and Swan 1979:222). Subsequent authors in the area of tourism resort life cycles, such as Haywood (1986)

and Williams (1993) who are discussed below, cite a number of other product life cycle models as being influential in their work on tourist resort life cycles.

The product life-cycle theorists, Polli and Cook (1969), cited by Haywood (1986), used percentage changes in samples of sales figures for health and personal care products, food products and cigarettes, as the basic statistic for their model. The figures were then adjusted for population growth and changes in general business activity, before constructing a frequency curve as shown in Figure 2-4. The resultant normal curve is then partitioned into a "growth stage", a "sustained maturity stage", a "decaying maturity stage" and a "decline" stage. Boundaries to each stage are assigned such that values lower than -0.5σ were considered to represent significant declines in real adjusted sales and values greater than $+0.5\sigma$ were considered to represent significant growth in real adjusted sales. Values in the range $\pm 0.5\sigma$ were labelled "mature". The actual boundaries in terms of percentage changes in sales can then be calculated from the standard deviation-based boundaries (Polli and Cook 1969:391). In order to differentiate between the introduction stage and the mature stages - both of which have very little growth - absolute values and percentage growth figures have to be used in conjunction with standard deviations. These vary according to the product categories.

Despite its highly theoretical nature, the product life cycle model is a useful conceptual tool for looking at life cycle theory in general, whether the product is a grocery item or a holiday destination. As Polli and Cook (1969) point out, at the very least, the concept leads us to expect a specific sequence of sales behaviour. Products can expect to go through a period of relatively limited acceptance and low sales followed by a period of sustained, rapid growth, which eventually starts to slow down as the product cycle matures. After a sustained period of maturity, growth rates of product sales can expect to become negative until the product has insufficient sales for profitability and is withdrawn from sale. Haywood (1986) suggested that the same technique be applied to calculate the stage boundaries in tourist resort life cycle theory.

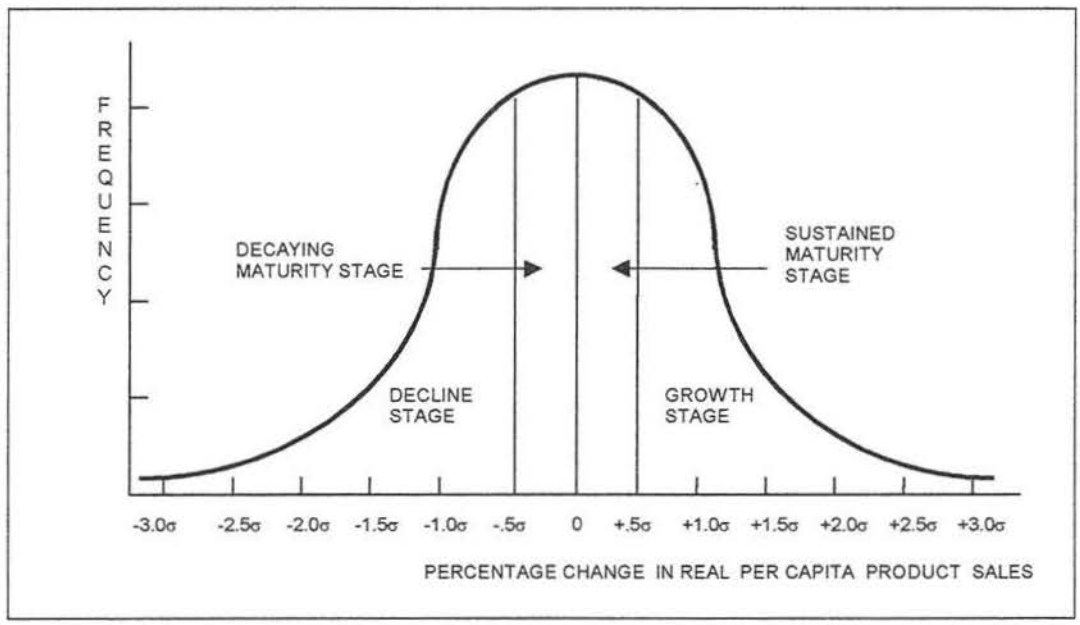


Figure 2-4: Identification of Product Life Cycles.

Source: Based on Polli, R. and V. Cook. 1969. "Validity of the Product Life Cycle." *The Journal of Business* 42(4), p. 390.

2.3.2 Butler's Tourist Area Cycle of Evolution

A main feature of Butler's (1980) model was his definition of specific stages of the resort life cycle (see Figure 2-5), and to these stages he assigned various descriptive criteria. The stages were labelled "exploration", "involvement", "development", "consolidation", "stagnation" and "decline" and/or "rejuvenation". During the "exploration" stage, tourism facilities do not exist, and so the visiting tourists have to share facilities with the locals. Contact with the locals is likely to be high and a positive experience, but the economic return to the region from tourism would be insignificant at this stage. In the "involvement" stage, locals are heavily involved in the provision of tourism facilities as the popularity of the area increases. Locals will start to advertise in order to attract visitors and contact between the two groups will remain high, affecting the lives of people involved in tourism. Pressure will start to be applied to government organisations to provide tourism infrastructure such as transport and local amenities likely to be used by the tourists (Butler 1980:8). A tourism "season" starts to define itself.

The next stage is called the "development" stage, during which heavy advertising of tourism venues takes place. Local ownership and control declines and is superseded by external (domestic or overseas) owned and controlled facilities, particularly in the area of accommodation. At this stage there is loss of control due to external ownership and importation of managerial expertise as well as a leakage of money to people outside the area. This leakage of money could be, for example, to tour companies which operate from capital cities, where they have access to markets, information, finance, lobby and legal services. This phenomenon is often referred to as a "centre-periphery conflict" (Keller 1987:20). At the same time, local attractions are marketed specifically, but these are also supplemented more and more by artificial attractions. The landscape starts to change, particularly in terms of new development and buildings. At this stage, some local people start to object to these changes. Regional authorities will become involved in planning and the provision of facilities, and again, this process may not suit all locals. During peak periods, the number of tourists may start to exceed the local population and the use of imported

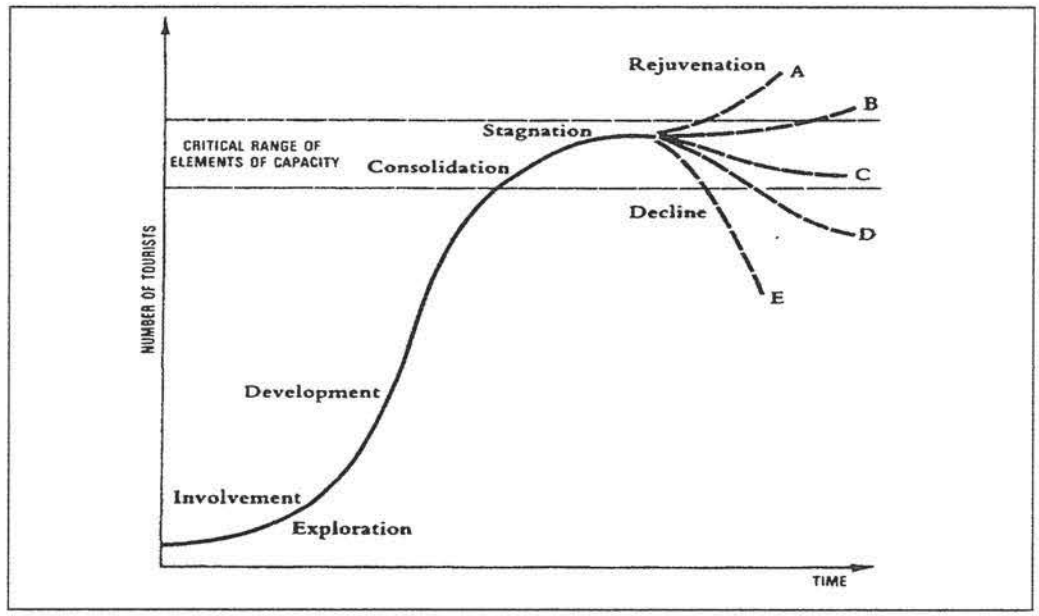


Figure 2-5: Hypothetical Evolution of a Tourist Area.

Source: Butler, R. W. 1980. "The Concept of a Tourism Area Life Cycle of Evolution: Implications for Management of Resources." *The Canadian Geographer* 24(1), p. 8.

labour will commence. Auxiliary industries such as laundries will also be set up to service the tourism industry (Butler 1980:8).

Following the rapid growth of the "development" stage, Butler (1980) postulated a "consolidation" stage, during which the rate of increase in visitor numbers declines. He also said that the total number of visitors will exceed local residents and that the bulk of the economy is tied to tourism. Despite the reliance on tourism, a significant proportion of local people, particularly those not involved in the tourism industry, will resent tourists. The industry responds to the decline in the growth rate by wide-ranging advertising campaigns and efforts to extend the tourism season and market area. Butler also states that resort cities will have well defined recreational business districts (RBDs) and possibly also facilities and infrastructure starting to show signs of age or of a "second rate" standard (Butler 1980:8).

Butler's (1980) fifth stage, known as the "stagnation" stage, is when "peak visitor numbers have been reached and capacity levels exceeded for many variables resulting in environmental, social and economic problems" (Butler 1980: 9). The region is well known and well established, but no longer fashionable. As a result, there will be some diversification into conventions and conferences in order to maintain visitor numbers. There will be a large number of manufactured attractions which may start to outnumber the natural and cultural attractions that made the area popular in the first place. The older properties will change hands frequently, although some new developments may still occur, but on the periphery of the original tourist area. Butler also says that the type of tourists will change to the organised mass tourism market (Butler 1980:9).

During the final stage, the area will either decline or be rejuvenated. In the "decline" stage there will be an inability to maintain market share. People will not wish to holiday in the area, but will use the region for day trips if it is accessible to large numbers of people such as the Gold Coast just south of Brisbane and Coney Island, New York. Butler (1980) also stated that during this stage, property turnover will be high and previously tourism related structures will get converted to non-

tourism uses as the economy switches to other areas. Local people will become more involved in tourism because they are able to buy in at very depressed prices due to the decline in tourism. Non-tourism uses for buildings include retirement centres, apartment buildings and offices, since the tourism attractions also attract permanent residents. In the end, the tourism industry offers a very low level of facilities, or dies completely (Butler 1980:9).

Instead of the "decline" stage, it is possible that the region can go through a process of "rejuvenation", but this requires a complete change in the attractions on which the resort is based. Butler (1980) discusses two ways that rejuvenation can be achieved: first, using man-made attractions such as casinos (although this is not much good if all the other competing areas follow suit); and second taking advantage of previously untapped natural resources. Examples of the latter are Aviemore in Scotland, where a winter ski resort was developed to supplement the summer tourist season. Other special interest groups could be catered for such as cycling, mountain biking, diving or fishing. Butler does admit that it is possible that some regions could have a "timeless" attraction that does not decline, such as Niagra Falls or some artificial attractions such as Disneyland which is constantly adding to its attractions in order to cater for "contemporary preferences" (Butler 1980:10).

2.3.3 Implications of Butler's Model

Whilst the model appears disarmingly simple, it assembles much of the earlier work discussed so far in this chapter. There are, however, certain implications, not the least of which is that resort regions can have a finite life span and can decline given certain circumstances, a fact which may contradict the beliefs, hopes and wishes of local entrepreneurs, particularly developers. Keys (1985:50) made the point that "the [TALC] concept ... contradicts the optimistic belief in the unlimited growth potential for tourism". The implication is that there is some degree of inevitability that there will be structural unemployment, as well as social and spatial adjustment, as the rapid growth stage gives way to more sustained tourism activity. People involved in building and development will have to change to tourism or some other, more appropriate occupation, if they want to remain living and

working in the same locality. There is also the related issue of family mobility such as the need for permanence of teenage children at high school and partners with careers. Also, there is the very significant problem of financial investment by local people and others in construction developments which may end up sending them bankrupt. To summarise this point, whilst the concept of a resort life cycle may be readily acceptable in an abstract, academic sense, it is very difficult to accept and forecast from the point of view of the people who are involved "at the coal face", until they are actually affected, usually to their own detriment.

By implication, once the concept of a resort life cycle is accepted by the people involved in the decision making processes, then the "decline" stage may be avoidable given appropriate decisions and action. Identification of these "appropriate decisions and actions" is an important part of this thesis, and is discussed at various points throughout the analysis. At this stage, however, it is possible to say that rejuvenated growth and development can be assisted by more conservative resource management and adjustments to carrying capacity, where this is possible, allowing continuing, but slower growth and a more sustainable rate of visitation (Keys 1985:50).

2.4 Testing Butler's Model.

Butler's work created more academic interest than any of the preceding work done in the area (see Table 2-1), perhaps because its simplicity appeared to give it a much wider application and relevance (Cooper 1994:342). At the same time, the theory has been criticised on numerous occasions because its simplicity makes it difficult to define boundaries between stages and because it is vague and imprecise in its application (Haywood 1986; Agarwal 1994;1997; Johnson and Snepenger 1993). Tourist carrying capacity, for example, which is one of the concepts used by Butler (1980), is most likely different, depending on what is being examined. Physical tourist carrying capacity, (eg. accommodation), environmental (reef, rainforest) and psychological capacities (resident and tourist attitudes) will all vary. Cooper (1994:344) points out that carrying capacity will also vary with "crowd tolerant visitors" at peak season and less "crowd tolerant" visitors in the off-season.

Table 2-1: Summary of major Tourism Life Cycle Studies following Butler's Model.

Author Date	**Region**	**Aspect tested/method/ Special emphasis**	**Results**
Hovinen 1981	Lancaster County	Butler's theory in total. Uses visitor numbers, otherwise a perceptual/historical approach	Substantially consistent with model. No sign of a decline in region.
Helleiner 1983	Loon Lake, Ontario	Traces the growth of what is a holiday cottage community from before WW I to the early 1980s.	Not a TALC study but focus is on the general evolution of the resort area.
Oglethorpe 1984	Malta	Uses visitor numbers, number of beds, hotels and % foreign ownership. Emphasises dependency on foreign tour operators	Accepts relevance of TALC and makes the point that dependency has led to rapid decline in the tourism industry.
Brown 1985	Weston-super-mare	Historical account, perceptive approach	Rejuvenation attempted
Meyer-Arendt 1985	Grand island Louisiana	Emphasis on cultural processes and environmental degradation. Uses building activity, maps at 5 different stages visitor-days, & capacity	Strong support for TALC which Indicates onset of "decline" stage
Butler 1985	Scottish Highlands	Historical account from early 1700s to early 1800s. Emphasis on fashion, tastes and transportation improvements. Uses maps and historical evidence	Complies with TALC model
Keys 1985 (masters thesis)	Some Queensland resorts compared, with Noosa in depth	Comparative, cross-sectional study of a number of Queensland resorts using TALC as an analyse framework and a time series study of Noosa. Data used is from Australian Bureau of Statistics, Queensland Travel and Tourism Commission, press reports, interviews and observation.	The Noosa case substantially complies with Butler's model with some outstanding differences. The comparative study of the other resorts showed that they are at different stages of development.
Haywood 1986	Not region specific	Emphasis on making Butler's model useable by suggesting more rigid criteria & a method involving the use of standard deviation for stage identification	Concluded the TALC model was not sufficient *on its own* to use for planning and marketing purposes even with the proposed changes
Richardson 1986	Galveston & other urban water fronts	Emphasis on re-vitalisation of historic buildings and the use of product life cycle models as a tools for managing resort evolution. Uses tax receipts, employment, population and dollars spent on works	Using TALC theory, Galveston is in "decline" stage but it may be possible to rejuvenate using historic buildings as an attraction. Work is being done in the area.

Table 2.1: continued.

Wilkinson 1987	Caribbean Islands of Antigua, Aruba, St Lucia & US Virgin Isles	Focuses on the later stages of Butler's model and Lundberg's (1980) model	Essentially a comparative analysis which found a high level of compliance with both models. Other conclusions related to the tourism industry rather than the TALC model.
Keller 1987	Canada's NW Territories	Emphasis on importation of capital and management leading to possible dependence on non-locals. Leakage of tourism dollars back to core regions. Uses arrival types (business, fishing, sightseeing, education etc) and where from. Also uses staff turnover in tourism.	Does not question the applicability of TALC and concludes that no further development possible without large injection of outside capital
Strapp 1988	Sauble Beach, Ontario	Emphasis on the transition from a tourism resort to retirement centre as previous holiday makers buy holiday homes and then retire there. Uses visitor numbers.	Proposes using "average length of stay" to calculate "total-person-days" rather than visitor numbers to overcome the change of status of tourists who eventually become retirees.
Cooper & Jackson 1989	Isle of Man	Butler's theory in total. Visitor numbers and other tourist statistics going back 100 years	Exemplifies the utility of Butler's model, emphasising dependence on management decisions and resort quality. Also introduces some suggestions for rejuvenation of region
Cooper 1990	Isle of Man European "cold water resorts"	Uses passenger arrivals etc.	Most resorts in this category are in serious decline
Debbage 1990	Paradise Island, Bahamas	Combines the use of TALC with Markusen's (1985) "profit cycle" and the influence of oligopolistic tourist suppliers.	Concludes that Butler's model does not take into account organisational behaviour as the cycle matures (ie. mergers and acquisitions)
France 1991	Barbados	Mainly a perceptional approach but also uses visitor numbers, number of establishments, number of rooms, etc	The Island is split into different market segments which are at different stages in TALC. One area is in decline, another in still in the growth stages.
Weaver 1988 1990 1992	Grand Cayman and Antigua	All aspects of TALC but emphasis on outside ownership and control, particularly in Antigua. Grand Cayman has little outside ownership and control. Uses arrivals, cruise ship statistics. Emphasis also on planning. Uses arrival numbers, building, bed numbers and Tourist Board Budget	Found substantial compliance with Butler's model. Concluded outside ownership & control affected stability of cycle. Grand Cayman is planned and has low outside ownership and is stable but Antigua is unplanned with high degree of outside ownership and control and is in danger of decline. Referred to as a new type of plantation economy (dependency).

Table 2.1: continued.

Cooper 1992	Coastal Resorts	Talks about the three uses of TALC (as a conceptual framework, for forecasting and strategic planning) and then goes into detail about the strategic planning process.	Strategic planning process consists of: defining the mission statement; business portfolio analysis; and growth strategies. Also talks about types of growth strategies.
Ioannides 1992	Cyprus	All aspects but emphasised the role of government and dependence on foreign tour operators. Used visitor numbers, number of beds, type of accommodation, tourism receipts, tourist type, arrivals.	TALC used to make the point that govt is steering towards "consolidation" (intentionally) and that destinations follow a predictable cycle through identifiable stages.
Getz 1992	Niagra Falls	Examines carrying capacity and planning aspects. Uses historical data, existing statistical data, interviews, field observations, maps and questionnaires	"Exploration" and "involvement" stages correspond partly with Butler's model but there are many points of divergence and no dating of stages is possible. Niagra Falls appears to be in a long "maturity" stage similar to Lancaster County
Johnson & Snepenger 1993	Greater Yellow-stone region	Variables used are visitation trends, the growth of the service economy, host resident's perception of current tourism development and current biological indicators of the ecosystem.	Tourism in the region is more intricate than the TALC theory suggests and the region is at no specific stage of the cycle. The TALC concept incorporates alternatives for future directions within the Yellowstone region.
O'Hare and Barrett 1993	Sri Lanka	Considers the effect of the civil war on tourism using tourism numbers. Also discusses the effect of cheap airfares based on stop-overs in Sri Lanka	Accepts relevance of TALC and concludes that there have been two distinct cycles in the country, one before the civil war and one after.
Choy 1993	Pacific Island Destination s	All aspects of Butler's model, but only with reference to visitor numbers.	Very little compliance with Butler's model reported. "At best the model can be used after the fact as a diagnostic tool"
Williams 1993	Minorca, Spain	All aspects but emphasis on dependency theory through external ownership and control. An "expanded" model of 8 stages was suggested. Uses tourist numbers, employment, number of hotel rooms	High level of external ownership and control. Existing industries declined as tourism expanded. The region has yet to reach its peak
Wang and Godbey 1994	Lancaster, Poconos, America's Ind. Heritage Project (AIHP)	Emphasis on measuring growth in tourism activity and what is the ideal rate of growth to year 2000 using surveys and expert perceptions of future growth	AIHP is in the early stages of TALC. Lancaster is in the mature stages and Poconos is in decline

Table 2.1: continued.

Cooper 1994	Not applicable.	Overall review of the TALC body of knowledge to date	Found Butler's model to be a useful framework for analysis and stated that with every study the body of knowledge increases suggesting further research. He suggested some more criteria
Bianchi 1994	Not applicable	Compares TALC and a number of other theories and models.	TALC fails on many grounds and what is needed is a concept of tourism development which is integrated into a sociological framework.
Agarwal 1994	UK generally. The resort Cycle revisited	Discusses the usefulness of TALC for analysis and planning using anecdotal and perceptual methods.	Suggests that TALC be modified to include a "re-orientation" stage before "decline/rejuvenate". States that as it stands, TALC cannot be usefully applied.
Prosser 1995	Not applicable	TALC in general. Progress and prospects as well as some suggestions for future research	Finds that TALC is a handy framework for analysis
Oppermann 1995	Not applicable	Life cycle concept used to analyse the travel life cycle of individuals.	Successful application of general life cycle theory to individual's life-time travel patterns.
Harrison 1995	Swaziland	Used Butler's TALC as an "ideal" or "expected" model and analysed the difference between it and the situation in Swaziland.	The cycle in Swaziland consisted of "exploration", "inactivity", "transition", truncated development" and "decline & attempted rejuvenation"
Braunlich 1996	Atlantic City	Success of rejuvenation program using casinos. Statistics. include amounts invested, tax receipts, social services for the elderly, urban redevelopment.	TALC accepted as an appropriate framework for analysis. Atlantic City has successfully entered the "rejuvenation" stage.
Russel 1996	Coolang-atta	All aspects of Butler's model, uses visitor numbers & a perceptual/historical approach for the period of the resort's existence.	Found substantial compliance with the model. The region was found to be in the "decline" stage.
Meyer 1996	Waikiki	Emphasis on rejuvenation plans. Uses reports etc	Concludes that the area is entering the "decline" stage and suggests rejuvenation.
Agarwal 1997	Torbay region. (Torquay, Paignton and Brixham.)	Tests the validity and applicability of TALC. Justifies this work by stating that the universal applicability of TALC is not yet proven. Among other things, the author stresses the importance of the "unit of analysis".	The application of TALC is reasonably consistent with Butler's (1980) model except for the post "stagnation" stage which requires more research. The author assumes that the original model specifies that "decline" is inevitable (p72).
Prosser 1997	Gold Coast, Coffs Harbour (NSW)	Uses time series (census) population figures, employment in tourism, unemployment etc. Also relies on a perceptual approach.	Both regions are at different stages in TALC. Finds that TALC is a handy framework for analysis

Table 2.1: continued

Douglas 1997	Melanesia, (PNG, Solomons & Vanuatu)	Historical picture using Butler's model as a framework. Uses largely perceptual methods	Each country is at a different stage. A major influence is the colonial past of each country.
Tooman 1997	3 regions in the Greater Smoky Mountains	Emphasis on the long-term, from 1900 to present and socio-economic effects using unemployment and food stamp figures etc. Also looks at the number of "Mom & Dad" hotels and motels verses chain companies as an indicator.	Concludes that TALC can be used to avoid the negative impacts of tourism.
da Conceição Gonçalves, V. F. and P. M. R. Águas 1997	Algave, Portugal	Analysis using TALC with demand, supply, distribution and competitors within each stage. Fits a 3rd degree polynomial to overnight data	Identifies stages and links them to regional strategies (cause and affect). Concludes area should plan for a long period of stagnation and stabilisation.
Russell & Faulkner 1998	Coolang-atta	All aspects of Butler's model also use of visitor numbers & a perceptual/historical approach	Found substantial compliance with the model.
Priestley & Mundet 1998	Catalan Coast, Spain. (3 resort towns)	Assumes away the early stages of TALC and concentrates on the Post-stagnation stages in response to Agarwal's (1994) challenge that there is not enough work in this area.	All three resorts (Lloret de Mar, L,Estartit & Sitges) are in post-"stagnation" stage and have implemented "reconstruction" strategies in an attempt to rejuvenate. Uses hotel capacity as core data..
Oppermann 1998	No specific region	Main thrust is to attack Agarwal's (1997) article on Torbay. Says there has been too much testing of TALC	Finds Butler's model good but suggests that there should be more testing of other models and theories.
Agarwal 1998	No specific region	Defends her 1997 article against Oppermann's 1998 attack	States there is a need to apply TALC to different tourism products in a variety of contexts.
Knowles and Curtis 1999	European Mass Tourist Destinat-ions	Study of second generation (Mediterranean but mainly Spanish) resorts. Ultimately, there is no avoiding decline for these resorts.	The authors generally find that the TALC model is a good fit up to the post "stagnation" stages after which they postulate three new stages.

Consequently, the TALC model lacks empirical support regarding carrying capacity, although the majority of authors report, or imply significant compliance between the model and the real world (see Table 2-1).

In order to rectify the shortcomings in the TALC model, a number of academics have recommended modifications that make it more useable (Haywood 1986; Strapp 1988; Williams 1993, Choy 1992, Cooper 1994; Agarwal 1994;1997). The effect has been to make the model more applicable to the geographical area concerned, but less universally applicable. Consequently, researchers have tended to refer back to Butler's (1980) original theory rather than build on the modified models. In this sense, Butler's work represented a conceptual focus in time in that it gathered previous work into one theory that has since been used as a basis for much of the research in the area. Prosser (1997) observed:

> "..... despite its simplicity, the destination cycle continues to provide a useful reference point for formulating the kinds of research questions that will assist in improving our understanding of the dynamic processes influencing the evolution of tourist areas."

Prosser's (1997) point of view is by no means universal. Getz (1992) states emphatically that "the validity and the universality of the life-cycle model has not been proven, nor has its utility for tourism planning been demonstrated" (Getz 1992:752). Agarwal (1997:72) makes similar concluding remarks stating that, "in its present form, the model cannot be successfully applied to studying the process of adaptation and change that are currently occurring within [UK] coastal resorts". Choy (1992:31), writing on the results of research into Pacific Island destinations, states that "at best, [Butler's model] could be used as a diagnostic tool after the fact". Choy's assertion raises the question of usefulness for tourism planning purposes where there is a distinct need for a model which can accurately predict the future of resort regions for managerial, investment, local government area planners and other decision makers. There has been a tendency to expect Butler's model to perform that function, when clearly its usefulness is as a general "framework for research seeking

to enhance our understanding of tourism development processes and their implications" (Prosser, 1997:328). When these expectations are not realised, researchers have tended to criticise the model rather than their use of the model.

2.4.1 Chronological overview of existing TALC research

There are two main approaches used by TALC researchers. The first is a long-term perspective, and considers the whole cycle from the inception of the resort area to the present time. The second method, which is less common, uses a cross-sectional technique and usually is adopted when a number of resort regions need to be compared with each other. An example of the latter approach is found in Keys (1985), who compares 24 coastal resorts in Queensland from the Gold Coast in the south to Cairns in the north. Even this analysis is not strictly cross-sectional, because the author uses census data from two points in time which are five years apart. Keys uses this data, as well as some additional, subjective data to divide the resorts into seven groups. The position of each group is then identified on Butler's model (Keys 1985). In the same work, Keys also does a more in-depth, time-series analysis of the resort town of Noosa, which was also one of the resorts in his comparative analysis. Much of the remaining body of TALC research (see Table 2-1) falls into the time series category, and relates to the whole period of the respective resorts' existence.

Data used to test the various criteria comes from a wide variety of sources, ranging from statistics to newspaper articles and questionnaires using open-ended questions. Some of these sources are mentioned in Table 2-1. In the main, however, there is an overwhelming use of subjective assessments and reports taken from newspapers, books and local government documents. Such source material is particularly relied upon when the resort cycle covers a period during which not much statistical data is available, or the only available sources of information are subjective.

Table 2-1 lists most relevant works whereas this section makes mention of the more main research. The first major test case, a year after Butler published his theory, was by Hovinen (1981) on Lancaster County, Pennsylvania. Using five

decades of data, Hovinen concluded that while Butler's theory was reasonably consistent with the evidence, there were some major differences, mostly in connection with the absence of any sign of a "decline" stage. Close proximity to the large urban centres mentioned on page 20 was cited as the main reason for the major deviations from Butler's theory. Hovinen's (1981) work was followed by a study on the Maltese tourism industry by Oglethorpe (1984), which highlighted dependence on British tour operators, and a study of Grand Isle, Louisiana, by Meyer-Arendt (1985). The latter reported strong agreement with the model, but appeared to be based more on subjective interpretation of the evidence than statistical methodology. The study concluded that the island is now in the "decline" stage, a process which has been helped along by shoreline erosion and a decrease in overall attractiveness. Efforts to stabilise the naturally dynamic shoreline do not appear to have worked, although a large levee project was started in 1984 by the US Army, a year before the work was published. The project triggered a boom which saw a big condominium completed and plans approved to build a large residential canal estate and marina. What had threatened to be the "decline" stage looked as if it could now become a "rejuvenation" stage (Meyer-Arendt 1985:461-3).

The next significant study was by Haywood (1986), who put forward a number of specific suggestions to make Butler's model more "useable". The title of his paper; "Can the tourist-area life cycle be made operational?", indicated clearly that in his opinion, Butler's theory was not something which could be seriously used as an analysis or forecasting tool in its original form, particularly from a commercial point of view. Haywood proposed six major conceptual and measurement decisions that he considered necessary to make the model useable for analysis and forecasting purposes (see Section 2.4.2). Nobody appears to have yet taken up the challenge to empirically test Haywood's proposals, but the debate about Butler's original model went on. In 1986, Richardson used the model to look at the possibility of a rejuvenation plan for Galveston, while Keller (1987) applied the model to examine conflict between the interests of the resort area and the need to import skills and capital from outside using Canada's Northwest Territories. Keller's work was followed in 1989 by one of the most prolific authors on the subject, Liverpool

University's Chris Cooper[1], who wrote about the decline of the Isle of Man with co-author, Stephen Jackson. Cooper again wrote about the Isle of Man, along with other resorts in 1990. The main conclusions of his work exemplified the utility of TALC, while at the same time saying that the form of the cycle depended upon many extraneous factors, including management decisions and the intrinsic quality of the resort (Cooper, 1989).

Another prolific writer on the topic was David Weaver (1988; 1990; 1992), who wrote about the two vastly different Caribbean resorts of Grand Cayman and Antigua. Like Keller, his work gave emphasis to outside ownership and control, which is one of the criteria in Butler's "development" stage. On the whole, Weaver found evidence of substantial compliance with TALC. He placed particular emphasis on the point that in Grand Cayman, where outside ownership and control was not significant, the "decline" stage would not be likely to occur. The reverse was the case in Antigua. The next seminal work about TALC came from Dexter Choy (1992), who was one of the few academics to come out strongly against Butler's (1980) model. He reported that the Pacific island destinations of Hawaii, Tahiti, Guam, Fiji and some of the smaller places like Tonga and the Solomon Islands, did not comply with the TALC model at all for reasons which are elaborated below. In the same year, however, Dimitri Ioannides published a paper on Cyprus which did not even question the appropriateness of the model. Ioannides concluded that Cyprus was being steered by the government into Butler's "consolidation" stage by an emphasis on conventions, agrotourism, hill resort tourism and other small-scale, special interest tours, with the aim of avoiding the "stagnation" and "decline" stages (Ioannides 1992:727). In the following year, Mark Williams (1993) expanded on existing TALC theory by providing more specific criteria and eight stages instead of six. He then tested his model on the Spanish resort island of Minorca, with considerable success, particularly in relation to the existence of dependence on the part of the locals due to the high degree of outside investment.

[1] Prof. Cooper is, at the time of writing, at the Ipswich Campus of the University of Queensland.

In 1994, a PhD thesis was published by Ioannides on the tourism life cycle on Cyprus, again with emphasis on the role of government in guiding the development of tourism, not only in that country but in less developed countries (LDCs) generally. The study argued that LDC government involvement followed a sequential and predictable path from an early role as tourism promoters to the latter stages where governments became involved in lowering costs to individual businesses. On the other hand, lack of local government encouragement can be an important factor in the decline of a resort area. Bill Faulkner and Roslyn Russell argue that local government discouragement of tourism-related development has allowed the tourism industry at Coolangatta (Queensland) to fall behind neighbouring Surfer's Paradise. Their results indicated that Coolangatta, the oldest and most southerly resort on the Gold Coast, was in its "decline" stage (Russell 1996; Faulkner and Russell 1998). Although Faulkner and Russell, and most of the other authors discussed in this section found the TALC model to be a suitable vehicle for resort region analysis, not all authors agree.

2.4.2 Criticisms of Butler's Model and Suggestions for Improvements

In reviewing the various criticisms of Butler's (1980) theory, Cooper (1994: 342) mentioned that there is a tendency to focus on a "single sector product", rather than a multisector approach. Whilst it is true that there is often a concentration on a specific product, such as holiday/retirement homes at Sauble Beach, Ontario, the TALC concept, if used correctly, focuses on the total tourism based economy (Strapp 1988). Often, however, there is a perception that a study has concentrated on a particular sector because that sector was predominant and is offered as an explanation for its development (or lack of). Cooper also points out that there has been little attempt to use TALC in conjunction with other theories except for Lundgren (1982) who used core/periphery theory as well as TALC to explain the growth of tourism (Cooper 1994:342). Debbage (1990) also used TALC in combination with another theory, combining Markusen's (1985) "profit Cycle" with TALC in relation to the oligopolistic control of the major suppliers of tourists to Paradise Island, Bahamas.

Another common criticism of the theory is that some authors assume incorrectly that the "S" shaped logistic curve is the independent variable and that all the other variables can be predicted from the curve itself (Cooper 1994: 344). One such author is Choy (1992), who argued that the Butler's life cycle model does not apply to most destinations in the South Pacific. Choy's basic approach is to look at visitor numbers over time and try to fit the "S" curve to his time series data. From Choy's (1992) journal article it does not appear as if he is using many of Butler's (1980) criteria to determine the stages. Cooper (1992) correctly argues that the data from which the "S" curve is constructed cannot be the independent variable because it depends heavily on management decisions and external forces. The data is, therefore, the dependent variable and as such "provides a useful explanation of the forces that drive it" (Cooper, 1992:344). Butler's (1980) other criteria, such as the attitude of locals to tourists and the existence of economic problems, are also dependent variables, but they are not used to form the "S" curve. Rather, they are used to locate the stage of the tourism region on the "S" curve.

Haywood (1986), Getz (1992) and Choy (1993), all state that TALC is too vague and that there is, therefore, a danger of misinterpretation which could lead to inappropriate reactions. Choy (1993) for example, argues that the theory does not take into account profits and competition, and because of these factors it is only good for hindsight analysis. Cooper (1994:344) invalidates this criticism by pointing out that profit is a factor in the cycle in that it will "peak during the rapid growth stage and problems of competition increase as the cycle progresses".

The first set of suggestions to improve Butler's (1980) model came from Haywood (1986), who believed that the theory required that the unit of analysis be defined very clearly. Is the subject of the study to include all hotels or just certain size hotels? Should camp grounds and hostels be included, what are the boundaries regarding the types of businesses and what are the geographical boundaries? While there is no doubt that the unit of analysis is a most crucial part of making the life cycle theory operational, Haywood makes no specific recommendations, saying that decisions should be based on the need and intended use of the information. In reality,

given the scarcity of regional data in most places, the unit of analysis would be based on what data is available. Haywood also states that consideration should be given to the relationships between the various "levels" of life-cycle, the "levels" being say the difference between camp grounds and 5-star hotels (Haywood 1986:155). Consideration of the relationships between the "levels" would, however, be beyond the scope of TALC. The purpose of TALC is to examine the tourism economy as a whole, and then depending on the results, further examination may be warranted, but not necessarily using the same model. To attempt too much detail would compromise the results of the TALC model.

Haywood (1986:156) also makes the point that the traditional approach in this area has implied that the market is homogeneous, whereas he points out that the market for conventions, for example, may be very different from the market for all-inclusive tours. He states that the traditional approach does not allow for sequential entry and exit to and from the market, (ie. different markets and market segments having different cycles as shown in Figure 2-6). Most existing studies have focused on the total market, although it is often more appropriate to consider different segments individually, such as domestic verses international tourists or family versus corporate groups (Haywood 1986:156). Haywood's claims are correct, tourism markets can be broken down into segments, but the study of markets is not the basis of the TALC model. A resort can have any number of curves representing different markets (Cooper 1994:344). TALC is a model used to analyse the totality, over time, of a given region's tourism-related economy. The analysis of individual market segments which go together to make the whole of a tourism region's market, should be performed as a separate exercise if and when it is needed. This sequence of events is no different from any other commercial enterprise. If the company is in trouble an overall analysis may be carried out to locate the problem area and then, if appropriate, a further in-depth analysis of each market segment can be performed.

Haywood (1986) further suggests that for the purposes of Butler's (1980) TALC model, the timing of the various stages within the cycle should be fixed. He also asks if it is necessary for a resort to experience all six stages. There is nothing,

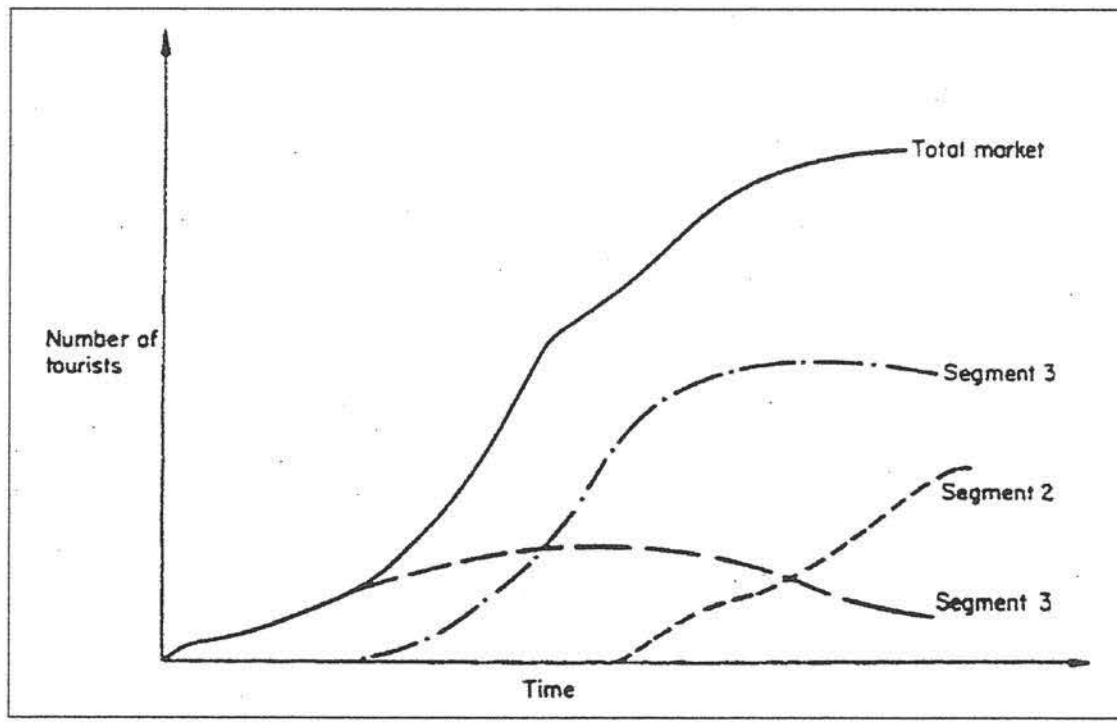


Figure 2-6: Tourist Area Life Cycle with sequential entry to three market segments.

Source: Haywood, K.M., 1986. "Can Tourism Area Life Cycle Theory be made Operational" *Tourism Management* 7(3), p.156.

however, in this research to suggest that, in reality, the timing of TALC stages is the same in each case or that all regions go through all six stages. There is also no evidence to indicate that it would be better or easier to use the model if the above were to be assumed. Each region is different. Some cycles are long and some are short, and as Figure 2-7 shows, some do not experience the earlier stages, such as the so-called "instant resorts" (Cooper 1994:341). To assume that the stages are fixed, and that all stages have to be experienced by all regions, would be to deviate from reality to such an extent that would seriously compromise the results of the model.

Haywood (1986:156-157) also suggests that it is necessary is to identify exactly when a region changes from one stage to another. He points out that time series data will not be strictly as predicted and all tourist area life cycle curves will have different shapes (see Figure 2-7). Accordingly, Haywood suggested a possible method based on the percentage change in the number of tourists from year to year. Where the percentage change is less than -0.5σ (standard deviations), the region could be classified as being in the "decline" stage, greater than 0.5σ can be the "development" stage, -0.5σ to 0 would be "stagnation" and 0 to 0.5σ would be "consolidation" (see Figure 2-8). This concept is based on Polli and Cook's (1969) product life cycle model discussed earlier (see Figure 2-4). A model based on a standard deviation, however, requires an arithmetic mean, which in turn requires a complete set of data, from the "exploration" stage through to the "decline" stage. If, for example, the region is only half way through the "stagnation" stage, there are no negative growth figures and so the "decline" stage (less than -0.5σ in Figure 2-8) will not exist in reality, but it will exist according to the proposed model. The model will include positive growth figures in the "decline" stage, which is a contradiction according to Butler's (1980) definition of the "decline" stage. All other stages in the model are then moved forward. The use of standard deviations for fixing the boundaries between the various stages is, therefore, not appropriate for the TALC model because it could not be used where a region has not yet completed the full TALC cycle.

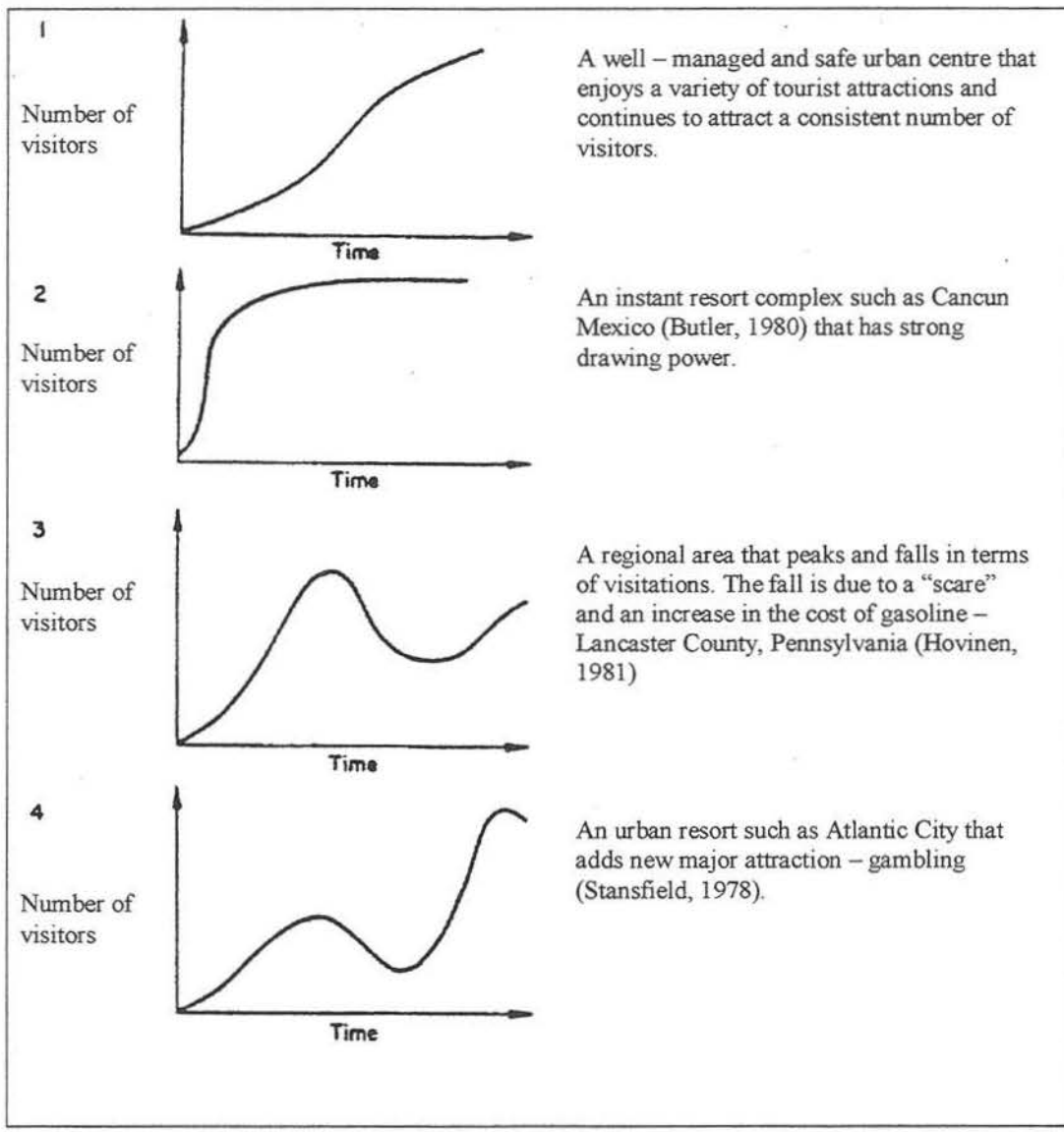


Figure 2-7: Difference Types of Tourist Area Life-Cycles.

Source: Haywood, K.M. 1986. "Can Tourism Area Life Cycle Theory be made Operational" *Tourism Management* 7(3), p.157.

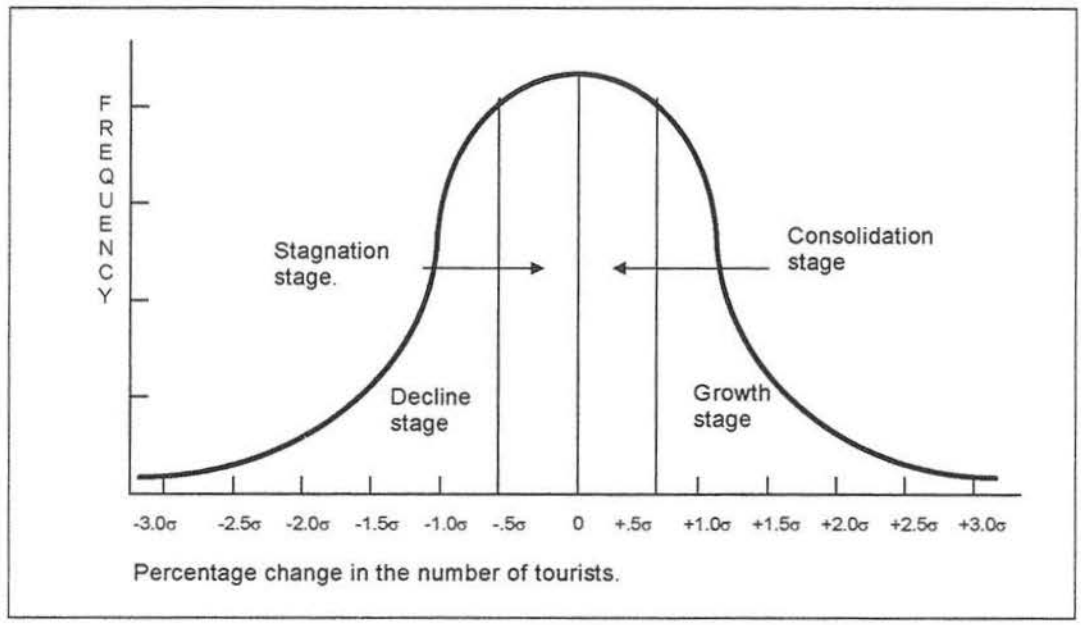


Figure 2-8: Identifying Tourist Area Life Cycle Stages.

Source: Derived from Haywood, K.M. 1986. "Can Tourism Area Life Cycle Theory be made Operational" *Tourism Management*, 7(3), p.158.

In addition to the above points, there are specific criteria suggested by Butler, and it is likely that at some points in time a destination will satisfy criteria relevant to more than one stage. In such a case, the destination is partly in one stage and partly in the next. In this sense, by its very nature, the TALC concept cannot possibly have the discrete stages proposed by Haywood (1986). The transition from one stage to the next is, therefore, a fuzzy concept.

One of Haywood's (1986) most important suggestions concerns the unit of measurement of the basic "S" shaped diffusion curve. Butler's (1980) model uses tourist numbers as the basis of the "S" curve, but Haywood asks if researchers should use tourism expenditure or profitability instead. The suggestion of using an alternative to visitor numbers has appeal, because as Butler (1980) points out, different stages in the cycle may imply different lengths of stay. A greater number of visitors could accompany a fall in the number of visitor nights if the average length of stay was sufficiently reduced (Haywood 1986:158). On the other hand, it is difficult to see how Haywood could use profitability in place of visitor numbers to construct the basic "S" curve. On the contrary, profitability is used as a criterion, in that it declines as the cycle progresses, resulting in economic problems and budget restrictions (Butler 1980:9; Cooper 1990:63). Haywood acknowledges this point when he suggests that profitability (and market share) could be a good measure of changing stages, arguing that even before the cycle enters the "stagnation" stage, individual businesses will experience a serious decline in profitability. This further affects the chances of successful rejuvenation of the area because this in itself, requires funding which will not be easily obtainable if profitability is low or negative (Haywood 1986:159).

Haywood's (1986:159) suggestion regarding the use of tourism expenditure to construct the basic "S" curve instead of visitor numbers, raises questions as to what should be included when calculating the former. He asks, for example, if tourism expenditure should measure unit sales, such as entry tickets to a museum or entrance to a national park. Also, should these figures be adjusted for the effects of inflation, seasonal differences or general economic conditions. In reality, however,

the answer to these questions would largely be determined by the available data. In the case of the Cairns region, figures on accommodation takings are available, but spending on other items may be difficult or costly to obtain. Circumstances would vary considerably from region to region, and researchers would need to optimise what is available so as to get the most out of the TALC model subject to their budget.

Haywood also points out that most tourism data are annual, stating that in some cases quarterly or monthly data may be better, particularly if this brings out any seasonal fluctuation, which he argues can be accommodated for by using say a moving average. The use of a moving average may, however, defeat the purpose. If the purpose is to analyse long-term data, as in tourist area life cycle data, it is better to ignore short-term fluctuations caused by seasonal factors as this will just serve to confuse the issue. Using annual data, over say a twenty-year period, would appear to be a good way of avoiding "noise" introduced by the undue influence of short-term fluctuations. To reinforce this point further, there would seem to be little point in analysing seasonal data, because local operators would be very familiar with this aspect of their operations, as would the population as a whole (Haywood 1986:160).

Haywood (1986:160) suggested the use of a moving average to compensate for quarterly or monthly fluctuations to smooth the data, but this technique would cause the expected data to lag behind the actual data. The amount of lag depends on the size of the moving average. Excessive influence of old data can be avoided by using an exponential moving average, although, either method would smooth not only short-term fluctuations, but take the highs and lows off the long-term fluctuations as well. The result would not be a smooth "S" shaped curve, but one that incorporates minimised fluctuations which are somewhat lagged in time. A better technique for smoothing seasonal data would be to use either a regression technique such as a polynomial formula or to attempt to fit a cubic (or similar) curve, and then test for goodness-of-fit. In this way there is no time lag and the end result is a smooth curve. Care, however, should be taken to make sure that the resulting curve is a good fit compared to the original data.

Haywood (1986) then goes on to speculate about the use of the model for forecasting purposes, particularly in relation to expected visitation and expenditure rates. Given expenditure and visitation rates for the first few periods, Haywood believes it is possible, using the S-shaped curve pattern, to predict rates in subsequent periods in the same way that product life-cycle based forecasting models are used. According to Haywood, any forecasting model should take into account the nature of the advertising and marketing strategies being used and a number of scenarios (ie. forecasting curves) should be developed according to the different marketing strategies available. Better still, the actions and reactions of competing tourist areas could also be built into a model. Haywood points out that most existing models are good at predicting the "development" stage, but poor at predicting the "stagnation" and "decline" stages. He cites two possible models. The first is Cooke and Edmondson's LIFER (life cycle forecaster) model (Cooke and Edmondson 1973), while the second is an approach involving the discovery of leading indicators of the timing of the "stagnation" stage (Wilson 1969). He suggested the following leading indicators:

1. A declining proportion of first-time visitors versus return visitors;
2. Declining profits of the major tourism businesses;
3. Tourism industry over capacity;
4. Appearance of new and accessible destinations (competing destinations);
5. A decline in the elasticity of advertising and an increase in price elasticity;
6. Present visitor's length of stay; and
7. Style and period-of-life changes among prospective market segments (Haywood 1986:161).

All of the above points except number seven, can be measured and are tested in this research (see Chapter 5). Point number seven involves market segments and, as argued above, TALC theory is concerned with the aggregate market rather than what is its component parts.

Finally, Haywood (1986:166) proposed seven major economic and social forces (see Appendix 1), which he argued collectively determined the ultimate success of any tourist area. "Changes in any of these forces will impact on the tourist area and, therefore, need to be taken into account along with the tourism area life cycle" (Haywood 1986:166). Some of these "forces", such as competition between regions and the concerns of environmentalists towards tourism related development, have been incorporated into this research, and are discussed in greater detail in Chapters four and five. Haywood (1986:166), however, does not appear to think that his seven "major economic and social forces" can be incorporated into the TALC model. He concluded that the life cycle theory was not sufficient on its own, and tourism planners need to look beyond this theory if they are "to get meaningful insights into how to manage a tourist area as it evolves" (Haywood 1986:167). This research shows, however, that while points such as Haywood's are not strictly part of Butler's (1980) original theory, they can easily be considered during a TALC analysis without much extra effort.

Cooper (1994:344) questions the "wisdom of pursuing a standardised marketing strategy at each stage" and states that the lack of long-runs of data adds to the difficulty in calibrating the model, further reducing its value as a forecasting tool. The latter point refers to the variability of the length of the various stages, and the difficulty of identifying stages and turning points (except by using hindsight). Cooper and Jackson(1989:381) suggested the use of leading indicators that are similar to those put forward by Haywood (1986:161). The use of such indicators will help with the accuracy of forecasting and Cooper and Jackson give as examples the growth rate of visitors, percentage of first-time visitors, number of competitors, levels of profits, advertising and promotional expenditure. There is also a need for the development of guidelines and ratios in relation to the use of indicators and forecasting. Even so, unexpected external forces, such as the Australian domestic pilot's strike in 1989-90, can always change the shape of the "S" curve (Cooper 1994:344; Norington 1990).

Williams (1993), in his study on the small Spanish tourist island of Minorca, was also concerned with forecasting. He found that Butler's (1980) model was

relevant, but needed some modifications concerning the number and nature of the stages, and the introduction of dependency and external control theories. Characteristics of the latter theories include: a high percentage of foreign ownership of rental cars, restaurants, hotels, vacation homes and airlines; a high percentage of foreign tourists and hotel managers; a high rate of foreign tour operator participation; foreign capital for tourism facility construction; a high percentage of food and construction materials imported from abroad; and a high percentage of local tourism marketing in the hands of foreigners (Williams 1993:25).

In William's (1993) expanded model there are eight stages, four of which are descriptive and four predictive (Williams 1993:26). The earlier stages that Williams labels descriptive, comply fairly well with Butler's (1980) model. The first stage was around 1965 (Butler's "exploration" and "involvement" stages). A few wealthy tourists visited the island in preference to neighbouring Majorca, which was a bustling tourist resort at the time. Minorca had a diversified economy with over 50% of the workforce involved in manufacturing and farming. Living standards on that island were described as good in comparison to the rest of Spain (Williams 1993:26).

The predictive, or forecasting stages, deal with two possible scenarios. The first was the probable impact of a laissez faire policy (assumed by Williams (1993:26) to be non-diversification), and the second was the probable consequences of the opposite, (ie a diversification policy). The use of the term "laissez faire" implies a classical economic approach which is that, left alone, industry will adjust to the circumstances. If these circumstances suggest that diversification into another area is where the profit lies, then that is what will occur. A laissez-faire approach will, therefore, not necessarily lead to non-diversification, in fact quite the reverse if circumstances so dictate. This criticism is not serious enough to negate Williams' argument, and it is more semantic than anything else. It does, however, indicate he was thinking in a non-classical paradigm while using classical terminology, suggesting a possible misinterpretation of classical economic theory.

Within five years of the start of the first stage, Minorca was in its second stage with a new international airport, increasing numbers of tourists and outside investors building large-scale tourism facilities. At this time, the two main manufacturing industries were coming under increasing competition from the newly industrialised countries and indigenous investors were switching to tourism. The economy became dependent on overseas agents as almost 90% of all tourists came from Britain and Germany (Williams 1993:28).

By 1980, the economy was in the third stage (which coincided with Butler's (1980) "consolidation" stage). Indigenous manufacturing industries were in serious decline and investors in these industries switched more and more to investing in tourism. Increasingly, foreign and mainland tour operators became involved. Mass tourism from Britain and Germany outnumbered Spanish tourism by two to one, but although the locals were increasing their investment in tourism, non-indigenous capital began to be redirected to cheaper tourism areas. At the same time, the island's tourism industry still remained mostly outside controlled because of the large foreign participation (Williams 1993:28).

Towards the end of the 1980s, the Island moved into the next stage (Butler's "stagnation" stage). The Island's tourism industry appeared to be peaking and local control of the industry increased with Minorcan tour operators sending the highest number of tourists to date. At the same time, foreign tour operators were predicting that they would soon replace Minorca with Tunisia, Turkey and Egypt for the mass British and German tourist market. Outsiders had stopped investing in the region, but indigenous people, mainly those who had interests in the declining manufacturing industry, were investing heavily in tourism in an attempt to earn large short-term profits while it was still possible. Williams states that it is during this period that the Island's economy reached its maximum level of external control. Not all local manufacturing declined during this period. Those that supplied the tourism industry, such as gin and cheese manufacturers and cattle farmers, experienced increased demand (Williams 1993:29).

The predictive stages, as mentioned above, could either take the form of a "laissez faire" tourism policy which would result in decline in tourism and manufacturing (including the sector which had an increased market due to tourism), resulting in high unemployment, and all that this implies, and dependency on the Spanish government. On the other hand, a policy of tourism diversification by the local council would encourage the construction of new tourist attractions such as camp grounds, tennis and squash courts, casinos, water parks, a zoo and botanical gardens. Tourism would grow and attract more investment from outside. In Williams' words, the Minorcan economy would "blossom" under these conditions, but there would be even more outside control (Williams 1993:31). Under this more positive scenario, it is quite possible that local investors would earn sufficient return on their capital from their tourism ventures to be able to update technology in the depressed industries of costume jewellery and footwear to enable them to compete with the newly industrialised countries. As a result, the economy would become more diversified and less under outside control.

The level of geographical aggregation is also a problem with the TALC model in that Butler's (1980) theory gives no guidelines about this unit of analysis. Some areas are a "mosaic of resorts and tourist areas", and each may have a different cycle (Cooper 1994:344). In Australia, for example, Surfers Paradise and Coolangatta are both part of a string of resorts on the Gold Coast, in southern Queensland, but both have very different resort cycles. Coolangatta is well and truly in the "decline" stage, unlike Surfers Paradise (Russell 1996). The situation is further complicated by the amalgamation of the Coolangatta and Surfers Paradise local government areas, a phenomenon which is one of Cooper's (1994:334) "threats" in relation to "cold water" resorts (Russell and Faulkner 1998). Amalgamation of local government areas has also occurred in the Cairns region, with the amalgamation of Cairns City and neighbouring Mulgrave Shire (see Chapter Three of this thesis).

One aspect of the TALC model which has received the least amount of attention is the post "stagnation" stage of the cycle (Knowles and Curtis 1999:88; Agarwal 1997:72). Although Butler's (1980) model is accepted as a broad research

framework, "there is a distinct lack of theoretical analysis and empirical validation of the final, post-stagnation phase" (Agarwal 1994:195). Consequently, the debate about this phase is surrounded by a theoretical and empirical vacuum, and many key questions remain unanswered" (Agarwal 1994:195). Agarwal stresses the need for a "re-orientation" stage between Butler's "stagnation" and "decline/rejuvenation" stage, which the author states should be added to the agenda for future research into resort cycles (Agarwal 1994:195). The need for such a stage stems from Agarwal's belief that the true value of TALC is in the insights it provides regarding the influences upon decisions taken at different stages in the cycle. Planning and decision making to ensure the successful continuation of resorts may occur anywhere during the "stagnation" or "decline" stages and, therefore, an additional stage should be added, devoted to the series of restructuring efforts that are inaugurated before the beginning of any decline. These efforts reflect the importance of tourism to the local economy and the degree of commitment to tourism on the part of local business leaders and local government. This "re-orientation" stage would be characterised by efforts towards target marketing, specialisation and segmentation, (eg. conventions and the casino trade), with the associated large investment required for such projects. During this stage, it is likely that the image of the region will undergo considerable change, and the addition of a new stage would throw considerable light on this process.

Knowles and Curtis (1999)and Priestly and Mundet (1998), responded to Agarwal's (1994:195;1997:72) challenge that more research is needed in the post "stagnation" stage, the former suggesting that there should be three extra stages. The Knowles and Curtis study, which was on the so-called "second generation" Spanish Mediterranean mass tourism resorts, concluded that each of the resorts studied were in irreversible decline. The first of the extra stages covered the first fifteen years of decline (1990-2005), and stated that the period will be punctuated by periods of temporary boom. The next five years constitutes the second extra decline stage and is characterised by "spiralling decline". During the third extra stage, the region will stabilise at a low level of economic activity (Knowles and Curtis 1999:93-94). Priestly and Mundet (1998:88), also using Spanish resorts (Lloret do Mar, L'Estarit

and Sitges on the Catalan coast), used TALC to identify the strategies applied for life cycle extension in the post "stagnation" stage.

Of particular significance regarding post stagnation rejuvenation strategies was the attention given to the subject by Cooper (1990: 63-64) in relation to the decline experienced in the Isle of Man and other "cold water" resorts in the United Kingdom. Four strategies are mentioned. The first was the "turnaround strategy", which represented a "concerted effort" by both public and private sectors to turn around declining visitor numbers by substantial development, planning and promotion programs. Examples of resorts using this strategy are the Isle of Man and Scheveningen in Holland. The second strategy was a "sustainable growth strategy" which relied on maintaining existing markets and slow growth in new recruitment of visitors. Cooper stated that there were a number of small to medium sized resorts in Northern England which fell into this category, but he does not give specific examples. Cooper's (1990) third strategy was "an incremental grow strategy", which was when the resort region tests the market for a new product by implementing the first stage of a phased development program that only goes ahead if the tests indicate that there is a good chance of success. Cooper stated that Bournemouth in England fell into this category. The last of the four strategies was a "selective tourism strategy", where markets utilising the resort's strengths were targeted. An example was given of Swanage in England, which specialises in the family and education markets (Cooper 1990:63-64).

England, which has a large number of resorts in decline, recognised the importance of rejuvenation strategies in a competition run by English Tourist Board (ETB), known as the Resort 2000 Competition. Resorts were asked to submit rejuvenation strategies to the Board for judgement. The winning resorts, Torbay and Bridlington, became eligible for considerable government aid for new tourist attractions and other developments under the Tourism Development Action Plan (TDAP) involving the private sector (Cooper 1990:64).

Another author who has paid particular attention to rejuvenation is John Soane of the Department of Geography at Reading University in his book entitled "Fashionable Resort Regions: Their Evolution and Transformation with special Emphasis on Bournemouth, Nice, Los Angeles and Wiesbaden". Efforts to rejuvenate include switching from an emphasis on tourism to other industries as in the case of Los Angeles (Soane, 1993:254) and promotion of dormitory status to more economically dynamic areas as in the case of Bournemouth and Nice (Soane, 1993:289). Other regions which have undergone rejuvenation include Atlantic City (Braunlich, 1996) and Sri Lanka (O'Hare and Barrett, 1993).

2.4.3 Dependency and control

By far the commonest theme in the research writings is that of outside dependency and control, and the leakage of profits back to a core region, usually an urban centre and often overseas (Oglethorpe 1984; Keller 1987; Weaver 1988, 1990, 1992). Dependence is seen as a negative influence on tourist areas and according to Butler's (1980) theory, is a feature of the "development" stage and results in a leakage of money from the periphery (the tourism region) back to the core region where the ownership of resources is concentrated (Keller, 1987:20). In instances where dependency has been avoided, such as Grand Cayman (Weaver, 1990), long-term stability is predicted for the tourism industry. As mentioned above, Grand Cayman Island largely conformed to the stages of TALC, except that there was a "significant deviation" with respect to local versus non-local control. Local participation has increased, rather than decreased in the "development" stage. Weaver contrasted this situation with that in Antigua, where external control has occurred during the "development" stage, and social, economic and environmental stresses are building up and may lead to the "decline" stage for tourism on that island (Weaver 1990:13). Weaver suggested that the "deviation" from Butler's (1980) model, which occurred on Grand Cayman, may have resulted in the lack of local antagonism towards tourists. In contrast, Weaver predicts that Antigua may enter a period of stagnation and then possible decline accompanied by local dissatisfaction with tourism because much of the financial and economic gain from tourism does

not reach a large section of the local economy as it does on Grand Cayman (Weaver 1988:329).

A similar situation to that of Grand Cayman has been documented at Baunei in Sardinia, and in Cyprus (McVeigh 1992). In Cyprus, there is a low degree of outside ownership, but only in the accommodation sector. Tour operators, however, are mainly located overseas and consequently industry dependence on foreign operators is high, a factor which effectively negates the effect of local ownership of tourism facilities (Ioannides 1992). In Baunei, development is owned and controlled by the locals through a customary land ownership system, called a "comune", which still controls 90% of the land within the municipality. This system means non-locals find it difficult to get a foot-hold in the ownership and control of tourism facilities. As in the case of Grand Cayman, there is no hostility towards tourists, although Baunei appeared, at the time of the study, to be at a much earlier stage in the cycle than Grand Cayman. Another similarity between the two regions was that they do not rely solely on tourism, but have another industry which is complimentary to the tourism industry. Baunei has a traditional agro-pastoral economy which, although declining in importance, has its busy season in the tourism off-season, thus providing some work when it is needed (McVeigh 1992; Weaver 1990). Grand Cayman is an off-shore finance centre which helps to generate not only work, but also capital for use in tourism development. In Antigua, on the other hand, tourism is an alternative industry to sugar, in that as tourism activity has increased, sugar production has declined to the point where there are now no mills left on the island and very little sugarcane grown (Weaver 1988:321). Weaver describes the Antiguan economy as a "one-sector" economy and therefore highly vulnerable should there be a decline in tourist numbers (Weaver 1992:173).

Weaver (1992) also points out that development has been carefully controlled on Grand Cayman, ensuring the environment has not been negatively affected by tourism development. This control is absent or limited in Antigua where there is little restriction on development activity; in fact Weaver refers to the development situation in Antigua and similar small island resorts as being laissez faire (Weaver

1990:15). In governing development, particularly on Grand Cayman, visitor numbers are also controlled. This restriction may seem to be detrimental to tourism but it is actually beneficial to the industry in the long run (Weaver 1990:14). Development in Baunei is also restricted, although the control is a result of a lack of local capital and the "comune" (McVeigh 1992:8).

Grand Cayman, Baunei and Cyprus are the exceptions to the rule rather that the norm. More often than not, dependence is present, particularly in the control of tourism numbers by travel agents and tour operators based in the tourists' home country. Once the destination loses its fashionability, travel agents, who generally have no financial interest in the destination, offer alternatives to their clients. The result can be a great deal of distress in terms of unemployment and bankruptcies in the host region.

As well as the influence of outside agents and tour operators, external control can come from the ownership and management of tourism facilities such as resorts and large hotels. Local government can encourage growth funded by outside capital on the grounds that it creates jobs and work for suppliers within the region. However, when employees are imported, resentment can build up among the locals, which has in at least one documented case, led to the destruction through arson of an Australian-owned resort in the Solomon Islands (Douglas 1997). Keller (1987) states that it is possible, using TALC to identify a point in the cycle at which little or no further development is possible without the importation of outside expertise. The greater the body of knowledge available to the decision makers at this point, the greater the chances of success in terms of desirable outcomes.

The effects of outside dependency and control are made worse when industries which existed in an area prior to tourism suffer "crowding out" due to available resources being channelled into tourism, resulting in a decline in those industries (Williams 1993). Such a situation leads to even greater dependency on tourism, with obvious economic and social consequences, if and when tourism goes into decline. The evidence so far in places like Antigua, Minorca and Baunei, has

indicated that existing industries must be maintained at all costs (Weaver 1992; Williams 1993; McVeigh 1992). If this is not possible, then the local government must encourage the creation of new alternatives to tourism.

2.4.4 Australian TALC Research.

There has been very little TALC research done on Australian tourism regions, and what there is has already been referred to above in some detail. Accordingly, this section will make mention of the Australian work without going into any detail which has already been covered. The first study was a Masters thesis by Keys (1985) involving a comparison of several locations in Queensland and with special emphasis on Nosa. The second study was an honours thesis by Russell (1996) on the Gold Coast town of Coolangatta (see Figure 1-1). The third study was by Prosser (1997) and involved a comparison between the Gold Coast and Coffs Harbour (see Figure 1-1). Mention should also be made here of a brief, unpublished, nine-page essay on the application of TALC to the Cairns region (Smith 1991).

The Russell study on Coolangatta is the most comprehensive of the Australian studies. A report on its results was published by Russell and Faulkner (1998) in a book edited by Eric Laws *et al.* (1998). Coolangatta is located about 25 kilometres, south of Surfer's Paradise on the Gold Coast (See Figure 1-1) and started life as a camping resort when the railway arrived just after the turn of the century. The resort flourished until 1960, catering for the low end of the market, (ie. campers and people seeking low cost accommodation). Clientele consisted of families and young singles and facilities and entertainment were limited to dance halls and mass beach events such as hokey pokey and beauty contests (Russell and Faulkner 1998). From the early 1960s, Surfers Paradise, north of Coolangatta, started to attract clientele away from Coolangatta by offering more entertainment, facilities and bright lights. Instead of competing with Surfers, Coolangatta deliberately limited investment and growth in the resort and suffered the consequences of a rapidly declining tourism industry (Russell and Faulkner 1998).

Developments at Coolangatta followed the stages suggested by Butler, although there are some significant variations. The discovery ("exploration" stage) and "involvement" stages were truncated because the arrival of the railway allowed for the early arrival of mass tourism, albeit campers. This part of the Coolangatta story is similar to the experiences of Williams, (1993) in Minorca and is consistent with Haywood's (1986) model. Another variation from Butler's (1980) idealised model is that the "development" and "consolidation" stages were not accompanied by a massive influx of investment capital, even though approaches were made to the local council by entrepreneurs willing to invest large sums in the tourism industry in the region. Because local attitudes favoured camping - the traditional type of tourism - the region did not develop along similar lines to Surfers Paradise. Decline set in as campers abandoned the area in favour of Surfers with its better and more modern facilities (Russell and Faulkner 1998).

Prosser's (1997) work used a combination of statistics and perception to compare the TALCs of Coffs Harbour in NSW with that of the Gold Coast in southern Queensland. Both areas have similar backgrounds and conform well to Butler's (1980) model. The timing of the "exploration", "involvement", "development", "consolidation", "stagnation" and "rejuvenation" stages for both regions coincide and each region has become a significant urban centre in its own right (Prosser 1997:318). Despite the evolutionary similarities of the two areas, the Gold Coast now has three times the number of visitors and five times the population of Coffs Harbour. Prosser (1997) attributes the difference to location-specific factors such as the Indy Grand Prix and a number of theme parks at the Gold Coast which do not exist at Coffs Harbour. The proximity of the Gold Coast to a major metropolitan area (Brisbane) is also a major growth factor because the region has access to a day-tripper market that Coffs Harbour does not have (Prosser, 1997:325). For practical purposes, particularly for local government and business decision making, the work provides a useful insight into how TALC can be used to isolate factors responsible for differing rates of growth.

Smith (1991) in an unpublished, undergraduate essay, identified Butler's (1980) "exploration" stage as being between 1876 (the first year of white settlement in Cairns) and the start of the Second World War in 1939. The "involvement" stage was from the end of the war until 1957. From that year there is a gap until the late 1980s and early 1990s when the "development" stage commenced. The latter stage typically involves outside investment, which in this case started slowly following the end of the "involvement" stage in 1957. The transition between these two stages was slowed because of the development of major island resorts in the 1960s, and so there appears to be less emphasis on mainland resort areas such as the Cairns region. The opening of the Cairns International Airport in the early 1980s, however, helped to fuel the start of the "development" stage. By 1991, the year Smith wrote her essay, the "development" stage was well and truly under way. She finished her work by stating that to avoid the "decline" stage, the region will have "to ensure the protection of the natural beauty that first drew tourists to the region over one hundred years ago" (Smith 1991:9).

2.4.5 Does Butler's model reflect the real world?

Most of the work discussed in this chapter substantially supports Butler's (1980) model. One exception is Choy's (1992) work on Pacific Island destinations. His main point is that the ten smallest Pacific island destinations in terms of visitor arrivals, including Fiji, French Polynesia, New Caledonia and Vanuatu, do not fit into Butler's framework. "At best" the TALC model can be used after the fact as a diagnostic tool with respect to these destinations (Choy 1992:26). Butler's resort life cycle curve is "S" shaped but Choy identifies three different shapes. They are: growth - decline - maturity (where "maturity" is a horizontal line); a primary cycle and a recycle; and a "scalloped" growth pattern akin to a series of small growth cycles (Choy 1992:27). On the other hand, the main Pacific resort in terms of visitor arrivals, Hawaii, could be characterised by the "S" shaped TALC curve. The next two resorts in terms of visitor arrivals were Guam and Northern Marianas which could be said to be in the early stages of TALC (Choy 1992:29).

Choy (1992:29) makes the point that destinations that have not reached 100,000 visitors per year, are least likely to follow the stages proposed by Butler (1980). He also states that the time periods (15 to 20 years) covered in his research may be a limiting factor. Furthermore, it seems that Choy is basing his conclusions on visitor arrivals alone, because he makes no mention of Butler's criteria which are necessary to identify the TALC stages.

In the work on Lancaster County, Pennsylvania (see page 20) some of Butler's (1980) stages fitted, although others departed significantly from the theory (Hovinen 1981:284). Hovinen considered Lancaster County, Pennsylvania, to be a suitable test case for the model because it had five decades of development as a major tourism resort. He found that there was no sign of a "decline" stage, even though visitor numbers were halved during 1979, a phenomenon blamed on a polio outbreak among the Amish, the nuclear accident at Three Mile Island and the difficulty in obtaining petrol during that summer (Hovinen 1981:284). Butler's second and third stages, "involvement" (1945-1960) and "development" (1960-1975) apply well, but not the "exploration", "consolidation" and "stagnation" stages or the shape of the curve. The early tourists came, not because of the adventure, as postulated by Butler, but because of people passing through on their way to other destinations. During the "involvement" stage, many local people became involved in the tourism industry, the main attraction being the Amish people and their lifestyle. The "development" stage brought a large amount of outside capital as well as national and multinational chain establishments and resorts (Hovinen 1981:284).

Lancaster County's close proximity to the large urban centres (see page 20) and the fact that the Amish do not seem to be thinking of leaving the area, would appear to prevent significant long-term decline of the region's tourism industry, unless of course, it reaches its carrying capacity. The concept of carrying capacity, however, is very hard to define in this context, and so it is difficult to tell when it will be reached. Hovinen (1981) makes the point that for the Amish, carrying capacity has been reached as they have been complaining about the numbers of tourists since the 1960s. Carrying capacity has also been reached according to a local

newspaper editorial complaining about the negative environmental impact such as signs along highways (Hovinen 1981, quoting from the *Lancaster New Era*, 16th January, 1963 and 6th January, 1972). Hovinen (1981:285) makes the point, however, that the carrying capacity of artificial attractions is much harder to define than genuine cultural attractions. Presumably this point refers to the fact that Amish themes parks, featuring aspects of the Amish life-style can, and are, taking over from the genuine cultural attraction once capacity has been reached with the latter.

Where differences have existed between Butler's idealised model and the empirical evidence, these have been used to illustrate that the area concerned is different from the norm. Some regions, such as Grand Cayman, for example, may be headed for a prolonged mature period with no decline in sight (Weaver, 1990). In other words, just because an area does not fit the model does not invalidate the model. In reality, a tourism region must try to deviate from the model so as to avoid the inevitable decline predicted by the model. The identification of deviations from the model, or the intentional creation of such deviations, is the main purpose of the TALC model. To try to fit every situation into the model and then to discredit the model if there is not a perfect fit, is to misunderstand the utility of the model. For this reason, there needs to be a large data base of empirical research to properly understand reasons for tourism region failures. This thesis will add to that general pool of knowledge, particularly as it concerns Australia, especially North Queensland.

2.5 Further Research Suggestions.

Many suggestions for further TALC research have already been discussed above in relation to the work of individual authors. Cooper (1994:342), however, provides what is arguably the most enlightened view of the usefulness of Butler's (1980) theory to date. He states that it has "intuitive appeal" and that it provides:

> "a useful framework for analysis of the growth of destinations, the interplay between markets and physical development and allows for historical examination of factors that lead to turning points in a destination's development and the characteristics and leadership styles at each particular stage of the destination's evolution".

The implication of the above quote is that with every empirical study, the body of knowledge about markets, leadership styles, physical development and factors that lead to turning points increases. As a result, the use of TALC theory as a framework for understanding what is going on is enhanced, thus improving the capacity for strategic decision making. Cooper goes on to argue that TALC recognises that tourism destinations and corresponding markets are dynamic in qualitative and quantitative terms. The model provides a framework for the provision of facilities and tourist access to match the changing resort and its markets. Any research on an area which has had no recent TALC analysis is, therefore, useful as a tool for planning and managing tourist areas (Cooper 1994:342). A similar argument is put forward by Prosser (1997) in the context of further research. He states that despite the large number of studies using Butler's model and despite the criticism from fellow academics such as Choy (1993), the original model developed by Butler (1980) has survived largely intact (Prosser, 1997:312). Prosser (1997) quotes Getz (1992:752) as saying that Butler's model has the:

> "potential to advance the theory and practice of tourism planning, particularly as a conceptual framework within which long-term changes can be forecast and strategies for land use, economic development and marketing can be harmonised".

Consequently, despite all the criticism and suggestions for changing the model, most of which appear to be little more than adaptations of the model for a specific purpose, the model is valuable as a conceptual framework for adding to the existing knowledge base for better regional spatial and temporal decision making. The latter point is consistent with Cooper (1994), who points out that research in the

area is moving away from pure theory, which he refers to as "geometric shapes", towards managerial applications which look at the concept of TALC in a more "realistic" light (Cooper, 1994:345). In order to use the model more effectively for managerial applications it is necessary to increase the knowledge base. This research will help to fill the gaps, not only about the model generally, but specifically the Cairns region about which there is currently a dearth of life cycle information.

2.6 Conclusion

From the literature there is no doubt that TALC, given further testing and refining, has the potential to be indispensable as a resort area planning tool. Once a researcher is satisfied with the accuracy of his or her TALC model, sensitivity analysis can be used to identify likely future directions under a number of scenarios. Any resort area which is serious about its socio-economic and environmental health should have an ongoing TALC model. The act of maintaining a model and looking at possible future scenarios, will highlight any problems, or potential problems, and suggest other techniques and models which may be applicable, such as Butler and Waldbrook's (1991) Tourism Opportunity Spectrum and McKercher's (1995) Destination-Market Matrix. TALC is the main diagnostic aid for resort regions and is well suited to being the first "port of call" in any serious analysis of a resort area. It will highlight problems and throw up questions, some of which may require other techniques to find an answer.

3. The Study Area

3.1 Introduction

The aim of this chapter is to provide detailed information on the Cairns region for three reasons: first, so readers can appreciate the physical characteristics which attract tourists; second, for a better understanding of the local tourism industry; and third, to facilitate comprehension of the application of the TALC model to the area. The first part of the chapter contains a description of the study region's local government area boundaries. The second section is on the physical setting and has details on the topography and geology, climate, flora and fauna and the Great Barrier Reef. Section three is a brief overview of the history of the region. The fourth section is concerned with describing the region's primary, secondary and tertiary industries. Next is a discussion about recent economic trends and the socio-economic profile of the region, especially population size and growth, age-sex characteristics, education, personal income, professional profile, unemployment and housing costs. Finally there is a description of the area's tourism industry within the framework of Queensland, Australia and the Asia-Pacific region.

3.2 Boundaries

The geographical boundaries used throughout this study are those of the local government areas (LGAs) of Cairns City and Douglas, Atherton and Mareeba Shires (see Figure 3-1). The main population centres in the study area are the City of Cairns, Port Douglas, Mareeba and Atherton. Cairns is located on the coastal plain at latitude 16 degrees 89' South and longitude 145 degrees 76' East. Port Douglas is also situated on the coastal plain roughly 60 kilometres north of Cairns at 145 degrees 27' East and 16 degrees 29' South. Mareeba and Atherton are on the Tablelands about 40 kilometres west of Cairns. The Daintree area and Cape Tribulation, forty kilometres north of Port Douglas, and famous for pristine rainforest, are also included in the study area. To complicate matters slightly, the LGA of Cairns City was changed in 1995 by an amalgamation the old Cairns City and Mulgrave Shire to form one large LGA.

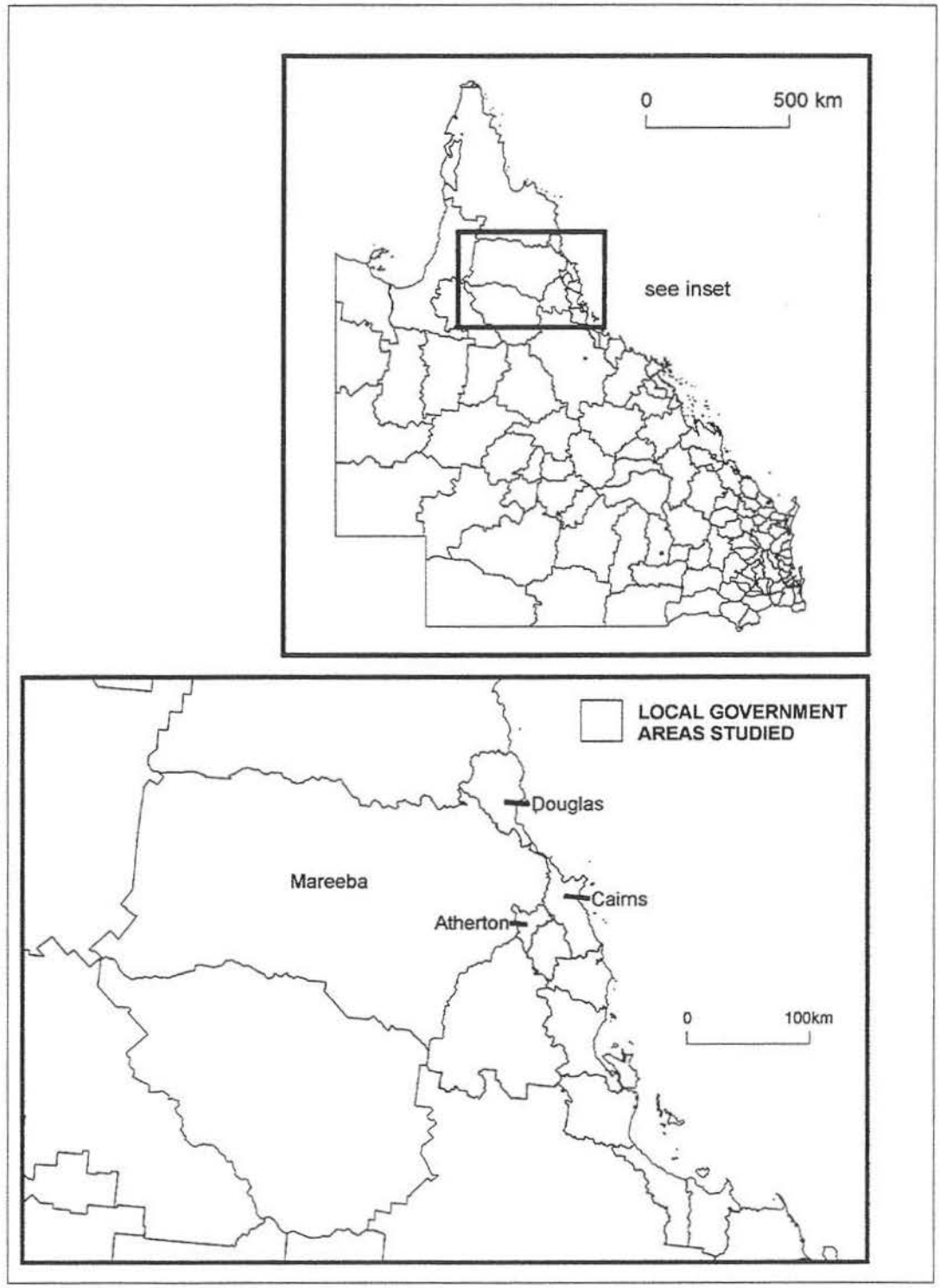


Figure 3-1: The Study Area: Local Government Boundaries, 1997.

Source: ABS 1997. *CData96 Cat. No. 2721.0.*

This study endeavours to use the current boundaries, although it is sometimes not possible or practical, when using long-term time series data. The old boundaries are such that the Cairns urban area consists of the old Cairns City area plus Part (a) of the old Mulgrave Shire. The remaining area, Part (b) of Mulgrave shire, is the rural region of the new Cairns City LGA. The new LGA of Cairns City also gained an extra 32 square kilometres from Douglas and Mareeba Shires in 1995. The amalgamation of the LGAs is referred to later on in the thesis when the resort life cycle theory is tested on the Cairns region.

3.3 The Physical Setting

3.3.1 Topography and Geology

Cairns is located on a narrow coastal plain bordered by the Coral Sea and the Great Barrier Reef World Heritage Area to the east, and mountains within the Wet Tropics World Heritage Area to the west (Figures 3-2, 3-3, 3-4). The Wet Tropics area is mostly mountainous, consisting of the coastal ranges and the Great Dividing Range which runs parallel to the east coast for the full length of the continent, a distance of almost 5000 kilometres. Forty kilometres south of Cairns on the Great Dividing Range is Mount Bartle Frere (1615 metres above sea level), the highest mountain in Queensland. Over the range from Cairns, to the East of the Great Divide, are the Atherton, Mareeba and Evelyn Tablelands, with an average elevation of about 700 meters (Turton 1991). The Tablelands are an area of significant scenic beauty with views, waterfalls and rainforest, and consequently are also becoming an important tourism destination. The escarpment, bordering the coastal plain, contains a number of attractive valleys and gorges such as the Barron and Mossman gorges, which have also become significant tourist attractions. The Mossman Gorge alone attracted 499,438 visitors in 1997 (Wet Tropics Management Authority, Mossman Office 1999).

The undulating country of the Tablelands consists mainly of an eroded metasedimentary basement punctuated by granite outcrops and overlain with basaltic volcanoes and alluvial sediments (see Figure 3-5). The metasedimentary rocks were

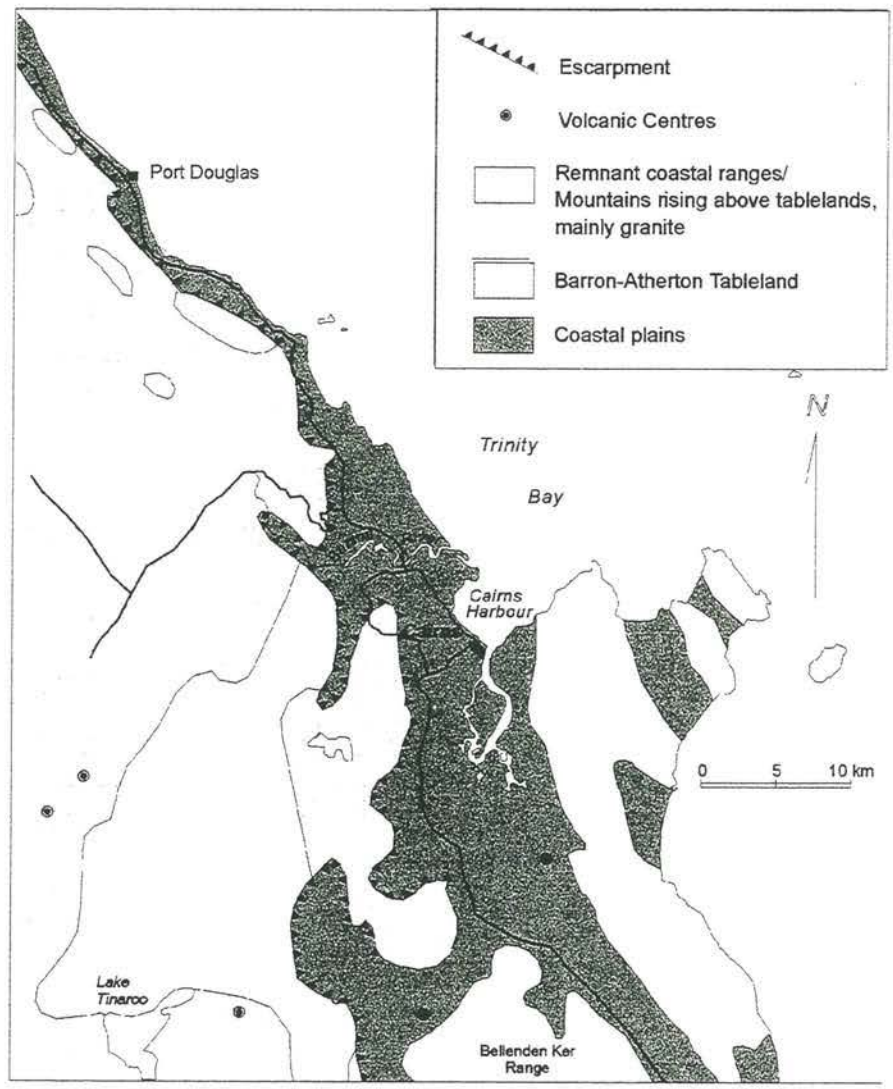


Figure 3-2: Major Physical Divisions of the Cairns District.

Source: Derived from Willmott, F. W., *et al.* 1988. *Geological Map Commentary for Sheets 8064 & 8063 (Part), Cairns Region.* Brisbane: Queensland Mines Department. p. 4

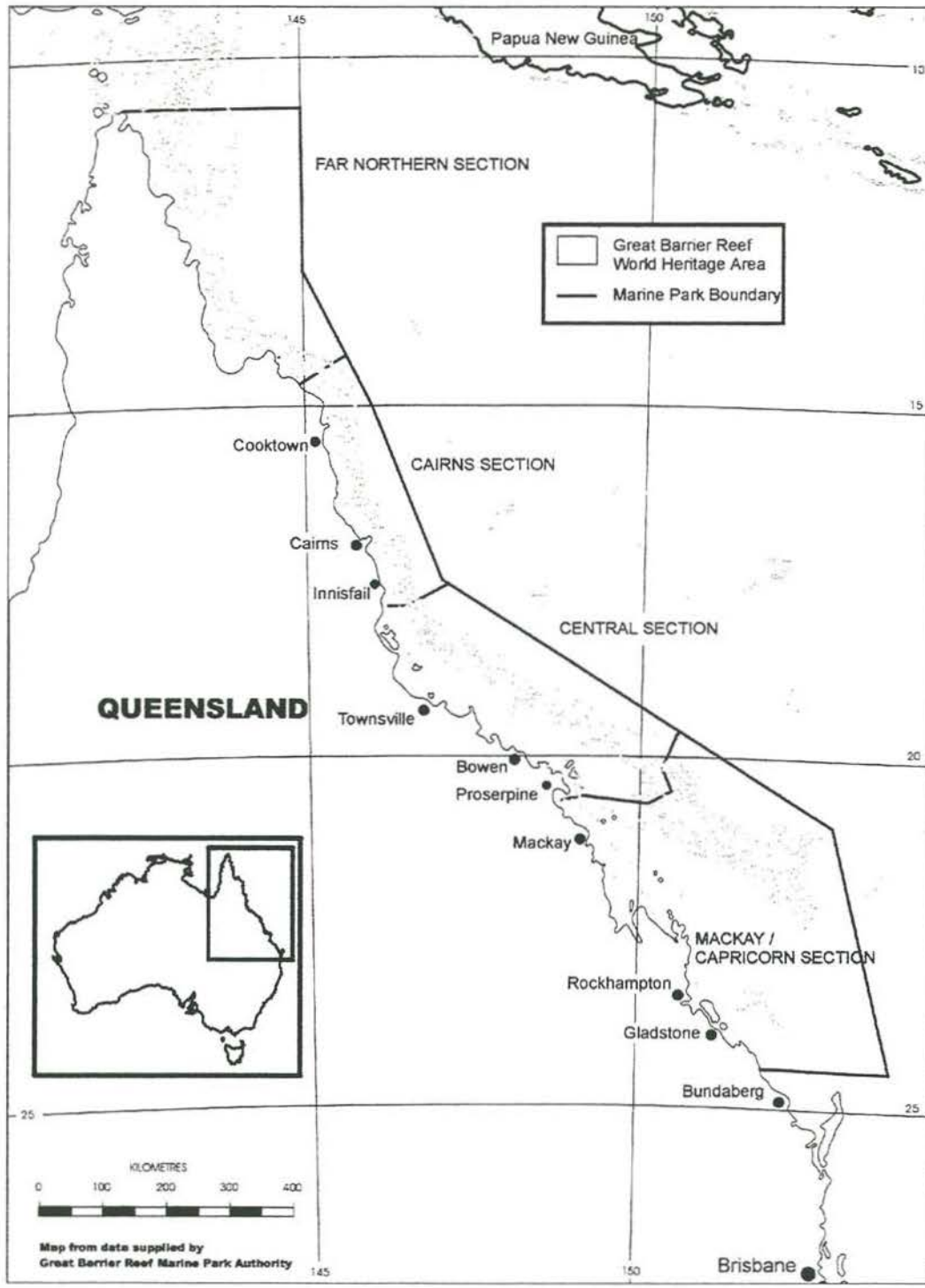


Figure 3-3: Great Barrier Reef showing the Marine Park and the World Heritage Area.

Source: Great Barrier Reef Marine Park Authority. 1996. *Annual Report 1995-1996.* Townsville: Great Barrier Reef Marine Park Authority. p. (iv).

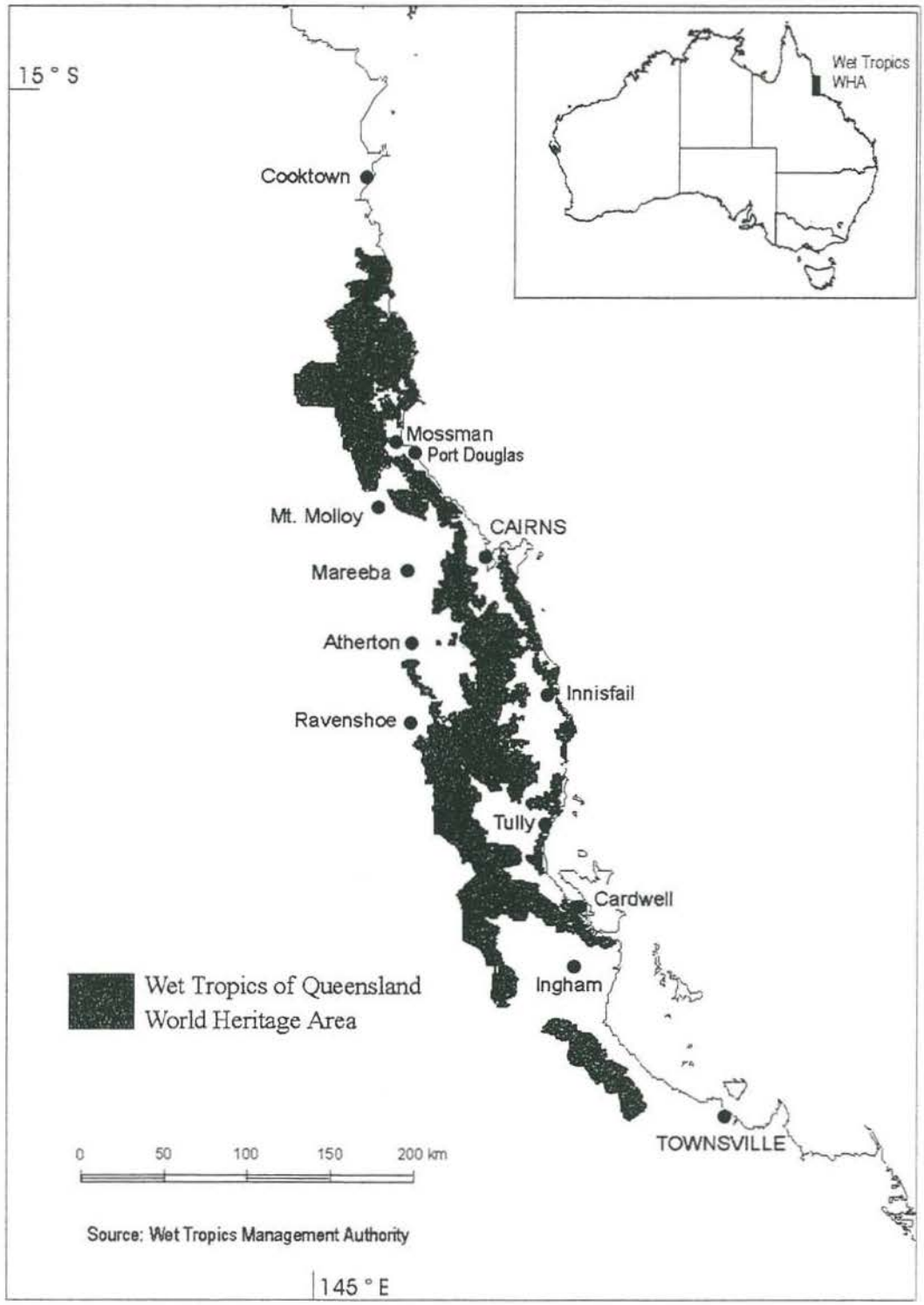


Figure 3-4: Wet Tropics World Heritage Area

Source: Turton, S. M. 1991. "Solar Radiation Regimes in Rainforest Understoreys, Gaps and Clearings, With Special Reference to Northwest Queensland." PhD. Thesis. Dept. of Geography, James Cook University, Townsville.

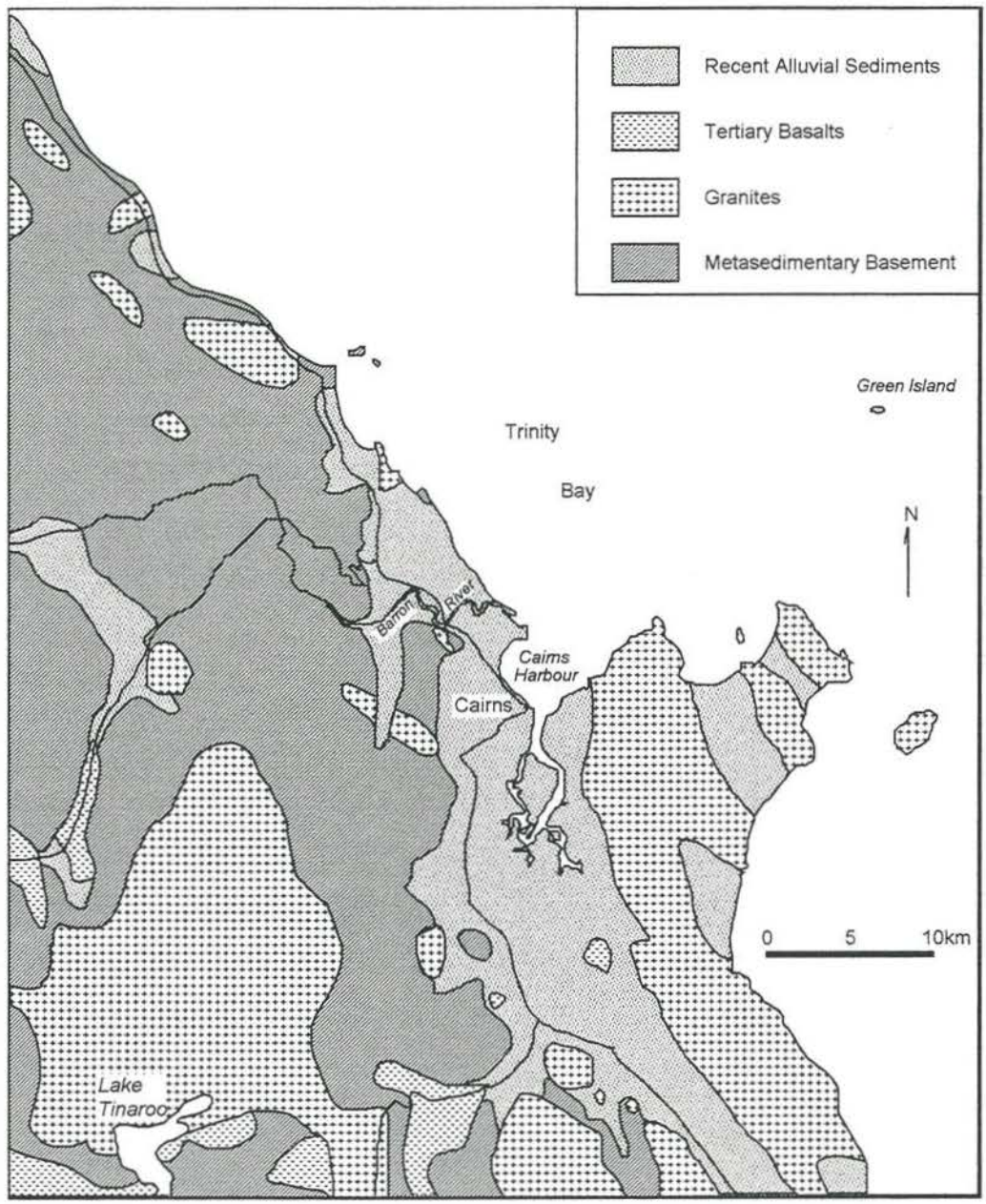


Figure 3-5: Structural Zones within the Hodgkinson Formation, Cairns and Surrounding Regions.

Source: Willmott, F. W. *et al.* 1988. *Geological Map Commentary for Sheets 8064 & 8063 (Part), Cairns Region.* Brisbane: Queensland Department of Mines. p. 23.

formed by the deposition of several kilometres of sediment into the Hodgkinson Basin that occurred approximately 420 to 360 million years ago (Willmott *et al.* 1988:7; Willmott and Stephenson 1980:14). These sediments were subsequently uplifted folded and metamorphosed, and intruded by granites. The region was then subject to a long period of erosion. Generally the granite outcrops are more resistant to weathering and erosion and so form the mountainous areas noted for their aesthetic value (Whitehead, 2000). Extensive volcanic deposits cap the Tableland area and the volcanic vents of The Crater, Lake Barrine and Lake Eacham have become major tourist attractions. The coastal lowland farming areas, mainly sugar cane growing areas, consist mostly of recent alluvial sediments formed by the streams and rivers exiting the hills (Willmott and Stephenson 1989:17). The origin of the escarpment separating the Tablelands from the coastal lowlands, and forming the mountain backdrop for which the region is so well known, was caused by fracturing of the eastern edge of the Australian continent between 144 and 65 million years ago. Subsequent erosion from streams with steep gradients has led to the westward retreat of the escarpment as well as the formation of the coastal plain (Willmott and Stephenson 1989:16).

Off the coast of Cairns and Port Douglas, but located inside the continental shelf, are a number of islands and reefs, which have become important tourist attractions. Perhaps the best known is Green Island, almost 30 kilometres east north east of Cairns. The island, which is now occupied by a resort, is a low, heavily wooded, coral island. Other reefs and islands in the region include Low Isle, off Port Douglas, Fitzroy Island, east of Cairns, and Arlington, Upolo and Michaelmas Reefs, also off Cairns. As well, there a number of island groups in the vicinity which continue to attract tourists, such as the Russel Islands and the Family group to the south of Cairns.

3.3.2 Climate

The study area has a tropical climate. Its location, 3 degrees south of the mean summer position of the monsoon trough at 13.5°S, ensures it rarely gets the monsoonal westerlies predominant in such areas during the summer (Turton

1991:137 citing an unpublished working paper Bonell et al., 1986). Instead, the region is subject to tropical easterly winds most of the year (Gentilli 1972:102,106). Even though the area is not strictly monsoonal, most of the summer rainfall is associated with monsoonal activity (Turton 1991:139 citing an unpublished working paper Bonell et al., 1986).

Mean annual rainfall in the study region is in the range 900 to 2200 millimetres. Sixty per cent of this rainfall falls during the summer wet season between December and March, with the remainder of the year being cool and relatively dry (Figures 3-6 and 3-7) (Turton 1991:139). To the south rainfall is higher, with the Innisfail area averaging over 3500 mm p.a. Inland, around Mareeba, rainfall averages much less at around 900 mm (Bureau of Meteorology 2000).

Temperatures are very mild, with the difference between average maximum and average minimum temperatures being between about 6° and 8° Celsius. The average maximum temperature in summer is 31°, and the average minimum in winter is 17° Celsius (Bureau of Meteorology 1998). On the Tablelands, these temperatures can vary considerably more than on the coast and are likely to be up to 5° cooler than the coastal areas at any time of the year (Tracey 1982:10). Humidity is high, particularly on the coast where the yearly mean is above 60% (Turton 1991:140). Overall, the mild climate makes the region ideal for tourism, particularly during the dry season which starts in April and ends in December (see Figure 3-7)

For tourism operators the climate does pose some challenges. Heavy rainfall in the early months of the year makes it uncomfortable for tourists to visit outdoor sites such as the reef and rainforest. Hence the seasonal nature of the tourism industry. The region is also subjected to tropical cyclones between December and March, at the rate of between two and three a year (Gentilli 1972:109). Cyclonic activity brings with it high winds and flooding, which can become serious particularly if it coincides with high tides (Regional Growth Management Framework Manager/Coordinator 1995). Even though cyclonic activity is not unexpected by the tourism industry, the arrival and departure of tourists, and their ability to travel around the region, is often disrupted by these events.

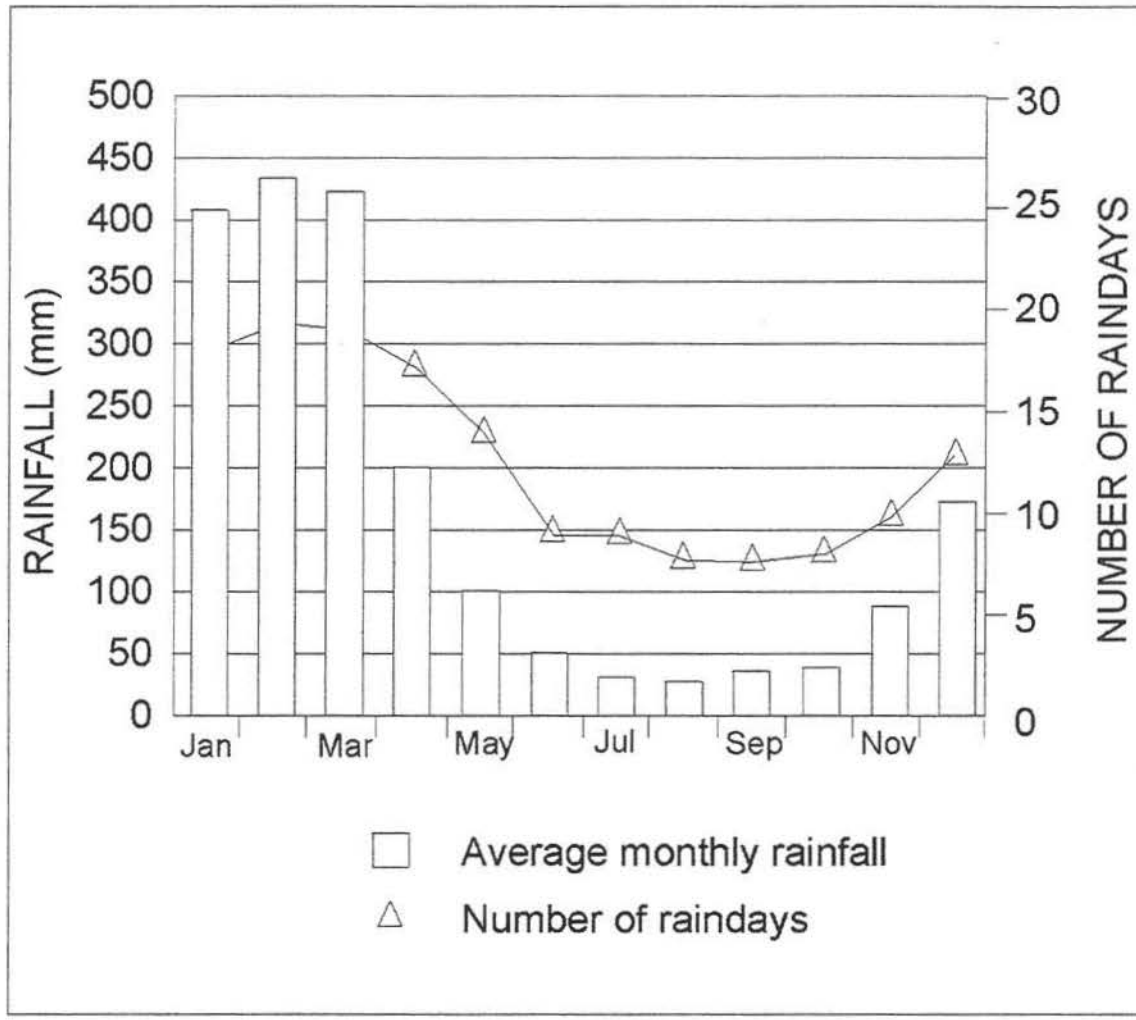


Figure 3-6: Average Monthly Rainfall & Number of Raindays, Cairns City.

Source: ABM. January 1998. "Average Monthly Rainfall." [Internet]. http://amdisa.ho.bom.gov.au/cgibin/climate/cgi_bin_scripts/map_script.cgi?31011

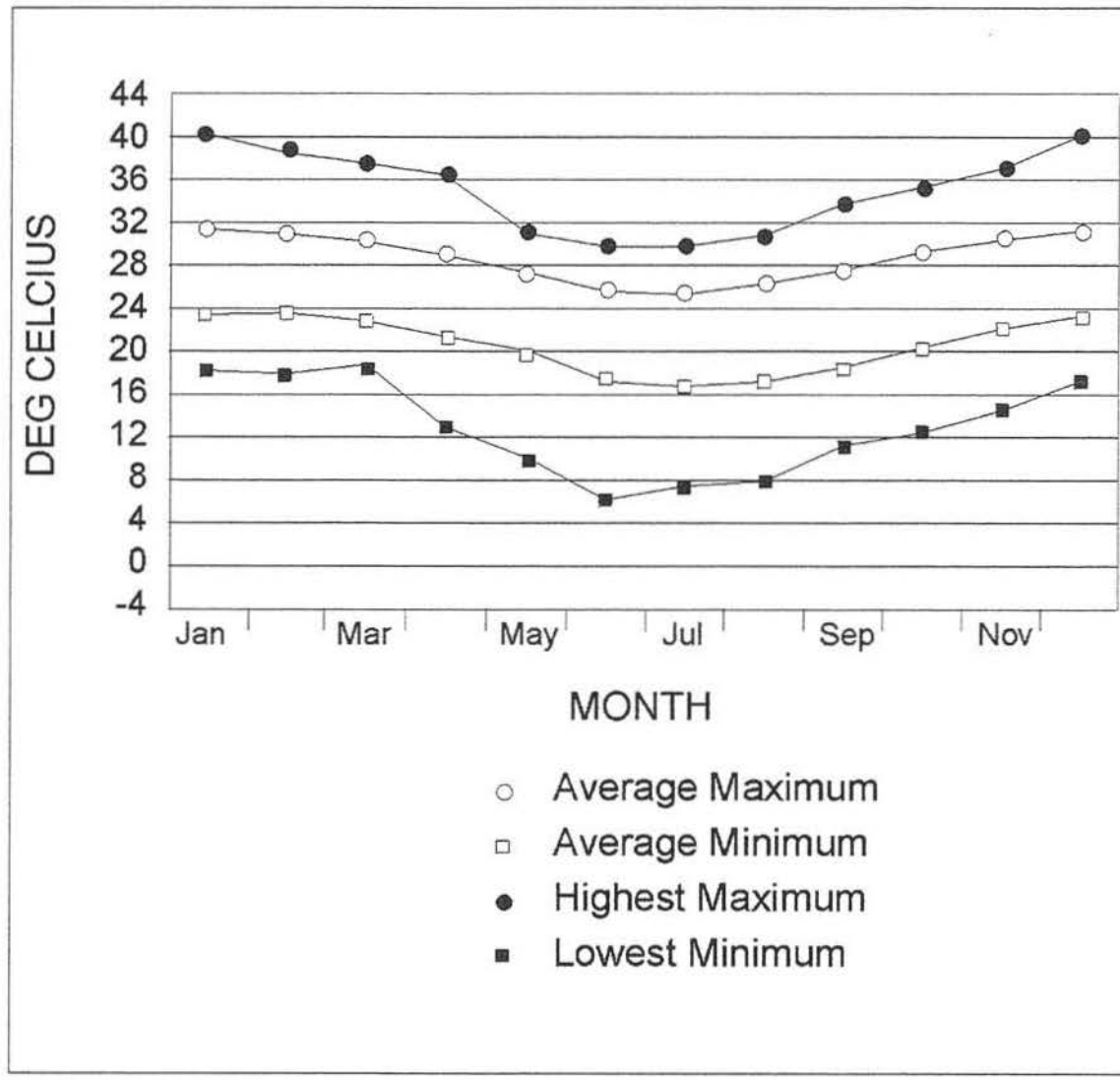


Figure 3-7: Average Monthly Temperatures, Cairns City.

Source: ABM. January 1998. "Average Monthly Temperatures." [Internet]. http://amdisa.ho.bom.gov.au/cgibin/climate/cgi_bin_scripts/map_script.cgi?31011

3.3.3 Flora and Fauna

Along the coast, mainland vegetation zones consist of mangrove forests (*Rhizophora* and *Brubuiera*) and large, attractive, paper bark (*Melaleuca leucadendron*) forests, often adopted by the coastal resorts as a feature and illuminated at night. Nearby are coastal flat lands that have been extensively cleared mainly for sugar cane farms and to a lesser degree, bananas and vegetables. The sugar cane fields surrounding Cairns and its mountain backdrop are noted for their aesthetic qualities and no doubt help to attract tourists to the area (Tracey and Webb 1975). In recent years, farmland around Cairns has been absorbed for urban development, including resorts (Queensland Sugar Corporation 1998). Typically, the land is cleared right up to foothills of granites and schists that are covered by medium and low Eucalyptus forests or moist or very wet closed vine forests of complex notophyll or mesophyll (rainforest). In some cases, where the hills drop into the sea such as on the Cairns to Port Douglas road, the low Eucalyptus forests, or even the rain forests, come right up to the coast. The Mesophyll vine forest also contains some patches of Eucalyptus and Acacia vine forests. West of the rainforest, on the Tablelands, the vegetation starts to thin out again into medium and low mixed Eucalyptus woodlands (Figure 3-8).

The Wet Tropics Rainforests of the region are internationally recognised as having scientific, particularly botanical, significance, and it is this factor which has led to the establishment of the World Heritage Area (Turton 1991:142). They contain the richest fauna in Australia with 30% of the country's marsupial species, 60% of bat species, 30% of frog species, 23% of reptile species, 62% of butterfly species and 18% of bird species. There are also 54 species of vertebrate animals unique to the region and a great diversity of insect species (Australian Heritage Commission 1986:21; Turton 1991:145 citing a 1984 unpublished paper by Montieth and Davies). Consequently, the diversity and richness of the region's rainforests is one of the main tourists attractions of the area, resulting in a close eye being kept on tourist carrying capacity by the Department of Environment (Driml 1997).

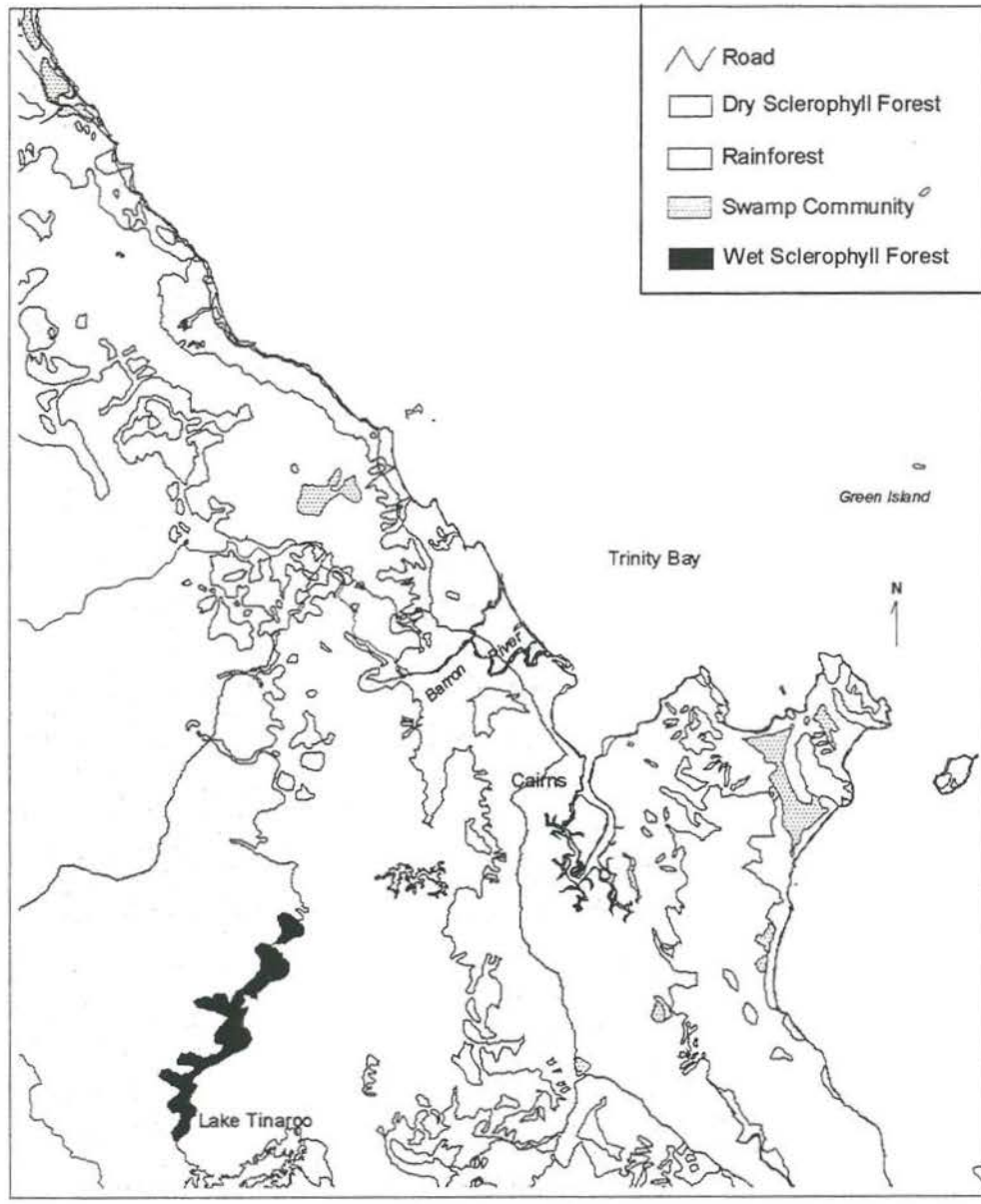


Figure 3-8: Vegetation Communities of Cairns and Surrounding Regions at the time of European Settlement.

Source: Smith, Meagan. 2000. *Vegetation Map of the Cairns Region.* Cairns: Wet Tropics Management Authority Mapping Unit.

3.3.4 Great Barrier Reef

The Great Barrier Reef runs almost parallel to the Australian coastline for over 2000 kilometres, on the edge of the continental shelf (see Figure 3-3). It contains thousands of islands, most of which are low coral islands (cays), formed by calcareous debris (sand and rubble) resulting mainly from the breakdown of coral skeletons. The elements then do their work and a cay is formed. Seeds from birds germinate and stabilise the island, at the same time providing a habitat for birds and turtles as well as insects, reptiles and small animals. The wildlife provides nutrients for the island and a unique ecosystem is born. There are also many continental islands on the Great Barrier Reef that form alternative habitats (Mather and Bennett 1978:xiii).

Like the rainforest, the Great Barrier Reef is a major tourist attraction and as such is carefully monitored in terms of its visitor carrying capacity by the Great Barrier Reef Marine Park Authority and associated agencies. The Authority was established in 1975 and is the principal adviser to the Federal Government on its care and protection. The goal of the Authority is "to provide for the protection, wise use, understanding and enjoyment of the Great Barrier Reef in perpetuity through the care and development of the Great Barrier Reef Marine Park" (Great Barrier Reef Marine Park Authority 1996:4). The Park extends from 24°30' S in the south, to 10°41' in the north, or from just north of Bundaberg to the tip of Cape York (Mather and Bennett 1978:xiii). The Authority is also the lead agency for the Great Barrier Reef World Heritage Area, which covers 348,700 square kilometres, including the Marine Park 93%, islands (5%) and other Queensland waters (2%). The Authority works in conjunction with a number of other State and Federal bodies, including the Queensland Department of Environment, which has responsibility for the day-to-day management of the Marine Park subject to the Authority (Great Barrier Reef Marine Park Authority 1996:12).

Tourism is by far the most significant economic activity in the Great Barrier Reef World Heritage Area, most of which is concentrated in the Cairns and Whitsunday regions. On an annual basis, reef tourism is estimated to be worth more

than four times the value of the fishing industry in the same area. The Authority estimates that tourism in the Marine Park is worth annually over one billion dollars to the Australian economy and attracts over 1.5 million visitors to the World Heritage Area (Great Barrier Reef Marine Park Authority 1996:12). The attraction of the reef, and its value as a tourism destination, lies mainly in its scenic qualities both above and below the water. Below the water there are innumerable shapes and colours of sea life, both in terms of the coral itself and fish and other species that live there. Above the water line, the scenery is just as attractive. Coral cays and islands are covered in tropical vegetation and surrounded by clear blue waters of the reef where the temperature is always warm and the skies are nearly always clear.

Recreation and tourist activities include diving, snorkelling, boating and fishing. There are also a number of resorts located on islands in the World Heritage area. The Great Barrier Reef Marine Park has drawn up strict guidelines and legally enforceable laws to make sure that these activities do not harm the Reef or the World Heritage values of the area. Common causes of damage to the fragile coral formations are fin damage from snorkelers and divers and anchor damage from boats. To reduce this damage, the Authority is trying to keep divers within marked routes, providing moorings for boats as well as issuing camping permits with a view to limiting campers to the carrying capacity of a particular island or group of islands. The Authority is also concerned about waste disposal from boats and resorts, and has developed strict requirements involving tertiary treatment of sewage on resorts and holding tanks for vessels are required to be emptied in port. To get the message to the public concerning the protection and better use of the reef, a number of leaflets, booklets and manuals have been published by the authority (Great Barrier Reef Marine Park Authority 1996).

3.4 Brief History of the study region

Prior to the arrival of Europeans, Aboriginal settlement goes back many thousands of years (Collinson 1939:60-65). Nowadays indigenous culture forms a part of the overall package sold to potential tourists in order to attract them to the area. The people occupying the Cairns rainforest region before white settlement were

called Bama and although they were hunters and gatherers, they were not nomads and lived according to an annual cycle regulated by seasonal changes (Bottoms 1992:7). Land travel was via a network of interconnecting "walkpads" and for sea travel the Bama used dugout canoes with one outrigger. Life was lived according to a system of religion/law called Bulurru which influenced every aspect of their life, and it was this system that the settlers failed to understand, leading to the "unintentional psychological dispossession of Bama identity" (Bottoms 1992:8). Although relations between the Bama people and the early explorers were usually peaceful, where aggression did occur it was generally the result of explorers and settlers not respecting Bulurru. The latter system gave the Bama people rights to the food resources in their territory which included the surrounding sea. Consequently, misunderstandings between the settlers and the Bama people over the rights to food resources often led to violence and killings (Bottoms 1992).

British explorer Captain James Cook was probably the first European to visit the Cairns region. He named Trinity Bay while mapping the North Queensland coastline in 1770 aboard the *Endeavour*. The area was surveyed again in 1819 by Captain Phillip Parker King (later admiral) aboard the Royal Navy survey ship *Mermaid,* which anchored at Fitzroy Island, south of Cairns, and Snapper Island just north of Cairns. The region was again visited in 1847 by Captain Owen Stanley in the survey ship *Rattlesnake*, and Captain Wickham in 1839 in the *Beagle*, the same ship used by Charles Darwin. Both ships were involved in surveys of the Queensland coast (Jones 1976:6-10; Lubbock 1967:196).

The first recorded white settlement and commercial activity in the area was J.S.V. Mein's béche-de-mer station on Green Island in Trinity Bay, 19 kilometres east of the present city of Cairns, in 1857. Mein also claimed to be the first white person to explore the mainland to the foot of the Bellenden Ker mountain ranges at about the same time. When Mein's station was closed due to a cyclone in 1857 or 1858 he explored and rejected the mainland as an alternative site (Jones 1976:14,15). The next white person to visit the area was Phil Garland in 1870 aboard the *Telegraph,* who was attacked by Aborigines while looking for wood and water in the vicinity of Smith's Creek, the present location of Cairns City. Green Island, which

now offers tourists five-star comfort, was the scene of foul play on several occasions during its early years of white settlement. The first incident was when béche-de-mer fishers, William Rose and William White, were killed by their own Palm Island workers in 1873. The same year another four fishermen were killed by their Aboriginal workforce, and in the following year an entire shore party was killed by Palm Islanders (Collinson 1942:167-174). During 1873, George Dalrymple, explorer, politician and land commissioner, "sounded out" Trinity Inlet, which later became Cairns Harbour. At the time Dalrymple was engaged in a government survey of the North Queensland coast between Cardwell and Cooktown in search of suitable land for growing sugar cane. He most probably camped at the site that was chosen by the first permanent white settlers in 1876 (Pike 1976:1-3).

When gold mining started at Hodgkinson, inland to the west of the present site of Cairns, the search started in earnest for a port which was closer than Cooktown to the north and Cardwell to the south. In 1876, after considerable effort from numerous people to find a route over the coastal range from Hodgkinson, settlements were established on the banks of the Barron River, near the where the northern suburb of Smithfield is now situated, and at Trinity Inlet, the present site of Cairns City. The Queensland government favoured the latter as a site for a port because the bar at the mouth of the Barron made shipping access to the former location difficult. Accordingly, officials were sent to survey a township and establish the necessary infrastructure, and the present city of Cairns was gazetted on 27th October 1876. The Barron River settlement, named Smithfield, also received official sanction, but was preferred by the district's earliest settlers because of its close proximity to place where the range track reached flat ground. Packers did not have to travel the extra 19 kilometres to Cairns. The success of the Smithfield settlement was, however, short lived because of difficulties with the bar at the mouth of the Barron and the establishment of trafficable roads between the foot of the range track, near what is now known as the Kuranda Range road, and Cairns. In addition, Smithfield was frequently flooded, up to three and a half metres deep in the main road in 1878. By the end of that year, the township of Smithfield was practically deserted. Cairns became the main settlement, but by 1878 the town had fallen on hard times due to the loss of hinterland trade to Port Douglas to the north. The latter

took over much of the trade previously going through Cairns because of the discovery of a good dray road through the Mowbray Valley to the Hodgkinson's gold fields (Collinson 1939:83-84).

The loss of trade to Port Douglas suffered by Cairns was partially balanced by the burgeoning timber trade, particularly cedar, which was worth the exceedingly high price of between £3 and £4 (A$6 to $8) per super foot (English 1964). The first pit sawmill was established on the banks of the Cairns Inlet in 1876, not long after the first settlers arrived. The logs were rafted to the mill (Collinson 1939:131; Collinson 1951). The first steam driven sawmill was not in operation in Cairns until 1887 (Pike 1976: Chap.2). Cairns also remained an important buying centre for béche-de-mer, gold and other minerals but reached its lowest ebb in terms of income and population in 1881. The town was saved however, by the development of tropical agriculture, mainly bananas and sugar, following the rush to select land for sugar plantations in the early 1880s (Collinson 1939:136; Collinson 1951).

The first sugar cane was crushed in 1882, and by 1885 three mills were in operation - Hambledon, Hop Wah and Pyramid. After 1885, a decline in world sugar prices, legislation prohibiting the recruitment of Melanesians after 1890 and drought led to the closure of Hop Wah and Pyramid plantations. Hambledon's owners were also forced to sell their property, but it continued to operate. The increased costs associated with the use of white labour did nothing for the confidence of the plantation owners, who typically had a work force of between 100 and 150 people. In the event, the future of the industry was to lie in the use of relatively small family farms and central mills rather than large plantations that owned their own mills. The first local central mill, Mulgrave Mill, opened in October 1896, with the help of a loan from the Queensland government, amid a rush for small land selections and lease holdings suitable for family cane farms (Collinson 1942:142; 1943:263).

By 1878 Cairns was connected to the national telegraph system and by 1884 construction had started on a railway to link Cairns with mining communities on the Tablelands via the Barron Gorge (Sheehy 1987). The construction of the railway up through the Gorge, past the Barron Falls to Kuranda at the top of the range was a

considerable feat of engineering and cost over 30 lives through accidents (Broughton 1991:32). The greatest loss of life, however, was from malaria, scrub typhus, dysentery, snake bite and scrub ticks (Robinson 1993:9). The first locomotives arrived by ship in 1888 and services started to Kamerunga, which was near the present Rainforest Estate and across the Barron River from Lake Placid where white water rafting, now a popular tourist attraction, terminates. The railway with its 15 tunnels was finally opened in 1891. These days the train ride from Cairns to Kuranda is a well-known tourist attraction, famous for its panoramic views of the coastal plain and the Coral Sea, as well as the spectacular rainforest and water falls in the Barron Gorge. During the railway's construction, large amounts of money were injected into the community by the construction workers and by Queensland Railways. The result was a regional economic boom that lasted until the world-wide depression of the 1890s (Robinson 1993; Broughton 1991:14).

Nowadays the Cairns region offers first-class accommodation and service to a demanding international clientele. In its early days, however, Cairns was very much a frontier town, a point not lost on operators offering heritage-based tours such as those to "historic ghost towns and goldfields" (Coral Coaches 2000). As a supply centre for the almost exclusively male mining areas on the Tablelands, Cairns was from the very start well supplied with hotels, brothels, gambling facilities and opium dens. The town was regarded as a particularly rough place for drinking and street fighting and observers commented that it was full of spielers, loafers, "bad marks", gamblers (particularly in the Chinese quarter) and that drinking to excess was a way of life (Jones 1976:chap 6).

The region's heritage also includes a rich ethnic component. Prior to the Barton (Federal) Government's introduction of the White Australia policy in 1901 and subsequent laws aimed at repatriation of non-whites, a large proportion of the population of Cairns, and surrounding regions, was non-white. In 1886, Chinese comprised 18% of the residents of Cairns and 48% of the population in the hinterland around the township. In the rural area around Port Douglas, 76% of settlers were Chinese (May 1984:13, quoting census figures). In addition, there were smaller numbers of Japanese, Malays, Indians and Cingalese, who had been brought

to North Queensland to work on the sugar plantations. After the Hodgkinson gold rush, these people were mostly involved in agricultural pursuits such as market gardening and banana growing (May 1984:10). There were also equally large numbers of Melanesians working mainly on the sugar plantations. As the negative effects of the white Australia policy took hold, violence and bickering, between, and towards, ethnic groups, including what amounted to officially sanctioned violence, arson and looting, became more and more common until only a few "die-hard" and/or rich, non-Europeans were left (Jones 1976:chap 6).

At the turn of the twentieth century, Cairns township still contained many fresh and salt water swamps. Therefore, health was a major issue. Fever, mostly malaria, was endemic, but at the time people did not associate the disease with mosquitoes. Dr Koch, the local GP, had however, made the association between malaria and the wetter parts of town and had developed a "cure" with a strong quinine base. One of the worse affected areas were the hospital grounds and it was the fortunate patient who did not contract a fever acquired while at the hospital. The disease was finally eradicated in 1943 with the help of a system of drainage designed by Cairns City Council engineers and executed with the help of Australian and US forces who were stationed in the town at the time. The drainage canals are still in use and as yet there has been no significant outbreak of malaria, despite daily flights from New Guinea and other infested areas (Stephens 1972; Derrick 1959; Daly 1994).

During the period from 1900 to the start of World War II, the regional economy changed from being dominated by minerals, mostly gold, to agriculture, mainly sugar. The basis of the sugar industry continued to be smaller, family operated farms and central mills. The industry was encouraged by the State Government who established a tropical agriculture experimental station at Meringa, just south of Cairns, in 1911, and provided loans for the construction of Babinda and South Johnstone central mills in 1915. Acreage devoted to sugar growing in the region continued to increase after the mills opened, while more cane tramways were built to transport sugar cane to the mills. During the 1920s, there was a large influx of Italian migrants, many of whom entered the sugar industry adding to the ethnic

mix already in the region. By 1932, sugar made up 66% of products handled by the Cairns wharf. The same year, the third most valuable export was timber, mainly sawn timber, but also some veneer and logs, most of which went to Brisbane by rail after 1924, the year Cairns was finally connected by railway to Brisbane (Allom Lovell Marquis-Kyle 1994:93; Queensland Government Tourist Bureau 1939:36). The direct rail connection with the capital was a boost, not only to trade, but also to tourism in the north. Transport within the region was further enhanced with the opening in 1926 of the Gilles Highway, the first road up the range to the Tableland. No doubt the direct rail link with Brisbane was a factor in the establishment of the Queerah Meatworks in 1925. The meatworks handled beef and prawns, and at its peak employed 800 people (Ryle September 1998; October 1998). It closed in 1988.

During the Second World War, American and Commonwealth troops trained on the Tablelands and used Cairns as a base before being sent to different theatres of war in the Pacific. The high incidence of malaria in the forces, which peaked at 1,600 cases a week in 1943 (out of 30,000 troops), encouraged the U.S. and Australian military to assist the local government in draining most of Cairns' swamps and fogging the mosquito breeding grounds. After the Battle of the Coral Sea in 1943, training facilities for 70,000 troops were constructed on the Tablelands. The remains of many large training camps can still be seen today and are marked by signs so that veterans and other interested people can easily locate them. Along with Townsville, the City of Cairns became an operations base for the Pacific Campaign (Coordinator General 1994:9). There is no doubt that the war changed North Queensland. What was previously only sparsely populated country, suddenly became the opposite. The roads were so busy with military traffic that major reconstruction was necessary, and a new range road had to be built from Kuranda to Smithfield near Cairns following the old pack route. Numerous aircraft runways were built and port facilities upgraded while businesses were kept busy supplying food and building materials to the military (Wilson 1988).

During the 1950s and 1960s the study region continued to rely on primary industry, although there was some food processing apart from the Queerah Meat Works. The Great Northern Cannery began producing tinned pineapple, mangoes,

paw paws and a number of other products in 1950, but closed in 1955 due to financial problems (Allom Lovell Marquis-Kyle 1994:95; Black 1996). Sugar handling at the Cairns wharf became mechanised in the 1950s resulting in a reduction of 517 wharf workers per day in 1955 to 99 in 1962 (Allom Lovell Marquis-Kyle. 1994:98). In 1964 the Cairns Bulk Sugar Terminal was opened, facilitating the storage and loading of sugar directly into bulk carriers without the need to lighter sugar out to the ships. A small manufacturing sector led by North Queensland Engineers and Agents (NQEA) started shipbuilding, as well as supplying the machinery needs of the sugar industry and timber mills. Hence, the emergence of other industries meant that the relative importance of sugar declined so that by 1955 it only made up 50% of produce handled by the Cairns wharf. On the Tablelands, the construction of the Tinaroo Dam and associated irrigation systems in the late 1950s made possible a large increase in the hinterland region's agricultural sector. In particular, the dam was the catalyst for the establishment of the tobacco growing industry in the drier, northern areas around Mareeba. In the 1980s and 1990s the tobacco industry has declined and farmers have been forced to diversify into fruit, vegetables and other crops. The timber industry continued to be important to the region's economy until the World Heritage Area was declared in 1988 at which time it production decreased considerably.

The geographic isolation of Cairns has made it vulnerable to the actions of relatively small numbers of people located outside the region. The earliest example of this was the "Great Maritime Strike" of 1890. It lasted several months and halted all cargo shipping so that perishable crops, mainly bananas, could not get to southern destinations and rotted on the wharf. The strike then spread to the new railway further affecting the income of the region by cutting all freight transport links. Roads to the South and up the range did not exist so what goods did get through went by pack horse (Jones 1976:chap 6). A similar incident took place in 1919, when the town was almost starved to death by a national maritime strike that affected all shipping to and from the port. To make matters worse, the strike occurred in the middle of the disastrous, world-wide Spanish flu epidemic, and the severe economic recession, which followed World War I. What shipping there was before the strike, had been delayed due to quarantine because of the epidemic. The economic lifeline

of the area, already suffering because of the recession, was effectively shut down. The most recent incident was the six-month long national domestic pilot's strike in 1989/90, exacerbated by the following deep recession. The strike brought tourism to the region, the mainstay of the economy, to a standstill and the local economy suffered badly as tourism income dried up. All of the above transport strikes were caused by factors outside the control of the people of Cairns but had a disastrous effect of the welfare of the region, illustrating the existence of geographical factors which have in the past created an almost absolute reliance on transport. Any strategy or policy resulting from a TALC analysis should consider population's socio-economic wellbeing and must therefore allow for the historic vulnerability of the region.

3.5 Recent Economic Profile.

The total work force in the region recorded at the most recent census (1996) was 73,887, up 70% from the 43,299 employed at the time of the 1986 census (ABS 1997. *CData96 Cat. No. 2721.0*). In addition to tourism, economic activity in the region includes shipbuilding, fishing, agriculture, mineral production and educational services. The region is also becoming a supplier of goods and services to organisations located outside the region, including Indonesia and Papua New Guinea. Freeport Mining in Indonesia for example, obtains provisions and professional services in Cairns. The construction industry has also been an important economic influence on the study region, but has tended to occur in "waves" of intense activity followed by slack periods. When tourism occupancy rates pick up, investors make plans to provide more infrastructure, which in itself provides an economic lift. When this new investment comes on line, the extra accommodation causes occupancy rates to drop and construction ceases until occupancy rates catch up, and so the cycle goes on. The fiscal multiplier intensifies the effect on the economy resulting in exaggerated regional economic cycles (Cummings February 1998:3). The economy has little in the way of built-in stabilisers, such as those enjoyed by Cairns' southern neighbour, Townsville, which is host to most of North Queensland's State and Federal regional head offices (eg. the Australian Tax Office) as well and the Army, Air Force and the university.

3.5.1 Primary Industry

Primary industries, once the mainstay of the region's economy, only employed 4601 people or 6.2% of the workforce by 1996. Of these, 3,938 persons or 5.3% were employed in agriculture, forestry and fishing and 663 (0.9%) in mining (ABS 1997. *CData96 Cat. No. 2721.0*). The numbers employed have changed little over the previous ten years, while the total workforce has increased, making a relative decline in this sector from 10.4% to 6.2%. The number involved in mining may be inflated, because it could include people living in the region, but working outside on a fly in, fly out, basis.

Primary industry in the four local government areas includes sugar, bananas, tobacco, mangoes, avocados, flower production, a variety of vegetable crops, and beef and dairy cattle. Total regional agricultural production for the Far North Statistical District[1] is greater in value than that produced by the State of Tasmania at about $850 million per annum in 1998. Most of the produce is exported to the southern capital cities. In recent years, tobacco production has been reduced dramatically, but has been replaced by mangoes and ti-trees. Sugar cane growing also commenced on the Tablelands in the early 1990s and the annual crops are now processed at a new mill near Mareeba. The region also has a large fishery, producing about $200 million annually, as well as a minerals industry with an output valued at between $400 and $500 million annually (Cummings 1998:2; 1999:1). Minerals include gold, bauxite, copper, tin and marble.

Both minerals and agricultural commodities are subject to market forces and small changes in value can have significant impacts on profitability. Through the fiscal multiplier, changes in company profit levels have a greater than proportional effect on the local economy. During the 1990s, the market price of most of the commodities produced in the region has been down on previous years.

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[1] Includes the majority of Cape York Peninsula from Cardwell in the south to the Papua New Guinea border in the north and the Gulf of Carpentaria in west.

3.5.2 Secondary Industry

Manufacturing industries employed 5,056 or 6.8% of the work force in 1996, an increase from 3,741 (8.6%) in 1986. Therefore, the relative importance of this sector decreased, despite the increase in the number of people employed in manufacturing (ABS 1997. *CData96 Cat. No. 2721.0*). The region's secondary industry includes a large machinery equipment and metal products sector, the largest company being NQEA. This company was responsible for the production of fourteen Fremantle class patrol boats now being operated by the Australian Navy and during construction employed 750 people directly and a further 250 subcontractors. Other activities of the company include building and re-fitting larger naval and civilian vessels, hovercraft, sugar mill machinery, cane tram equipment, rolling stock and bridge structures. Other secondary output includes wood, wood products, processed food, beverages and tobacco.

3.5.3 Tertiary Industry

In 1996 the tertiary sector employed 61,667 people (83.5% of the employed workforce). The corresponding figure for 1986 was 33,279 or 76.9% of employed people. The tertiary sector, therefore, has gained relative to the primary and secondary sectors, with the prime mover being tourism. A shortcoming with the current data classification, however, is that it does not have a separate classification for those people employed in the tourism sector. The closest is "Accommodation, Cafes and Restaurants" which has increased from 2,616 (6%) to 7,719 (10.5%) over the ten-year period. Other classifications in the tertiary sector include the wholesale (4.6%) and retail trades (14.9%), property and business services (8.3%), health and community service (8.2%), construction (7.7%), transport and storage (7.5%), education (5.6%) and Government and defence (5.2%). Most of these activities would be influenced in some way by tourism (ABS 1997. *CData96 Cat. No. 2721.0*).

Most Cairns residents would agree that the building of the Cairns International Airport by the Cairns Port Authority in 1984, was the major catalyst for recent the rapid growth in the region. The major indicators such bed spaces and accommodation takings show rapid growth immediately after the building of the airport. Passenger numbers

grew from 454,987 in 1984 to 2,391,128 in 1995, with consequent flow on to the rest of the economy (Figure 3-9) (Dept of Transport and Regional Development 1997). Between 1995 and 1998, however, growth in passenger numbers has slowed down and was negative in some years, particularly after the impact of the Asian economic crisis in December 1997 (Figure 3-10). The growth rate of domestic passenger movements, on the other hand, started to decline from the beginning of 1996 and fell into negative figures in March 1997, several months before the effect of the Asian crisis effected international passenger movements.

3.5.4 Recent Economic Trends

According to the *Cairns Post* index of economic activity (Figure 3-11), the economy entered a period of negative growth during the early months of 1996 (Cummings W.S. 1999:2). That period commenced eighteen months before the impact of the Asian economic crisis on international passenger movements at the Cairns Airport. The fall in domestic passenger movements did, however, coincide with the decline in the index, which continued right up to the end of the study period (December 1998), except for a month or two around October 1997 (Figure 3-11). The Asian crisis alone is not responsible for the decline in economic activity in the region.

3.6 Recent Socio-Economic Profile.

3.6.1 Introduction

There is a large body of data and numerous reports that provide details on the socio-economic situation in the study region. The difficulty has been to keep the section down in size, considering many TALC criteria are socio-economic. This section provides an overall picture, but with an emphasis on factors that are important to the model. Comparisons are made between the study region and the Gold Coast, one of the Cairns region's main competitors, as well as with Australia as a whole. Briefly, the region has been subject very rapid economic and population growth because of the tourist boom. As a result, there was a negative effect on housing affordability and other cost-of-living components such as food, causing concern about the welfare of low-income groups. On the other hand, the boom

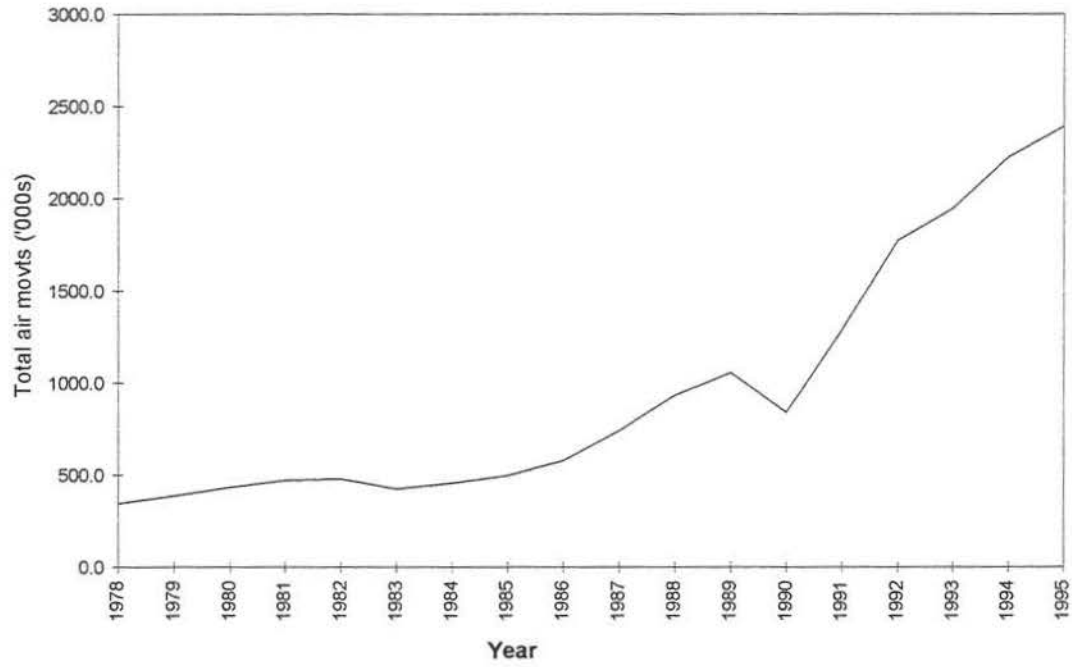


Figure 3-9: Total Air Passenger Movements at Cairns International Airport, 1978-1995.

Source: Department of Transport and Regional Development. 1996. *Air Traffic Data*. Canberra: Department of Transport and Regional Development.

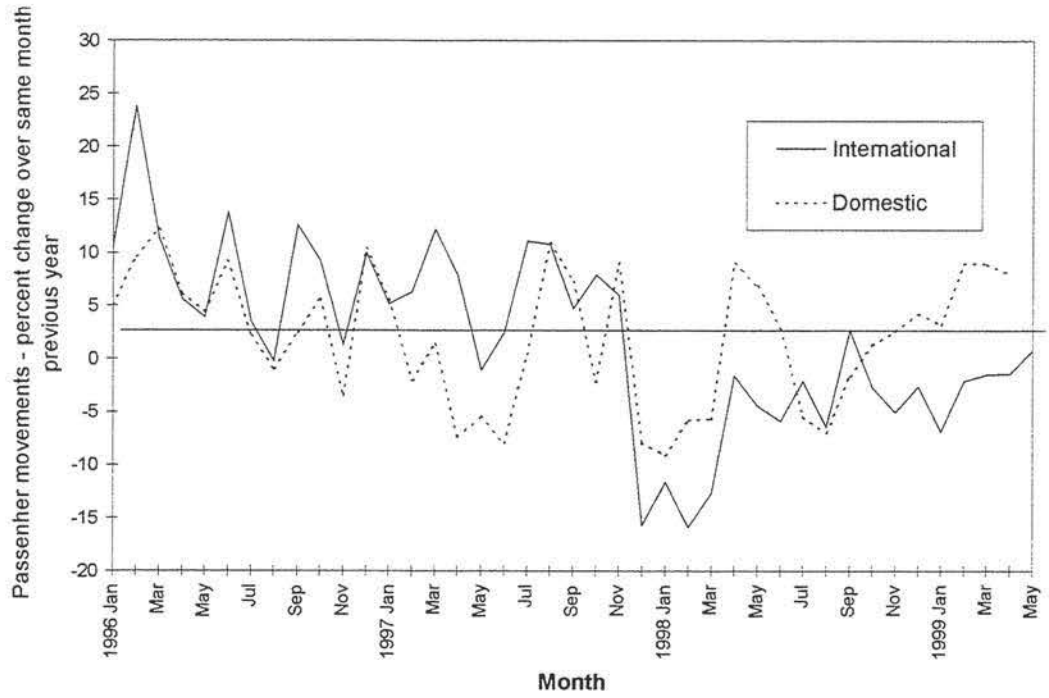


Figure 3-10: Cairns International Airport Passenger Movements (Excluding Transit Passengers) January 1996 to May 1999, Percentage Change Over the Same Month of the Previous Year.

Source: Cummings, W.S. 1999. *Tourism Growth Returns.* Cairns: W.S. Cummings Economic Research Services.

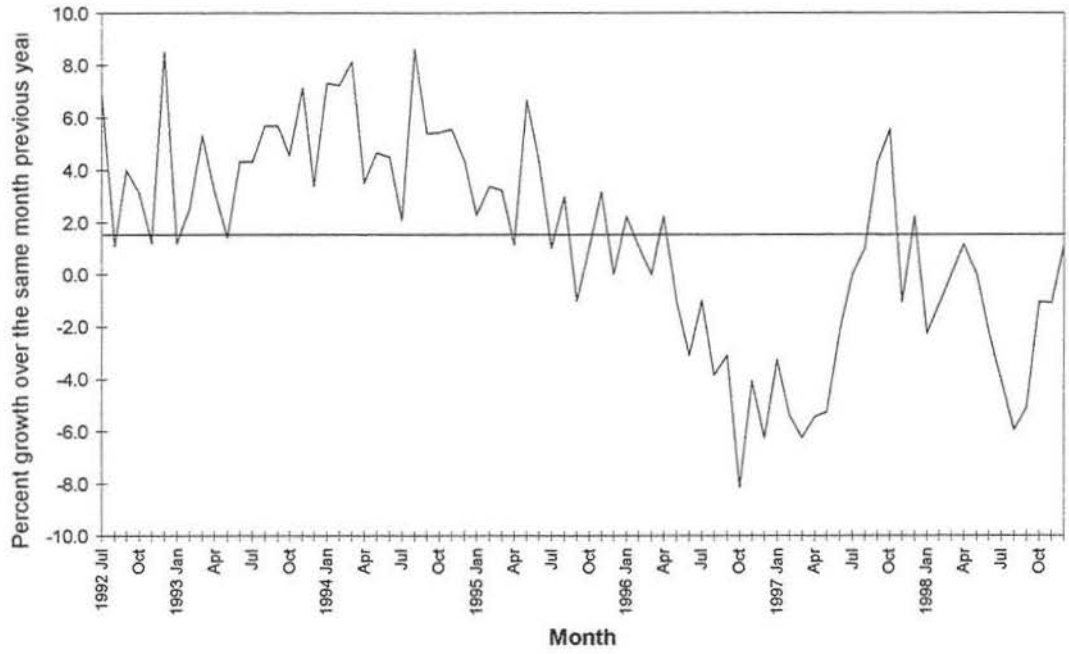


Figure 3-11: *Cairns Post* Index of General Economic Activity, July 1992 to October 1998: Growth Over the Same Month Previous Year.

Note. The *Cairns Post* Index of General Economic Activity is based on "confidentially supplied monthly sales results of a number of widely used goods and services" and is "designed to give an early indication of general business conditions in the local economy. While affected by elements like tourism and construction activity, it is not designed to be an indicator of activities in those fields" (Cummings November 1999:1).

Source: Cummings, W.S. November 1999. *Steady Growth Continues*. Cairns: W.S. Cummings Economic Research Services. p. 1

provided employment, especially in tourism and construction. The boom also brought a criminal element and property crime increased to a peak around 1987 to 1990 (*Cairns Post* 11 December 1987:1; 22 June 1989:6). Since the economic growth in the region has started to slow down, the crime rate has also declined (*Cairns Post* 17 July 1998:1).

3.6.2 Population Size and Growth

LGA population figures for the years 1886 to 1996 are far from comprehensive, but give some idea of the growth of the various administrative areas and their relative importance in terms of population (see Table 3-1). In 1996 there were 128,026 people in Cairns and 18,188 in Mareeba and smaller numbers in the other shires. Cairns is by far the most populous LGA although the smallest in area. Mareeba, with the largest area, has a population density of only about 0.34 people per square kilometre compared to Cairns with about 70 people per square kilometre. Population density is greatest near the coast in the Cairns region and generally thins out towards the west.

Between 1976 and 1996, population growth was 121.2% in the Cairns LGA while Douglas Shire the figure was 207% and 64.3% and 49.9% for Atherton and Mareeba respectively. The equivalent figure for Australia was 30.6% over the same period (*CData96 Cat. No. 2721.0*). Although the figure for the Cairns LGA was inflated due to the change in LGA boundaries, the end result would be similar. It is possible that such rapid growth had some social costs, for example, people displaced because of high rates and rents. This possibility is discussed in greater detail below.

3.6.3 Age-sex Characteristics

The age structure according to the 1996 census differed markedly amongst the four LGAs, the Gold Coast and Australia as a whole (Table 3-2). Regional populations in the study area were getting older. This trend was consistent with national developments. In the zero to fourteen age group, Cairns had about the same population percentage as the national average, whilst Atherton and Mareeba had a

Table 3-1: Population of LGAs in the Study Area, 1886-1996.

LGA	Area (1996)	1886	1891	1901	1911	1921	1924 (est)
Cairns City	50 sq km	1,376	2,460	3,557	12,998	4,113	8,500
Mulgrave Shire	1,750 sq km						
Douglas Shire	2,400 sq km					831	1,350
Mareeba Shire	52,600 sq km					1,531	3,812
Atherton Shire	600 sq km					1,209	3,850

LGA	1933	1947	1954	1961	1966	1971	1976
Cairns City	11,993	16,644	21,020	25,204	26,802	30,288	34,857
Mulgrave Shire total	10,303	10,485	13,477	14,427	16,057	16,985	23,025
Douglas Shire	2,901	2,493	3,100	3,354	4,197	4,072	4,746
Mareeba Shire	8,248	6,312	7,595	10,212	11,227	11,676	12,136
Atherton Shire	3,962	4,335	5,401	5,806	5,344	5,638	6,240

LGA	1981	1986	1991	1996	Growth 1976-1996
Cairns City	39,096	39,823	41,257	128,026*	121.2%
Mulgrave Shire Part (a) + (b)	31,335	39,907	51,306	amalgamated with Cairns	
Douglas Shire	5,957	6,545	7,783	14,591	207.4%
Mareeba Shire	14,003	15,698	17,032	18,188	49.9%
Atherton Shire	7,501	8,544	9,318	10,253	64.3%

* Note: 1996 Figures include new LGA boundaries involving the amalgamation of the old Shire of Mulgrave and the City of Cairns into one LGA called the City of Cairns.

Sources: *Statistics for the Colony of Queensland.* 1886, 1891, 1901.
Statistics of Queensland. 1911-1933.
Queensland Year Book. 1947-1954.
Queensland Year Book. 1961-1998.
ABS 1997. *CData96 Cat. No. 2721.0*

Table 3-2: Age Range data for Cairns, Douglas, Atherton, Mareeba, Gold Coast and Australia.

'96 Census	Ages	0-14	15-24	25-39	40-59	60+	Totals
Cairns	Persons	25,237	17,566	32,241	28,884	14,830	118,758
	%	21.25%	14.79%	27.15%	24.32%	12.49%	100.00%
Atherton	Persons	2,382	1,162	2,023	2,467	2,085	10,119
	%	23.54%	11.48%	19.99%	24.38%	20.60%	99.99%
Mareeba	Persons	4,272	2,103	4,062	4,797	2,809	18,043
	%	23.68%	11.66%	22.51%	26.59%	15.57%	100.01%
Douglas	Persons	2,165	1,604	3,521	3,483	2,207	12,980
	%	16.68%	12.36%	27.13%	26.83%	17.00%	100.00%
Gold Coast	Persons	68,517	50,123	79,645	90,060	74,323	362,668
	%	18.89%	13.82%	21.96%	24.83%	20.49%	99.99%
Australia	Persons	3,837,932	2,572,145	4,155,338	4,352,753	2,834,647	17,752,815
	%	21.62%	14.49%	23.41%	24.52%	15.97%	100.01%

1991 Census	Ages	0-14	15-24	25-39	40-59	60+	Totals
Cairns	Persons	22564	14932	26246	22375	13940	100057
	%	22.55%	14.92%	26.23%	22.36%	13.93%	100%
Atherton	Persons	2261	1344	1991	2012	1818	9426
	%	23.99%	14.26%	21.12%	21.35%	19.29%	100.00%
Mareeba	Persons	4121	2475	3875	4017	2427	16915
	%	24.36%	14.63%	22.91%	23.75%	14.35%	100.00%
Douglas	Persons	2203	1476	3100	2872	1933	11584
	%	19.02%	12.74%	26.76%	24.79%	16.69%	100.00%
Gold Coast	Persons	56320	41815	64349	68735	63718	294937
	%	19.10%	14.18%	21.82%	23.30%	21.60%	100.00%
Australia	Persons	3753804	2639931	3998376	3770985	2607832	16770928
	%	22.38%	15.74%	23.84%	22.49%	15.55%	100.00%

1986 Census	Ages	0-14	15-24	25-39	40-59	60+	Totals
Cairns	Persons	20,000	13,439	21,484	16,542	11,168	82,633
	%	24.20%	16.26%	26.00%	20.02%	13.52%	100.00%
Atherton	Persons	2,230	1,226	1,838	1,705	1,490	8,489
	%	26.27%	14.44%	21.65%	20.08%	17.55%	100.00%
Mareeba	Persons	4,149	2,459	3,532	3,391	1,977	15,508
	%	26.75%	15.86%	22.78%	21.87%	12.75%	100.00%
Douglas	Persons	1,621	972	1,902	1,807	1,248	7,550
	%	21.47%	12.87%	25.19%	23.93%	16.53%	100.00%
Gold Coast	Persons	44,019	33,198	48,817	46,498	47,736	220,268
	%	19.98%	15.07%	22.16%	21.11%	21.67%	100.00%
Australia	Persons	3,630,834	2,584,973	3,749,439	3,241,955	2,334,742	15,541,943
	%	23.36%	16.63%	24.12%	20.86%	15.02%	100.00%

Note: The above tables do not include overseas tourists.

Source: ABS 1997. *CData96 Cat. No. 2721.0*

greater proportion, perhaps reflecting cheaper housing costs for young families on the Tablelands compared to Cairns and Port Douglas. Douglas Shire and the Gold Coast had less than the average, reflecting their status primarily as holiday centres and retirement areas. The time series data for the period 1976 to 1998 was consistent with the 1996 census data. In the entire study region over the twenty-two year period, the population percentage in the zero-to-fourteen age group fell at almost twice the rate of the equivalent national average figures (ABS 1997. *CData96 Cat. No. 2721.0*).

In 1996, the fifteen to twenty-four age group were very much under-represented in Atherton and Mareeba, possibly reflecting a lack of employment and higher educational opportunities in those areas. Certainly there was a very low level of tertiary education participation in the two LGAs (see Table 3-3). Cairns, on the other hand, was slightly over-represented in this age group compared with Australia as a whole, but still had a very low tertiary education participation rate. The implication is that employment opportunities in Cairns and Port Douglas may have been drawing young people from the Tablelands and other parts of Australia to the coastal tourist centres more so than the lack of educational opportunities. Time series data over the period 1976-1998 reinforced the 1996 census data in that while the nation suffered a population drop in this age group of about two percent, there has only been a relatively small drop in Cairns and Douglas shires. On the other hand, the farming communities of Mareeba and Atherton suffered a four percent population drop in this age group, twice the national average rate (ABS 1997. *CData96* Cat. No. 2721.0).

Within the study region the proportion of people in the twenty-five to thirty-nine age group varied considerably with Cairns and Douglas LGAs particularly high at 27%. The national average was 23%. The relatively large proportion may reflect work opportunities for this age group in the two tourism centres as well as the effect of visitors because of their inclusion in the 1996 census. If this explanation was valid, however, one would expect Gold Coast percentages to be higher than the national average, which was not the case. Atherton was three percent below the national average and seven percent below Cairns and Douglas LGAs. Nationally,

Table 3-3: Type of Educational Institute Attending, 1996.

	Cairns Persons	%	M'eeba Person	%	D'glas Person	%	A'ton Person	%	Australia Persons	%
Pre-School	1645	1.28%	259	1.42%	132	0.90%	126	1.23%	258394	1.44%
Infants/Primary	10636	8.31%	1830	10.06%	879	6.02%	1047	10.21%	1737568	9.71%
Secondary	6595	5.15%	1022	5.62%	467	3.20%	762	7.43%	1209766	6.76%
TAFE f/t	577	0.45%	35	0.19%	15	0.10%	16	0.16%	133525	0.75%
TAFE p/t	1394	1.09%	116	0.64%	97	0.66%	75	0.73%	306493	1.71%
TAFE not stated	14	0.01%	0	0.00%	0	0.00%	7	0.07%	3679	0.02%
TAFE total	1985	1.55%	151	0.83%	112	0.77%	98	0.96%	443697	2.48%
Uni f/t	753	0.59%	59	0.32%	30	0.21%	23	0.22%	379679	2.12%
Uni p/t	1396	1.09%	146	0.80%	105	0.72%	86	0.84%	250167	1.40%
Uni not stated	5	0.00%	3	0.02%	0	0.00%	0	0.00%	2484	0.01%
Uni total	2154	1.68%	208	1.14%	135	0.93%	109	1.06%	632330	3.53%
Other f/t	164	0.13%	13	0.07%	4	0.03%	4	0.04%	33383	0.19%
Other p/t	361	0.28%	44	0.24%	29	0.20%	32	0.31%	65731	0.37%
Other no stated	14	0.01%	3	0.02%	0	0.00%	0	0.00%	1943	0.01%
Other: Total	539	0.42%	60	0.33%	33	0.23%	36	0.35%	101057	0.56%
Not attending	87231	68.14%	13188	72.51%	10136	69.46%	7402	72.21%	12498628	69.85%
Not stated	7970	6.23%	1327	7.30%	1084	7.43%	537	5.24%	871391	4.87%
Overseas visitor	9269	7.24%	144	0.79%	1614	11.06%	134	1.31%	139594	0.78%
Total	128024	100.00%	18189	100.00%	14592	100.00%	10251	100.00%	17892425	100.00%

Source: ABS 1997. *CData96 Cat. No. 2721.0*

over the period 1976-1998, this age group has been getting smaller with farming centres showing significantly larger falls, indicating a rural-urban drift. Cairns and Douglas shires, on the other hand, have been moving against the trend (ABS 1997. *CData96 Cat. No. 2721.0*).

The forty to fifty-nine age groups, varied very little from the national figures which showed increases of up to 4% over the 1976-1998 period, purely a result of the aging of the baby-boomer generation. The 60-plus age range, however, increased only about one percent in the case of Australia as a whole, whereas the tourism centres of Cairns and the Gold Coast went against the national trend with a decrease of up to about one percent. The Gold Coast and Atherton did, however, have a higher proportion in this category than the nation as a whole. Cairns, on the other hand, had less than the national average in this group which may reflect the city's lack of appeal to older age groups. In contrast to Cairns and the Gold Coast, the farming communities of Atherton and Mareeba showed increases in this age group of three times the national average, indicating an aging rural population. There was also possibly some retirement emphasis in Atherton, which recorded a slightly larger percentage increase. At the time of the 1996 census, Cairns was not, and perhaps never will be, a retirement centre in the same category as the Gold Coast (ABS 1997. *CData96* Cat. No. 2721.0).

3.6.4 Ethnicity

The study region as a whole has three main ethnic characteristics that distinguish it from the rest of Australia. The first is the relatively high proportion of Aboriginal and Torres Strait Islander people. Six percent of the local population is Aboriginal and Torres Strait Islander, as opposed to just over two percent for the state as a whole. The second distinguishing feature is migrant influence. Although the predominant migrant origin in the region is the United Kingdom and Eire, there is no doubt that Mareeba Shire has a clear Italian influence. In that shire in 1996, 8.5% of the population used the Italian language at home and 5% were born in that country. As a comparison, only 1.2% speak Italian at home in Cairns and only 0.7% of the population where born in Italy, whilst for Australia as a whole the figures are

2.2% and 1.3% respectively. Mareeba Shire clearly has a strong Italian heritage, particularly when it is taken into account that it is two generations since the land ballot which brought large numbers of Italian migrants to the region to take up irrigated tobacco farms following the construction of the Tinaroo dam. There is also a strong Yugoslav influence in the shire. Cairns, on the other hand, could be said to have a slightly greater than average German and Dutch influence (ABS 1997. *CData96 Cat. No. 2721.0*).

3.6.5 Education

The age at which people left school in Cairns differs little from the nation as a whole (Table 3-4). In terms of tertiary participation rates, however, the study region does not compare well with the rest of the country (Table 3-3). In the City of Cairns, which has had a TAFE college for many years, only 1.55% of the population attended the college, compared with the national figure of 2.48%. The other Shires in the region have TAFE participation rates ranging between 0.77% and 0.96%, despite the presence of small TAFE campuses in all three shires. University participation rates in the region are also low. In the nation as a whole, an average of 3.53% of the population attend university, while in Cairns it is 1.68% and in Douglas Shire 0.93%, despite the presence of a James Cook University of North Queensland Campus in Cairns since 1987. Reasons for this low participation rate may relate to the relatively high proportion of indigenous people and the transient nature of the population, such as backpackers working in the tourism industry (ABS 1997. *CData96 Cat. No. 2721.0*).

Census figures for 1991 and 1996 indicated that with the exception of Douglas Shire, the study region appears to have lower percentages of degrees and higher degrees than Australia as a whole. Skilled vocational qualifications, in contrast to university degrees, are in good supply in the region, with the exception of Mareeba which is a little down on the national average. Overall, however, the differences between the Australian average figures and the region do not vary sufficiently enough to warrant a great deal of attention or explanation. What differences exist can be explained by the lack of professional opportunities that

Table 3-4: Age Left School, 1996 Census

	Cairns		Atherton		Douglas		Mareeba		Gold Cst		Australia	
	Persons	%	Persons	%	Persons	%	Persons	%	Persons	%	Persons	%
14 years and under	11262	11	1391	18	1419	12	2704	19	42804	14	1906553	14
15 years	20131	20	1971	25	2170	18	3047	22	69707	23	2762280	20
16 years	18745	18	1444	18	2149	18	2363	17	60725	20	2640857	19
17 years	20238	20	1337	17	2199	18	2270	16	53919	18	2692905	19
18 years	8592	8	453	6	1232	10	891	6	26368	9	1684849	12
19 years and over	2625	3	135	2	284	2	340	2	7639	3	523864	4
Still at school	3545	3	429	5	262	2	631	5	10457	3	657469	5
Never attended school	378	0	43	1	46	0	162	1	702	0	101027	1
Not stated	8004	8	534	7	1054	9	1364	10	21830	7	945093	7
Overseas visitor	8432	8	127	2	1414	12	136	1	11052	4	125406	1
Total	101952	100	7864	100	12229	100	13908	100	305203	100	14040303	100

Note: The question in the census questionnaire which related to this data was only required to be answered by people who were 15 years and over. Hence the total for Australia is less than the population.

Source: ABS 1997. *CData96 Cat. No. 2721.0*

would be expected to exist in capital cities. The slight over-representation of skilled tradespeople can be explained by the construction activity in the region, which has resulted from the rapid, tourism-based growth (ABS 1997. *CData96 Cat. No. 2721.0*)

3.6.6 Personal Income

The TALC model is aimed at measuring the performance of tourism-based economies, and personal income is one of the main measures of how well the tourism industry is performing for individuals. This topic will, therefore, be dealt with in some detail. Figures 3-12 to 3-16 provide information on incomes in the study region, relative to the Gold Coast Shire and Australia as a whole as recorded in the 1996 census. Not surprisingly, the four LGAs in the study region had differing income levels. Cairns LGA had a higher proportion of people in the $300 and $799 dollars per week range, compared to all the other regions, including the Gold Coast Shire and the nation as a whole. National income, however, was more polarised, unlike in the LGAs under review. The popular conception that the tourism industry pays low wages compared with other industries did not seem to affect overall individual incomes. On the other hand, all regions in the study area, and the Gold Coast, lagged behind the nation in the $800 and $1500 range. High income earners did not appear to be moving to Cairns or anywhere else in the region. As already mentioned, Cairns appeared to be home to the middle age groups (as opposed to the very young and the very old) and the middle to upper income groups. The Gold Coast, as would be expected of an area with a larger than average proportion of retirees, had a higher than average representation in the lower income groups of between $200 and $399, particularly those income groups which would include government pensions. Douglas Shire was ahead of the Gold Coast, but behind the nation as a whole in the higher income groups, and over-represented in the lower income groups. Atherton and Mareeba were over-represented in all groups below $300 per week compared to Australia as a whole, indicating the relative financial hardship which is no doubt encouraging people to leave farming communities nationwide.

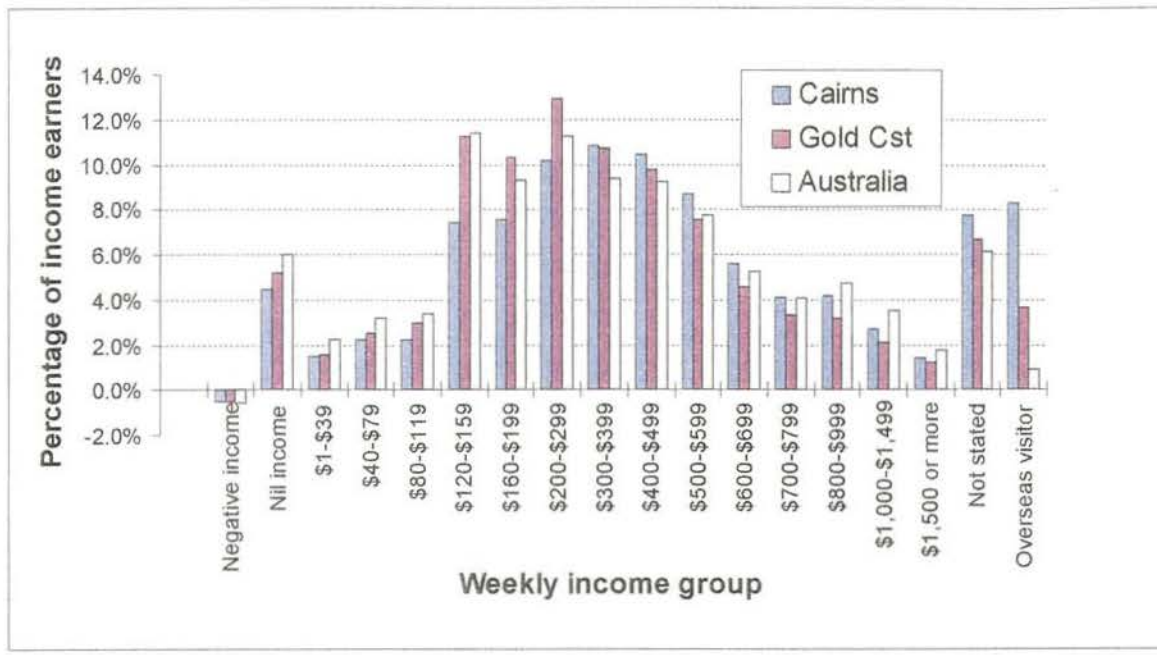


Figure 3-12: Relative Weekly Income: Cairns, Gold Coast & Australia, 1996 Census.
Source: ABS 1997. *CData96 Cat. No. 2721.0*

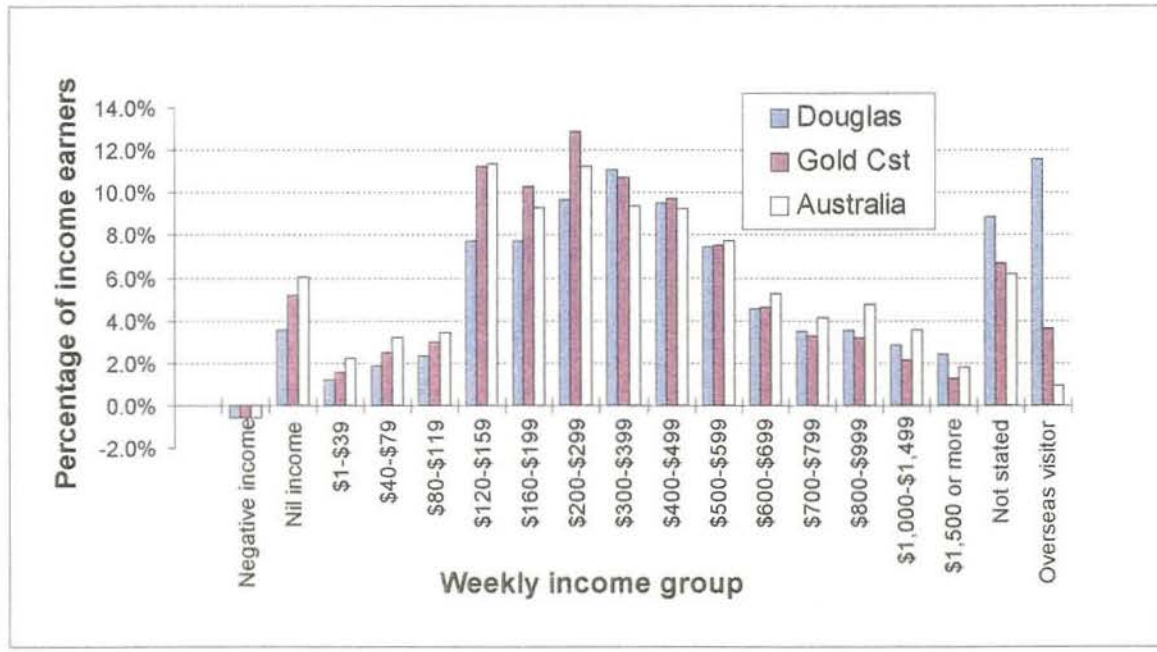


Figure 3-13: Relative Income: Douglas, Gold Coast & Australia, 1996 Census.
Source: ABS 1997. *CData96 Cat. No. 2721.0*

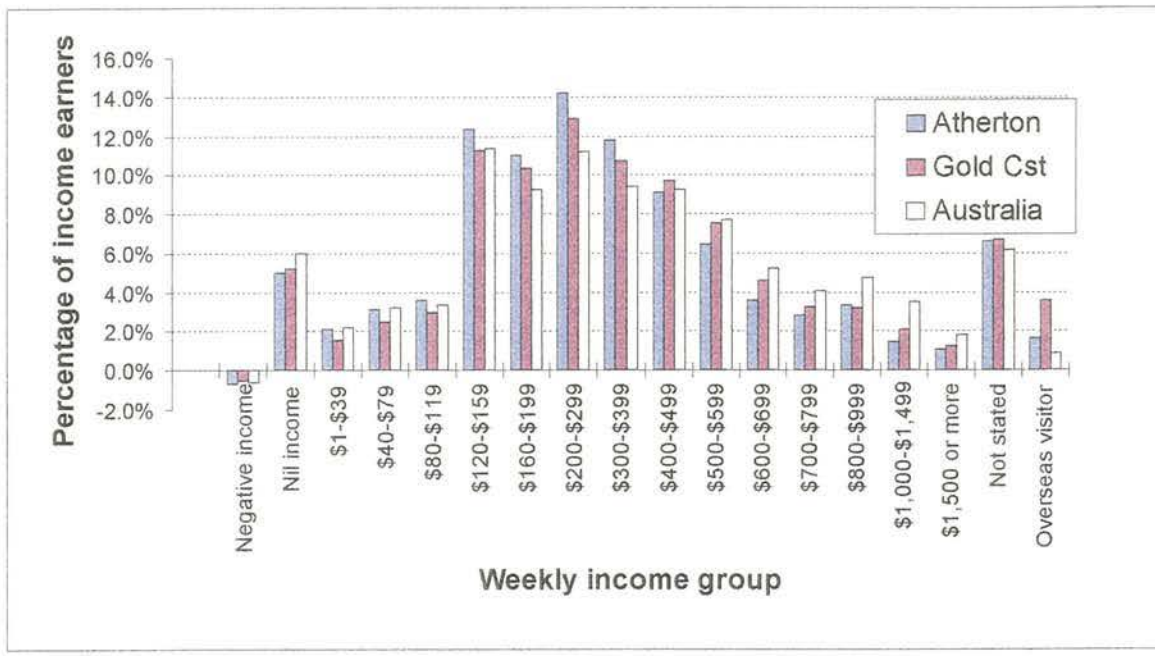


Figure 3-14: Relative Income: Atherton, Gold Coast & Australia, 1996 Census.
Source: ABS 1997. *CData96 Cat. No. 2721.0*

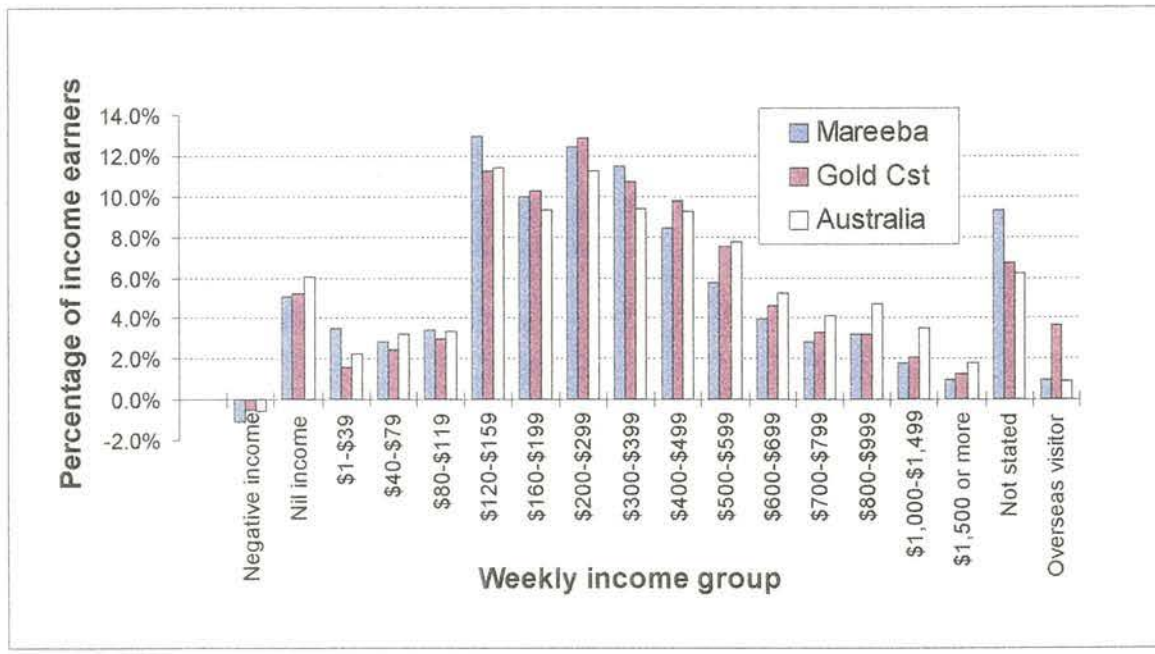


Figure 3-15: Relative Income: Mareeba, Gold Coast & Australia, 1996 Census.
Source: ABS 1997. *CData96 Cat. No. 2721.0*

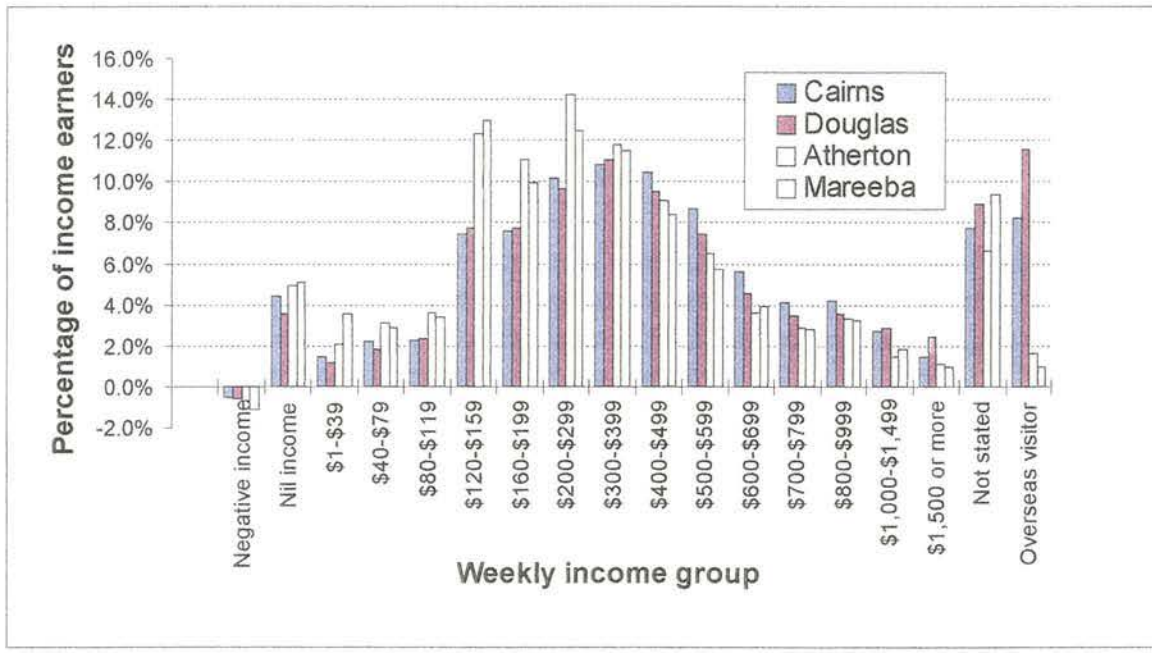


Figure 3-16: Relative weekly personal income: Cairns, Douglas, Atherton & Mareeba Shires, 1996 Census

Source: ABS 1997. *CData96 Cat. No. 2721.0*

Table 3-5: Grouped Mean and Modal Incomes for the Study Area, Gold Coast and Australia in 1996.

	Cairns	Douglas	Atherton	Mareeba	Gold Cst	Australia
Grouped mean (male)	491.51	486.74	397.09	378.00	432.15	480.17
Grouped mean (female)	331.70	354.21	274.17	274.70	291.86	301.01
Grouped mean persons	412.03	421.52	333.39	328.77	359.98	388.97
Female as percent of male	67.5%	72.8%	69.0%	72.7%	67.5%	62.7%
Grouped mode (male)	463.27	421.91	386.17	338.91	439.69	462.27
grouped mode (female)	290.66	324.07	246.01	255.91	247.79	241.06
Grouped mode (persons)	363.82	346.75	255.90	271.37	253.97	251.02
Female as percent of male	62.7%	76.8%	63.7%	75.5%	56.4%	52.1%

Notes: - The original ABS data included two categories, "not stated" and "overseas visitor", both of which were removed. The first because it would corrupt the calculation of the grouped mean and mode and the latter because this chapter is more concerned with Cairns residents than overseas visitors.

- The first and last categories in original ABS data were both open-ended. The first being "less than zero" and the last being "more than $1,500". These classes were changed to "-$100 to $0" and "$1,500 to $1,599" respectively so that the group mean and modal formulas (provided below) could be applied. The effect of removing the open-endedness of the latter class would be to lower the calculated group mean as, no doubt, many of the higher incomes would be above $1,599 per week.

- The group mean formula used was: $(\Sigma fm)/n)$

where f = frequency of data
m = midpoint of the class
n = total number of frequencies

- The group modal formula used was: $Mo = L + (d_1 / (d_1 + d_2))(i)$

where Mo = Group data Mode
L = real lower limit of modal class
d_1 = modal class frequency minus frequency of the previous class
d_2 = modal class frequency minus frequency of the subsequent class
i = the class interval of the modal class

Source of formulas: Waxman, P, 1993, *Business Mathematics and Statistics, 3rd edition*, Prentice Hall, Sydney.

Source: ABS 1997 *CData96 Cat. No. 2721.0.*

Mean and modal groups reinforce the above discussion (Table 3-5). The average male income for Cairns was $491.51, ahead of all other LGAs in the study area, the lowest average incomes being in the farming communities. The table should be interpreted in the light of the notes attached, particularly in reference to the open-ended nature of the highest category, "more than $1,500 per week", which was changed to "$1,500 to $1,599" in order to calculate the grouped mean. The change will lower the grouped mean weekly income slightly compared to the true arithmetic mean. In terms of gender equity, the study region was more equitable than the nation as a whole, but if the goal is to achieve absolute equity, the record is not good, with females earning between 67.5% and 72.8% of mean male incomes. This outcome was no doubt effected by the high incidence of female part-time workers, compared to males both within the study region and nationally (ABS 1997. *CData96 Cat. No. 2721.0).*

3.6.7 Professional Profile

A study of TALC theory requires some knowledge of the region's professional resources, because the evolution of a tourism area involves significant structural adjustment in its workforce. As the TALC progresses through its stages, different work force skills are required and often trained hospitality workers, particularly managers, have to be imported. Tourism-related analysis is made difficult however, because the ABS classifies farmers as "mangers and administrators". As a result, the farming communities of Atherton and Mareeba, and to a large extent, Douglas Shire, had more than twice the proportion of managers and administrators than Australia as a whole. The figure for the shires in 1986 was is 17%, 20% and 13% respectively, as opposed to 8.8% for the nation. By 1991 this percentage had dropped slightly in the three shires, but increased slightly in Australia as a whole. By 1996 the situation was 12%, 15.9% and 11.13% respectively for Atherton, Mareeba and Douglas as opposed to 9.27% for Australia (ABS 1997. *CData96 Cat. No. 2721.0*). To complicate matters further, the classification also includes self-employed workers, so it is possible that these figures reflect an increase in small business nationally on the one hand, and decline (and aging) of farming communities on the other. The situation in the Cairns LGA in all three census years

was similar to that on the Gold Coast, in that this group was under-represented by two or more percent in relation to Australia as a whole. In terms of gender representation of "managers and administrators" in the study region, males outnumbered females by about three to one in the tourism-based LGAs, and about two to one in the farming LGAs (ABS 1997. *CData96 Cat. No. 2721.0*).

In the "professional" category, females outnumber males in all local government areas as well as the nation as a whole. This situation may be related to the inclusion of categories that are not entirely gender neutral, such as social welfare, education and nursing. For both males and females between 1986 and 1996, in all LGAs except Mareeba, there was a tendency to have lower percentage representation in relation to Australia as a whole. The change was not great, less than one percentage point over five years. Possibly "professionals" were tending leave the region in search of work. The increase in Mareeba in this category coincides with the establishment of a large new correctional centre and the College of Tertiary and Further Education (TAFE) campus (ABS 1997. *CData96 Cat. No. 2721.0*).

Tradespeople, unlike professionals, were relatively over-represented in the study region and were very much male-dominated. Over the period 1986 to 1996, all LGAs in the study area and the nation as a whole, recorded a drop in the proportion of tradespeople compared to other categories. Cairns in particular recorded a drop in this group from 23.2% of the workforce in 1986 to 14.7% in 1991 and 14.2% in 1996. The fall in percentage representation coincides with the maturation of those TALC stages which involve rapid expansion of tourism facilities, as well as the pilot's strike of 1989/90 and deep recession of 1990/92 (ABS 1997. *CData96 Cat. No. 2721.0*).

Other occupations, including "advanced clerical and service workers", "elementary clerical, sales and service workers", "production and transport workers", "labourers and related workers" showed no significant departures from the national trend. One exception, however, is the "intermediate clerical sales and service" category, which includes hospitality workers. In the case of Douglas Shire, which underwent very rapid development during the 1980s, the proportion of

workers in this category rose from 8.7% in 1986 to 13.4% in 1991 and 17.8% in 1996. Other LGAs within the region have had steadier growth of about one percent, while the nation as a whole grew by about half of one percent (ABS 1997. *CData96 Cat. No. 2721.0*).

3.6.8 Employment and Unemployment

Employment and unemployment vary considerably throughout the tourism area life cycle. While the industry is growing, people are attracted to the area because of employment opportunities. Typically these highly mobile workers have no dependants, so it can be expected that the labour force participation rate will increase. As the TALC matures, a rise in unemployment could be expected. In the study region, unemployment rates have varied quite considerably, not only over time, but also between the LGAs and in comparison to the nation as a whole and the Gold Coast region (Table 3-6). National unemployment figures, however, have reflected economic conditions. The nation's economy was relatively healthy in 1986, followed by deep recession in 1991 and improving conditions in 1996. The national labour force participation rate increased during the recession year of 1991, but then returned to its 1986 level in 1996. During the same period, true to expectations, the participation rate in Cairns increased much more than the national average while unemployment has been falling (ABS 1997. *CData96 Cat. No. 2721.0*).

With the exception of Atherton shire, the high 1986 unemployment in the region, at a time of reasonably high economic activity for the nation, is significant in that it could indicate the presence of some counter-cyclical activity in the region. At the same time, while the Cairns economy has been quite counter-cyclical to the national business cycles, unemployment tends to follow the same trend as the national economy and so is not necessarily a good indicator of counter-cyclical activity. The reason for this apparent contradiction could be due to the relative mobility of the type of low-skilled labour that is required by the tourism industry, in that it can easily and quickly move from areas of low, to higher, labour demand. Despite the above argument, at the time of the 1986 census, unemployed labour in the tourism areas of Cairns, Douglas Shire and Gold Coast, had not yet responded to

Table 3-6: Unemployment and Participation Rates for the Study Area, Gold Coast and Australia, 1996.

	Mareeba			Douglas		
	1986	1991	1996	1986	1991	1996
Unemployment rate	17.21%	16.37%	9.44%	16.92%	8.96%	6.47%
Participation rate	59.18%	60.72%	59.27%	54.91%	63.15%	64.40%

	Atherton			Cairns		
	1986	1991	1996	1986	1991	1996
Unemployment rate	10.70%	10.54%	8.73%	15.64%	11.73%	8.22%
Participation rate	57.10%	57.32%	56.87%	62.63%	66.77%	69.25%

	Australia			Gold Coast		
	1986	1991	1996	1986	1991	1996
Unemployment rate	9.22%	11.59%	9.20%	15.53%	14.53%	12.50%
Participation rate	61.44%	63.04%	61.91%	54.60%	58.35%	59.21%

Notes
- Participation rates are persons in the labour force (employed and unemployed), divided by persons in the labour force plus persons not in the labour force over 15 years of age.
- These rates can vary considerably depending on the source. For example, the 1986 Cairns unemployment rate is given as 14.2% by the Australian Department of Employment, Education and Training *Small Area Labour Market - Australia* publication, where as the Census data, used above gives the figure as 15.64%.

Sources: ABS 1997. *CData96 Cat. No. 2721.0.*

the presence of lower unemployment areas elsewhere. The same could also be said about Douglas Shire in 1991 and 1996 (Table 3-6).

Atherton unemployment levels have tended to be relatively stable, probably because the shire has an agriculture-based economy as opposed to tourism-based. Mareeba's unemployment, on the other hand, was relatively high in 1986 mainly because problems associated with the demise of tobacco farming had started. The subsequent diversification in farming and encouragement of industry by the local government has resulted in some recovery in the Shire, as both the unemployment and participation rates show (Table 3-6).

3.6.9 Social Welfare

Tourism regions tend to become more interested in social welfare as the TALC matures, not only because of an increase in redundancies as the "stagnation" and "decline" stages commence, but also if there is a high proportion of retirees on the age pension. Under the Australian social welfare system, all pensioners and welfare recipients are entitled to the same benefits regardless of age. Aged pensioners are classified as welfare recipients along with other pensioners. In the study region, Atherton Shire had a large and increasing proportion of aged pensioners which by 1998, had reached 20% of the population, over twice the national average. The shire also had three times the national average rate of sole parent pensioners, and over twice the national average rate of disabled pensioners. Not surprisingly, incomes in Atherton shire are well below the national average (see Section 3.6.6). The proportion of welfare recipients in Cairns, Douglas and Mareeba was higher than the national average until the mid-1990s, but has gradually decreased until by 1998, all three LGAs were lower than the national rate. To conclude that there is a migratory trend of pensioners to Atherton from the other three shires would not necessarily be valid. There is however, a probability that pensioners were leaving the hot, expensive coastal resort regions, and moving to Atherton shire with its cooler climate and cheaper housing (ABS 1997. *CData96 Cat. No. 2721.0*; Centrelink, 1999).

The situation regarding pension recipients is roughly in accordance with the income data discussed above (see Section 3.6.6). Douglas LGA, with the boutique resort town of Port Douglas as its main urban centre, has a low percentage of pensioners and the highest average weekly income in the study region. Mareeba, on the other hand, does not have a high proportion of pensioners, but does not have a high level of income. The high proportion of farmers in the shire and an extended period of low commodity prices is a possible explanation for the low average income. Cairns, with a low level of welfare recipients, had an average income in excess of the national average, despite a high proportion of relatively low income hospitality workers.

3.6.10 Housing Costs

One of the most significant consequences of rapid population growth is the increased demand for land on which to build dwellings. In the study region, most of this land was once sugar cane farms. These farms were, and still are, being sold for housing, tourism and industry developments. Loss of such land has led to the closure of the Hambledon Sugar Mill at Gordonvale, just south of Cairns, affecting the livelihood of many employees, and has created a situation of conflict between the need for development and housing and the needs of the sugar industry.

During the late 1980s, population pressures due to the influx of labour, led to housing shortages and high housing costs. It is, therefore, not surprising that these high costs have become an issue of concern in the region, particularly in Cairns and Port Douglas (Department of Family Services and Aboriginal and Islander Affairs and FNQ Human Services Sector 1995:64). Between 1978 and 1995, housing prices in the Cairns City and Mulgrave Shire (the two LGAs later combined to form the new Cairns LGA in 1996), rose 88.8% and 64.7% respectively in real terms (REIQ, 1995). As would be expected, the high values flowed on to mortgage repayments. According to the 1991 census, median monthly housing repayments were higher in Cairns and Douglas Shire than in Queensland as a whole, regardless of household income. The cost also flowed on to rents, even though some of this pressure was alleviated by Housing Commission (state public housing authority) properties which

were rented much less than the cost of privately owned dwellings (Forsyth and Dwyer 1990). Since 1995, prices have been quite stable or even declined in some suburbs (REIQ 1999).

One reason for the rapid rise in real estate values between 1978 and 1995 could be the high degree of foreign investment in the Cairns economy (Forsyth and Dwyer 1990). Outside investment (both foreign and Australian), especially if it is unrealistically optimistic, can affect not only land suitable for tourism development but also ordinary residential house and land prices and rates and property taxes as well. An extreme example of the rapid increases which did occur is the Queensland Valuer General's estimate that land at Clifton Beach, a northern residential suburb of Cairns, rose 74.83% in 1988/89 and a further 83.12% the next year. Where high demand for tourism land exists, as would be expected to occur in a newly fashionable resort area such as Cairns, there is a finite supply which is often already occupied by residential buildings. Clifton Beach is one such area (Forsyth and Dwyer 1990).

The type of accommodation in Cairns LGA in 1996 was not a great deal different from the national profile. One difference, however, was that only 65.7% of people live in separate dwellings, as opposed to 74.8% for Australia. As would be expected in a tourist resort, a slightly larger percentage of people lived in apartments, 16% compared with 13% for the nation. For comparison, in Douglas Shire 18.2% of the population lived in apartments while on the Gold Coast the figure is 22.6%. The farming communities of Atherton and Mareeba had a relatively high proportion of people living in separate dwellings, 79.3% and 83.5%, and a correspondingly low proportion of people in apartments. Other forms of dwellings such as caravans were more prevalent in the study area than in the nation as a whole, as could be expected in a holiday resort region such as Cairns and Douglas LGAs and the relatively income-poor country LGAs of Atherton and Mareeba. Caravans were home to 4.2% and 16.4% of people in Cairns and Port Douglas respectively and 6.1% and 3.4% in Atherton and Mareeba compared to 2.2% on the Gold Coast and 1.4% for Australia (ABS 1997. *CData96 Cat. No. 2721.0*).

Levels of home ownership in the study region in 1996 were not typical of the nation at all. The farming regions on the Tablelands had a high percentage of people living in fully paid for homes (all categories and types of homes), with Atherton having 43.7% and Mareeba 42%, whereas the national average was only 37%. At the same time, only 13.5% and 14.5% of people in Atherton and Mareeba Shires respectively, were still paying off their homes compared with a national figure of 23.1%. Taking into account that these two LGAs had relatively low incomes, the high proportion of people in fully paid-for homes seems contradictory. A large proportion of homes, however, would be farmhouses and so would not have conventional domestic mortgages. There is also a possibly the higher-than-average age means that people have had longer to pay off their homes (Australian Bureau of Statistics 1997, *CData96*).

In Cairns LGA and Douglas Shire, the pattern was totally different. The proportion of people who owned their homes outright was 26.7% and 32% respectively, well below the national average. The main reason for this situation is most likely that the recent rapid growth has meant a high proportion of dwellings are not very old. Also, as with the farming communities, the low rate of outright ownership could be both a function of age and income, age being less than average and income being higher than average, the opposite to the situation in the Tablelands. Additionally, as mentioned above, properties were more expensive in the resort areas, making it less likely that homeowners would be able to own their homes outright. In Cairns LGA 21.3% of people are still paying for their homes, while the equivalent figure for Douglas Shire and Australia as a whole is 12.7% and 23.1%. The difference is possibly due to the transient nature of the population resulting in a high proportion of renters, 37.3% and 34% in Cairns LGA and Douglas Shire respectively compared to 24.7% nationally. The proportions for the Tableland Shires are about average for the nation as a whole (ABS 1997. *CData96 Cat. No. 2721.0*).

3.7 Recent Tourism Industry Profile.

This section briefly examines the study area tourism and travel industry performance at the end of the study period within the framework of Queensland,

Australia and the Asia-Pacific region. The latter is defined as Oceania and Southeast Asia and includes the twenty-six countries mentioned in Table 3-7. The Asia-Pacific region is discussed here because of its proximity to the Cairns area.

For the year 1999, the travel and tourism industry in the Asia-Pacific area represented 12.1% of total regional GDP and employed 7.7% of the region's workforce of 17,410,000 (see Table 3-7). On average, therefore, tourism industry productivity per unit of labour in the Asia-Pacific region is greater than alternative economic activities. Hence, the industry is a good vehicle for economic growth in countries where the latter condition exists. The reverse is the case for Australia where the industry represents 13.8% of GDP and 15% of employment, implying that the larger the relative size of the tourism industry, the lower national GDP will be (see Table 3-7). Travel and Tourism Gross Domestic Product (GDP) is defined as that part of total GDP attributable to activities producing goods and services directly for visitors (World Travel and Tourism Council 1996:14).

Asia-Pacific travel and tourism industry investment is growing at 6.9% a year and represents 10.9% of total regional investment while in Australia the figures are 3.2% and 13.3% respectively. The low investment growth rate in Australia is consistent with the low productivity relative to other forms economic activity. The high cost of labour compared to other countries in the region would also exert downward pressure on the tourism industry growth particularly in view of its labour intensive nature. The relatively high investment, however, appears inconsistent with the latter point and may be due to other forces. For example, federal and state government policy regarding the industry is one of encouragement. The 1999-2000 federal budget allocated A$90 million to the Australian Tourist Commission for promotion of the country as a tourism destination. An additional A$16 million was allocated for regional tourism infrastructure, special interest projects and new market development (Office of National Tourism 1999). Furthermore, state and some local governments also have tourism incentive schemes.

Without exception, Australia has the largest tourism and travel industry in the Asia-Pacific region with thirty-five percent of industry GDP in 1998. GDP for the

Table 3-7 Travel and Tourism Industry in Oceania and South East Asia showing GDP contribution, Employment & Investment March, 1999

Region	Gross Dom. Product			Employment			Investment		
	US $ million	% of total	% Growth*	000s Jobs	% Total	% Growth*	US $ million	% of Total	% Growth*
Oceania									
Australia	53,310	13.8	4.1	1,340	15.3	2.2	11,380	13.3	3.2
Fiji	640	26.7	3.6	90	21.6	1.4	110	46.4	3.0
Kiribati	10	10.6	3.1	180	12.7	1.2	0	0.0	2.7
NZ	9,400	16.9	2.3	330	18.5	1.7	1,680	12.6	0.9
Other Oceania**	4,310	31.1	3.7	100	28.4	0.9	850	56.4	3.1
Solomon Islands	40	8.4	5.0	10	6.5	3.5	10	9.1	4.5
Tonga	30	13.4	4.2	10	13.8	1.0	10	18.9	3.6
Vanuatu	110	35.7	5.2	20	29.4	2.7	30	26.4	4.6
Oceania Region	**67,850**	**14.8**	**3.9**	**2,080**	**16.0**	**2.0**	**14,070**	**13.9**	**3.1**
South East Asia									
Brunei	430	6.5	4.1	10	4.5	3.9	120	8.2	3.4
Burma	11,530	5.5	4.8	710	3.8	3.2	3,200	7.4	6.5
Cambodia	420	10.3	8.4	440	8.4	8.1	120	12.6	7.5
Indonesia	15,060	12.7	3.5	5,270	7.2	5.4	2,590	10.4	6.0
Laos	170	7.2	5.2	180	7.2	5.6	40	13.2	4.7
Malaysia	11,130	13.4	7.2	850	9.8	4.0	3,300	10.3	8.5
Papua New Guinea	500	8.4	4.4	140	6.3	3.0	150	9.1	4.2
Philippines	9,580	11.6	8.2	2,330	8.0	4.7	1,550	8.2	8.4
Singapore	11,800	12.8	5.2	200	10.5	1.4	3,320	9.8	6.7
Thailand	19,830	14.5	5.7	3,710	11.4	3.2	4,780	10.7	9.1
Vietnam	1,840	5.1	9.2	1,490	3.9	6.3	710	7.7	11.1
S.E. Asia Region	**82,290**	**10.6**	**6.1**	**15,330**	**7.2**	**5.0**	**19,880**	**9.4**	**8.0**
Total Asia/Pacific	**150,140**	**12.1**	**5.3**	**17,410**	**7.7**	**4.9**	**33,950**	**10.9**	**6.9**

* 1999-2010 Analysed real growth adjusted for inflation (%).

** "Other Oceania includes American Samoa, Cook Islands, French Polynesia, Guam, Marshall Islands, New Caledonia, Northern Mariana Islands, Samoa.

Regional average percentage figures associated with GDP, employment and investment in the Travel and Tourism industry take into account the relative size of the industry in each country.

"The Travel and Tourism industry" includes the provision of transportation, accommodation, catering/retail, recreation and travel related services to tourists.

"Travel and Tourism Gross Domestic Product" (GDP) is defined as that part of total GDP attributable to activities producing goods and services directly for visitors (World Travel and Tourism Council 1996:14).

Sources: World Travel and Tourism Council. 1999. *Travel and Tourism: Oceania Economic Impact;* London: World Travel and Tourism Council.
World Travel and Tourism Council. 1999. *Travel and Tourism: Southeast Asia Economic Impact;* London: World Travel and Tourism Council

whole region was US$150,140 million and for Australia US$53,310 million (see Table 3-7). The nation's tourism and travel industry employment was estimated to be 171,100 for international, and 499,700 for domestic tourism in 1997, a total of 670,800 personnel nationwide (Bureau of Tourism Research 2000:1). Total tourism expenditure grew 8% the same year. At that time the country had 91 tourism regions, the top ten accounting for 87% of total expenditure by international visitors. Thirteen of the 91 regions where located in Queensland. Tropical North Queensland (TNQ) ranked fourth in the nation in terms of international tourist numbers behind Sydney, Melbourne and the Gold Coast in southern Queensland. The region ranked fifth for international tourist expenditure and eighth for domestic tourism expenditure. Most international tourists visited the state capitals while domestic tourists tended to visit regional centres.

"Tropical North Queensland" refers to the statistical district taking in the whole of Cape York to the north and Townsville in the south. The Cairns/Port Douglas/Atherton Tableland region is, however, by far the most significant tourism region in TNQ and most visitors arriving by air would have to go through the Cairns International Airport. Estimates of visitor expenditure for 1998 in TNQ were A$1,715,000,000 of which 33.3% came from international visitors (see Table 3-8). Visitor expenditure includes money spent by tourists in Australia on things like air fares, other transport expenses, tours, accommodation, food and beverages, entertainment and education (Cook, Johnson, and Rossetto 1998:x,xi,4,11,54; Johnson 1998:4,9,19).

Although the domestic visitor market is the main source of visitors for the study region, the 2000 kilometres from the state capital, Brisbane and 3000 and 4000 kilometres from Sydney and Melbourne respectively represent a significant hurdle for the tourism industry. Return airfares to Cairns from Melbourne and Sydney are often more expensive than fares to New Zealand or Fiji, depending on the season and the special deals available. To drive direct from Melbourne takes at least five days and from Sydney four days. Tourists who arrive by road are usually on extended holidays, a factor that limits the market by effectively excluding working people with only three weeks annual leave. The Gold Coast, one Cairns' main competitor regions

Table 3-8 Australia - Top 10 Tourism Regions- Visitor Expenditure

Region	Expendure in region (A$ mill)			Expenditure in region (%)			Region's Share of Total National Expenditure (%)		
	Inter-national	Domestic	Total	Inter-national	Domestic	Total	Inter-national	Domestic	Region Total
Sydney, NSW	2,582	5,321	7,903	32.7	67.3	100.0	33.3	12.4	15.6
Melbourne, Vic	1,351	4,784	6,135	22.0	78.0	100.0	17.4	11.1	12.1
Gold Coast, Qld	597	2,349	2,946	20.3	79.7	100.0	7.7	5.5	5.8
Brisbane, Qld	447	2,481	2,928	15.3	84.7	100.0	5.8	5.7	5.8
Perth, WA	670	1,835	2,505	26.7	73.3	100.0	8.6	4.3	4.9
Adelaide. SA	194	1,735	1,929	10.1	89.9	100.0	2.5	4	3.8
Tropical Nth Qld.*	576	1,139	1,715	33.6	66.4	100.0	7.4	2.7	3.4
Sunshine, Cst, Qld.	89	1,407	1,496	5.9	94.1	100.0	1.1	3.3	3.0
Canberra, ACT	115	955	1,070	10.7	89.3	100.0	1.5	2.2	2.1
Hunter, NSW	64	951	1,015	6.3	93.7	100.0	0.8	2.2	2.0
Darwin, NT	92	601	693	13.3	86.7	100.0	1.2	1.4	1.4

* Tropical North Queensland refers to the whole of the Cape York Peninsula and south as far as Townsville. The Cairns/Port Douglas/Atherton Tableland region is by far the most important tourism region in the Tropical North Queensland region.

Sources: Derived from:

Johnson, L. 1998. *BTR Occasional Paper Number 31, Tourism Expenditure by Domestic Visitors in Regional Australia.* Canberra: Bureau of Tourism Research, p. 54.

Cook, S., L. Johnson, and A. Rossetto. 1998. *BTR Occasional Paper Number 32, Tourism Expenditure by International Visitors in Regional Australia.* Canberra: Bureau of Tourism Research, p. 19.

has the advantage of being located close enough to Brisbane for day-trippers and within a days drive of Sydney. The same applies to the Sunshine Coast to the north of Brisbane and destinations close to other capital cities such as the Blue Mountains near Sydney. On the other hand the Cairns region has the advantage of having the closest Australian international airport to Asian and European markets, second only to Darwin. The study region is also the closest Australian resort area to the US market, however, this advantage is lost due to all scheduled flights going south to Brisbane, Sydney or Melbourne. US tourists wishing to visit the Cairns region generally have to fly north for two or three hours north to the study area and then another two or three hours south in order to catch a flight home. Hence, for international tourists, the region has a significant geographic advantage over other Australian tourism regions. Unfortunately, however, this advantage is not being utilised because of insufficient scheduled flights even though the Cairns airport is fully capable of handling a greater volume of tourists.

During most of the 1990s, the Cairns region's biggest and most lucrative market was Japan. In 1998 Queensland accounted for 46% of the nation's Japanese visitors, most of whom visited either Cairns or the Gold Coast. On the plus side, Japanese tourists have the highest spending rate per night of any other nationality. On the negative side they do not stay long and total expenditure per visit is almost half that of other Asians and Europeans (Cook, Johnson, and Rossetto 1998:xii). The latter part of the 1990s saw the European market becoming increasingly important to the study region. Both Japanese and European tourists coming from Asia have access to some scheduled flights which land in Cairns before going on to the southern capitals. Often, however, visitors from these regions cannot get a direct flight and have to fly directly over Cairns to Brisbane or Sydney, another two or three hours away. As with visitors from the USA, they then have to wait in the airport before flying for an additional two or three hours back to Cairns, all of which adds to the cost and inconvenience of coming to Cairns and is a powerful disincentive, particularly for families. The proportion of visitors coming from the US has been relatively constant through the decade perhaps because of the total absence of direct scheduled flights to Cairns from that market. The geographic advantage of the study region has effectively been turned into a disadvantage in favour of destinations

located close to Brisbane, Sydney and Melbourne. Tourists are being given a financial incentive to visit southern destinations rather than the study region.

3.8 Summary

The study region is renowned for its tropical rainfore st and coral reefs and consisted of the local government areas of Cairns, Douglas, Atherton and Mareeba. The cities of Cairns and Port Douglas are the main tourism areas and are on the Pacific coastal plain. The agriculture-based shires of Atherton and Mareeba are inland, on tableland country at an altitude of between three hundred and one thousand metres. Cairns was originally used as a port to service the gold and tin mines in the hinterland. The region later developed numerous industries, including fishing and sugar farming and milling, as well as some associated service industries and ship building. The tourism industry remained small until the local government took it upon itself to build an international airport in 1984. The increase in airport traffic resulted in rapid economic and population growth, particularly in the coastal tourism regions. By the end of the study period the Cairns region was the fourth largest tourism area in Australia in terms of tourism numbers. At the same time, Atherton and Mareeba Shires had aging populations with low incomes, while Cairns and Douglas LGAs had young populations with high incomes relative to the national average. The town of Port Douglas could be considered a "boutique" resort as it catered for the more well-to-do tourists. Cairns, on the other hand, catered to the mass tourism market.

4. Methodology

This chapter starts with a description of the way the research project was designed and then looks in detail at what actually took place. The latter starts with the literature search (see Chapter Two). Next, an account of data collection methodology is presented followed by a description of data analysed techniques.

4.1 Overall Research Design.

At the start of the three-year project it was decided that it was not possible to design how the research would be conducted until a literature search had identified the exact aims and objectives. The first step was, therefore, to set aside six months for a literature search. The aim was to clearly define the area of intended investigation in the light of current and past research trends relevant to Tourism Area Life Cycle theory. In actuality, by the end of the six month period it was clear that there were a number questions left unanswered in the literature. Additionally, some reports contained suggestions for further research that had not yet been taken up (see Chapter 2, Section 2.5). Although different versions of the model had already been tested, academics were still discussing the relevance and usefulness of the model as a framework for resort region analysis, for forecasting and for strategic planning (see Chapter 2, Section 2.4). At this point it was intended to define the aims and objectives of the project so as to add to the existing body of TALC knowledge and to avoid unnecessary duplication of previous research (see Chapter 1.4). The research could now be designed to achieve the aims and objective of the project in the most efficient manner. In addition, an estimate of costs could be calculated and presented to the funding committee. The literature search was to be written up as it progressed.

The next stage of the research design was data collection, the main aim of which was to identify two categories of variables. One type of variable was to be used for construction of the "S"-shaped curve and the other for the identification of Butler's (1980) criteria for each stage. The latter group of variables could also be used to identify Cooper's (1990:63) threats to so-called "cold water" resorts and

Haywood's (1986:161) leading indicators of stagnation. The data to be used for the cubic curve would come from existing statistical data (Section 4.1.2). The various criteria to be used to identify Butler's stages were to be collected using a questionnaire, a newspaper search for the period 1976 to 1998. Existing statistical data from various agencies could also be used for this period. The stages were to be analysed separately, starting with the "exploration" stage and finishing with the "rejuvenation" stage. An historical search was to be used for the period 1876-1976 (4.1.1, 4.1.3, 4.1.4, 4.1.5). The resulting data was then to be analysed using SPSS, however, Microsoft Excel proved to be more appropriate (Section 4.3). The last stage of the project would be to complete the write-up and present the dissertation for examination. Six months were allocated to the latter task but in actuality it took about ten months. The remaining part of this chapter describes how the research design was carried out.

4.2 Data and Information Gathering

The availability of existing statistical data meant that a suitable period for a detailed analysis of the study region was 1976 to 1998. Prior to that period, statistics are limited and tourism activity in the region was not very significant compared with other sources of income such as sugar and timber (see Chapter Three). There was, however, some tourism activity, which could well form what Butler (1980) described as the "exploration" and "involvement" stages of the TALC model. The first part of the data gathering process was, therefore, directed towards searching for signs of early tourism activity to get some idea of the extent of the industry in the Cairns region between 1876 and 1976. Historical material held by the Cairns Historical Society, James Cook University, the Cairns City Library and the *Cairns Post* Newspaper were examined.

For the period 1976 to 1998, a list of variables was compiled containing all feasible data alternatives for the "S" shaped TALC curve and all possible criteria as suggested by Butler (1980), Haywood (1986) and Cooper (1990). The list of variables is provided in Appendix 2 and is divided into the following sections:

1. TALC curve data - that data used to construct the "S" shaped curve.
2. Questionnaire variables relating to the present time.
3. Time-series questionnaire variables covering the period 1976 to 1998.
4. Newspaper search variables covering the period 1976 to 1998.
5. Statistical data which may be available from other sources.

In Butler's (1980) model, the data used for the TALC curve, when graphed, forms the actual "S" shaped curve. Only one data set is required for this part of the model. The questionnaire and newspaper variables, along with some more existing statistical data variables, are used to establish whether or not the criteria for each of Butler's stages is present. All data names are limited to eight characters for use with the statistical software package SPSS, and are made as meaningful as possible (see Appendix 2). A short description accompanies each one. In the event, SPSS was found unsuitable for reasons discussed in the analysis chapter, and Microsoft Excel was used. Those data names to do with the questionnaire contain the letter "Q" after the main part of the data name and those to do with the newspaper search contained the letter "N". "F" is used for existing statistical data.

4.2.1 Early Tourism in the Region Prior to 1976.

The search of historical records uncovered mainly descriptive information designed to attract tourists to the region. A number of brochures published by Queensland Railways advertised package deals from Brisbane to the Cairns region even before the railway system was connected to Brisbane in 1924. Souvenir booklets, mostly undated but appearing to be around 1930, containing photographs of the region and its attractions were also located. The search also located souvenir Cairns-Kuranda-Cairns railway tickets dated 1908. Advertisements by steamship companies from the 1920s to 1960s aimed at attracting passengers for the regular steamship services between Cairns and the southern capitals of Brisbane, Sydney and Melbourne were also found (Cairns and Tableland Publicity Association 1933; Cairns Air and Sea Port Authority Annual Reports and Pamphlets 1920s and 1930s; Cairns and District Travel League 1960).

Evidence of early tourism activity was also found in documents published by the Cairns Harbour Board, the Cairns Chamber of Commerce, the Cairns and District Travel League, the Cairns and Tableland Publicity Association and the Queensland Government Tourist Bureau. Further information on early tourism in the region was also gleaned from Lander (1937), Wakely (1965), Smith (1991), Pelgrave (1994) and Collinson (1942). No statistical information was found which would give any idea of visitor numbers, although it was possible to get some idea of the number of steamships that visited the Port of Cairns. Despite the lack of statistical information, an impression of the state of the region's tourism industry prior to 1976 was obtained, and it was possible to speculate with regard to the timing of the early TALC stages.

4.2.2 TALC Curve Data, 1978-1998

Butler (1980) originally suggested that visitor numbers be used for the TALC curve to form the basic cubic graph. Haywood (1986:159), however, suggested using a statistic which reflects tourist expenditure as being more indicative of the effect of tourism on the economy. The use of tourism expenditure for life cycle curve data would appear to have more intuitive appeal, but in the final analysis the choice depends on what is available at the time. The essential point is that with this model, hard and fast rules cannot be applied governing which data must be used, in spite of harsh criticism due to TALC's vague and imprecise nature (Haywood 1986; Agarwal 1994; Johnson and Snepenger 1993). The key point about the TALC model is not to stick rigidly to specific guidelines, but to understand the conceptual basis and then to select data which best suits the purpose. The simplicity of the basic concept put forward by Butler (1980) allows the user a great deal of flexibility in its application. Despite this simplicity, however, the model provides a useful reference point for understanding the dynamic processes of a tourism region (Prosser 1997).

Various data sets were examined for use as TALC curve data, such as guest nights, takings from accommodation and visitor numbers. The criteria for choice of data included that if possible it had to be continuous over the period 1976 to 1998 and must cover the relevant geographical areas. Time-series data was considered

from publications such as the quarterly *Tourist Accommodation Small Area Data Queensland* (ABS Product No. 8635.3.40.001). Numerous problems were encountered, such as changing data definitions, lack of continuity of data and changing local government area boundaries. The latter problem mostly related to the amalgamation of Mulgrave Shire and Cairns City into the new Cairns local government area (LGA) in 1996. The new LGA did not have exactly the same boundaries as the two old LGAs, but the difference was so small it is considered to have no effect on the outcome of this study. The first data set to be examined was guest nights.

Guest nights appears to meet the requirements discussed above, the only drawback being that it does not take into account changing tourist spending patterns. Guest nights may still continue to rise, when in fact the amount of money spent by those guests may be falling, giving a false impression with respect to the economic effect on the community resulting in a negative effect on the integrity on the model.

The next data set to be considered was accommodation takings which has the advantage of showing the economic impact of changing tourist numbers and the impact of the amount that these people spend on accommodation. Accordingly, this data set is quite suitable for use as TALC curve data, given a sufficiently long unbroken time-series. Assuming that the amount spent on accommodation varies proportionately with spending on other items, this statistic provides a good idea of the economic impact of tourism on the economy. A low spending visitor such as a backpacker, therefore, spends proportionately less on food, entertainment and souvenirs than a person using more expensive accommodation.

Guest arrivals/visitor numbers were considered for use as life cycle curve data, but neither of these statistics take into account changing spending patterns or length of stay. As a consequence, they are less suitable than guest nights, which takes into account the length of stay of each visitor. The data is, however, available for the period in question and could be used in cases where more suitable data is not found.

Out of four data sets discussed above, the most suitable to use for the purpose of constructing an "S" shaped TALC curve is accommodation takings. The least suitable is guest arrivals and visitor numbers, the latter being the statistic originally suggested by Butler (1980). The Australian Bureau of Statistics, however, allowed inconsistencies of geographic definition and continuity to corrupt its data series somewhat (see Figure 4-1) and so it was necessary to make some adjustments. Firstly, none of the data available was continuous either in definition or geographical area. Also, in some cases such as caravan park statistics, long-term accommodation statistics have been included with short-term data (ABS, Product No. 8635.3.40.001). Consequently, resident and visitor statistics are mixed, making caravan park data unsuitable for this research. Despite all these shortcomings, accommodation takings data was considered useable between 1978 and 1998 as long as its limitations were recognised and allowance made during the analysis.

In relation to accommodation takings from "hotels and motels with facilities", Douglas Shire statistics start in September 1977 and Cairns City and Mulgrave Shire follow a year later (see Figure 4-1). For the purpose of this research, the first twelve months of the Douglas Shire data are ignored as not being representative of the region as a whole because tourism activity at that time was mainly centred around Cairns. Atherton and Mareeba data were not collected until 1987. With less than 4% of total accommodation takings in September 1987, the absence of Atherton and Mareeba shires prior to that date was not considered significant enough to affect the outcome of this research. Figures before that date in those shires would have been so small as not to effect the cycle anyway. Similarly, the category, "visitor hostels", which started in 1991 with Douglas shire, and then Cairns and Mulgrave shires in 1992, had less than 5% of total accommodation takings. The same, however, cannot be said of the series, "holiday flats and units", which started in September 1987 with Douglas shire and then Cairns and Mulgrave in March 1988. The series already had around 11% of total accommodation takings by March 1988. TALC, however, is not an exact science, and as with Atherton and Mareeba shires prior to September 1987, the discrepancy is not large enough to effect the overall results. Figure 5-1 in Chapter Five is a plot of this data.

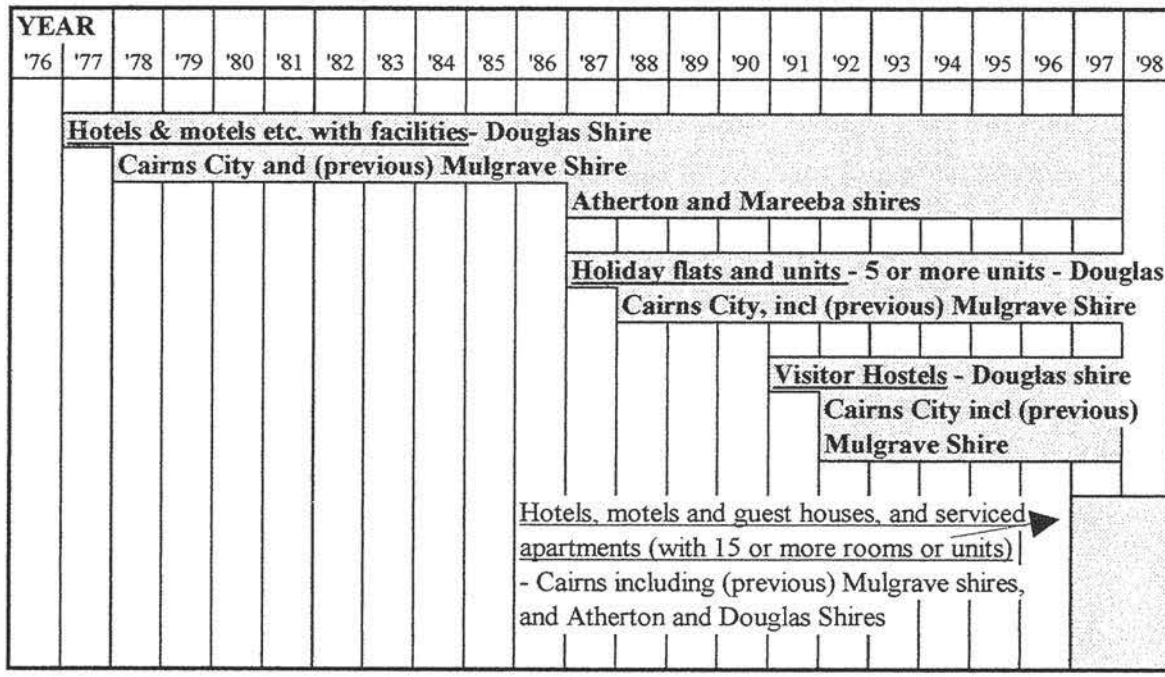


Figure 4-1: Time Lines for Data Available on Accommodation Takings.

Source: Australian Bureau of Statistics Tourism Accommodation Small Area Data, Queensland, Product No. 8635.3.40.001.

A further change in the data definition occurred in 1997. There was, however, an overlap of one year before the three existing series ceased and the new series, "Hotels, Motels and Serviced Apartments (with 15 or more rooms or units)", took over. During 1997, the value of the new series averaged only 87.5% of the old series. Figures for 1998 were, therefore, adjusted accordingly to make them comparable with the rest of the data. The series was then adjusted for inflation.

4.2.3 Questionnaire Design

As with the TALC curve data, it is not necessary to stick rigidly with Butler's (1980) original suggestions. Other authors such as Cooper (1990:63) and Haywood (1986:161) have used additional criteria which can be added to Butler's (1980) criteria. Haywood's leading indicators of "stagnation" and Cooper's threats to cold-water resort areas are also examples of additional criteria. Another example is Ioannides (1992:724) who looked at percentage of mass tourists relative to overall tourists, which he said increased as the TALC progressed. For the purposes of this project, it was decided to use as much available data and information sources as was feasible in order to get some idea of the effectiveness of each source. In the interests of the future commercial useability of the model, data sources which offer only a marginal rate of return and have no real impact on outcomes, can be recognised and bypassed.

Haywood (1986:161) suggested that certain indicators may signal an impending change from one stage to another. Following is his list of leading indicators of stagnation:

1. a declining proportion of first-time visitors versus return visitors;
2. declining profits of the major tourism businesses;
3. tourism industry over capacity;
4. appearance of new and accessible destinations (competing destinations);
5. a decline in the elasticity of advertising and a increase in price elasticity;
6. visitor length of stay declines as the cycle progresses; and
7. style and period-of-life changes among prospective market segments.

The inclusion of the first five of these criteria in the questionnaire helped to further test the applicability of the model. Number six is existing statistical data, but the seventh criterion was not included because the cost associated with identifying, and then surveying prospective market segments was beyond the scope of this thesis. Even if funds were available, it is doubtful if testing this last criterion is cost-effective in terms of results.

The questionnaire was designed with the help of a number of texts on survey design (Fink 1995:vols 2,5; Moutinho and Evans 1992; Parasuraman 1991) and consultation with other experienced people. The final draft of the questionnaire started with a preamble which briefly explained Butler's (1980) model and how it could be used to help the tourism industry in the region (Appendix 3). The general approach was to frame questions in such a way as to allow quantification of subjective data, and the main purpose was to obtain time-series data over the period 1976 - 1998, to help identify the presence or otherwise of the various TALC criteria.

The membership of the regional tourism promotion organisation, Tourism Tropical North Queensland (TTNQ) was used, with the agreement of the chief executive officer (CEO), to select potential questionnaire respondents. TTNQ is the official body responsible for promoting the Cairns region to the rest of the world and at the time of the survey (1998 and 1999) had 626 member organisations. This figure represented 21.3% of all companies in the City of Cairns (not the LGA) and 9.4% of all companies in the Far North Queensland Statistical District (FNQSD)[1]. Only 10.1% of businesses in the City of Cairns and 12.7% in the FNQSD are in the "accommodation, cafes and restaurants" category, so the TTNQ membership is highly representative of the tourism industry (Australian Economic Consultants 1998:33,34). The use of the membership list for the survey meant that all the businesses contacted were either directly involved in tourism or affected by the tourism industry sufficiently enough, in their opinion, to warrant joining the organisation. The preamble to the questionnaire mentioned TTNQ's cooperation in the hope that it would lend the survey some weight and so increase the response rate.

[1] The FNQSD includes most of Cape York Peninsula.

Their involvement in the tourism industry meant that TTNQ members were qualified as potential respondents who would be able to answer the questions asked. The actual person who completed the questionnaire was the CEO or the owner, or another senior employee nominated by the latter as being more qualified. Often the respondent was selected because of length of service with the organisation.

The main emphasis of the questionnaire was to obtain perceptions of past and present trends, rather than actual historical data, a point which was explained verbally and in the preamble. The reason for this approach were threefold: first, because actual historical data might not be available back to 1976, even if the business dated back that far; second, the response rate would be very low if business people were asked to resort back to old financial records; and third, economic and business cycles are often influenced by business confidence and perceptions of what happened, and what is going to happen, more than what actually happened (MacMillan et al. 1987:337-8). Also, for the purpose of this study exact figures on, for example, profitability were not necessary. Overall, it was only necessary to know if profits were positive or negative or rising or falling, for any given year during the period under review. This data is often not available in company records older than the statutory seven years. Business people, however, usually remembered general trends when asked. An underlying expectation of this methodology was that with enough responses it would be possible to get a reasonably accurate picture of what really happened during the period under review.

Questionnaires were sent to all the names on the TTNQ membership list except for government and tourism industry organisations because of the possibility of introducing bias in favour of official government or TTNQ policy. Most businesses surveyed would not have been in existence at the beginning of the study period. Consequently, the data gathered on the year of establishment of the organisation in the study area provides useful background detail on the growth of business in the region. The member organisations were listed in ten different categories, however, an eleventh category, "manufacturing", was added at data entry time, to satisfy the wishes of some respondents. The categories were as follows:

1. Accommodation.
2. Attractions and activities.
3. Convention and incentive services.
4. Finance, legal and research services.
5. Restaurants and entertainment.
6. Retail.
7. Tourism associations and government.
8. Tourism support services.
9. Tours.
10. Transport (include. car rentals etc.).
11. Manufacturing.

In some cases subsidiaries of the same company were listed, often in more than one category, in which case only the parent company was used. The total number canvassed (not including tourism associations and government) was 582, of which 223 returned the completed questionnaires. Only five questionnaires were rejected as being invalid, mainly because of internal inconsistencies identified by a number of cross questions designed specifically for that purpose. The low response rate (37.46%) was mainly attributable to many TTNQ members who claimed that high staff turnover had resulted in corporate memory being insufficient to adequately respond to the time-series section of the questionnaire. Potential respondents could also have been discouraged by the complexity of the questionnaire combined with time constraints associated with management and a general negative attitude of people in the tourism industry at the time. Whilst the low response rate is likely to be primarily caused by the former, it could also indicate the presence of substantial unknown biases affecting the sample.

Following University Ethics Committee approval of the questionnaire in July 1998, a pilot survey was conducted involving 20 respondents randomly selected from the TTNQ membership list. The pilot questionnaire was delivered personally to respondents who had already been contacted and who had agreed to take part in the

survey. After a few days, the respondents were again contacted by telephone to see if the questionnaire was completed or if they needed any help.

University policy preferred that an Informed Consent Form be included with each questionnaire, but separate to the main questionnaire so as to protect anonymity (see Appendix 4). The form was designed to protect the University from people claiming that they did not give their consent or that they did not know what they were filling out. The respondent was required to sign the form and the signature had to be witnessed by the person delivering the form. The form was presented to the pilot survey respondents during the first visit and a signature obtained together with a proposed pick-up date. Resistance, however, was encountered, as respondents indicated that the form violated the anonymity requirement because it required a name and a signature as well as a date. Consequently, it was decided not to continue using this form in order to protect the integrity of the data.

As a result of the pilot survey, the preamble to the questionnaire was changed to better explain the purpose of the survey, and a sample answer was removed from the time-series section to eliminate any possibility of unduly influencing respondents to answer in a particular way. Question 2.1 on the environment and Question 3.1 on political influence were reworded so as to make them more understandable to the reader. The method whereby potential respondents were contacted by telephone prior to delivery of the questionnaire and then again after delivery was found to be sound, and so was used for the questionnaire proper. The first call was used to explain the purpose of the survey and TALC in general, and the second was mainly to identify problems with the time-series questions in Section 8, and so increase the chances of a successful outcome. A third call was made prior to pick-up of the questionnaire. Any further problems were addressed at the time of pick-up. The telephone follow-up and personal pick-up of the completed questionnaire kept the rejection rate due to invalid responses down to five. Most of the rejections were due to internal inconsistencies identified by a number of cross questions in the questionnaire which were designed specifically for that purpose. For the sake of consistency, the initial verbal telephone approach was standardised and a copy is provided in Appendix 5.

The second call proved to be particularly useful, because respondents often got to the time-series graphs and decided they were too hard to complete, or needed too much information. Nevertheless, after going through some questions over the telephone, respondents were usually able to carry on and complete the remaining questions without much trouble. It was essential to stress to potential respondents that the study was interested in their perceptions of what happened. Management perceptions of what occurred were often more important in day-to-day decision making than historical data such as accounting records (MacMillan et al.1987:337-8. There was also the difficulty in obtaining historical data for twenty years ago to take into consideration. The telephone follow-up also helped increase the response rate by confirming the confidential nature of the exercise.

The survey proper commenced in October 1998 and finished in January 1999 with a four-week break over the Christmas period. The proportion of valid responses returned in each industry was highly representative of the membership of TTNQ and so no adjustment was necessary (see Table 4-1). If it had turned out that there was not a representative sample, adjustments would have had to be made to compensate or more questionnaires would have had to be sent out. If, for example, 20% of the membership of TTNQ were in the "accommodation" category but only 10% of valid responses were in the same category, the sample could not be said to be representative of the population data.

Questionnaire results were entered into SPSS and Microsoft Excel and the preliminary results were released in a working paper at the 1999 Council for Australian University Tourism and Hospitality Education (CAUTHE) National Research Conference held in Adelaide in February 1999 (Berry 1999). In the final analysis prepared for the dissertation, SPSS was rejected in favour of Excel for presentation and other reasons that are explained more fully in the analysis chapter.

4.2.4 Rationale for the Questions

Each question was designed with a specific objective in mind and this section contains a rationale on a question by question basis and should be read in

Table 4-1: Respondents by Industry (Category 7, Industry Organisations and Government Bodies Excluded).

Industry Category	Ind. Code	Response Frequency	Percent Response	TTNQ Membership %
Accommodation	1	73	33.5	34.1
Attractions & Activities	2	24	11.0	11.2
Convention and incentives	3	4	1.8	1.9
Finance, Legal, Research	4	11	5.0	5.1
Restaurants and Entertainment	5	9	4.1	4.2
Retail/wholesale	6	30	13.8	14.0
Tourism support services	8	18	8.3	8.4
Tours	9	23	10.6	10.7
Transport	10	20	9.2	9.3
Manufacturing	11	2	.9	.9
Missing	888	4	1.8	Missing
	Total	218	100.0	100.0

Source: Ted Berry, 1999, Cairns Regional Questionnaire

conjunction with the questionnaire in Appendix 6. In using cross checks to decide validity of responses, it was necessary to try to identify if an inconsistency was a minor mistake such as an error of omission or a more serious error which put the credibility of the whole response in doubt. Responses in the latter category were rejected. Table 4-2 contains a list of questions and associated criteria, leading indicators and threats.

Questions 1.1 and 1.2, were concerned with the nature of the organisation's main activity and its legal basis. Responses were used to obtain background information in case a profile was required on respondent organisations at a later date (see Appendix 7). Answers to the first question were also used to verify that the correct proportion of responses had been obtained from each industry category to ensure there was a representative sample (see Section 4.2.3 above). Associated with Questions 1.1 and 1.2 was Question 1.4 which asked which year the business commenced operations in the Cairns region. This question gathered background information and sought to gain information on the growth of business in the region over time. Further background information about the growth of tourism in the region between 1976 and 1998 was obtained from Question 8.3 which asked respondents how many employees there were in their company.

Questions 1.3, 1.5, 8.1, 8.2 and 8.9 tested Butler's (1980) "development stage" criterion that there is "increased control of tourism trade by outsiders". Questions, 1.3, 1.5 and 8.1 asked about ownership of tourism facilities and were cross-checked against each other for inconsistencies at the data entry stage. Question 8.1 is a time-series question in which respondents provided information relating to the geographical location of the owners over time. The response to Question 8.1, however, did not always correspond with the response to Question 1.4 (the year the business commenced operations in the region). The inconsistency appeared to be caused by confusion between the year the business commenced operations and the year the respondent joined the company. Additionally, there was some confusion with the year the business commenced operations somewhere else and the year a change of ownership occurred. Where it was obvious that an honest mistake had

Table 4-2: Questionnaire Relevancy Summary

Question Numbers	Relevant to:			
	Butler (1980)		Haywood's (1986:161) leading indicators	Cooper's (1990:63) threats
	criteria	stage		
1.3, 1.5, 8.1, 8.2, 8.9	Outside control	devel		
2.1	Environment problems,	stagn		
3.1				Political interference
3.2				LGA Amalgamation
4.1, 8.7, 8.13	Economic problems	stagn	Declining profits	Financial restrictions
4.2, 8.6			Advertising less effective	
4.3				Lack of prof. staff
4.4				Tourists spending less
5.1	2nd rate facilities	cons		Outdated and poorly maintained facilities
5.2				Lack of out-of-season wet-weather facilities
5.3				Poor access
6.1	No longer fashionable	stagn		
7.1, 8.12	Not be able to compete	decline	Appearance of competing destinations	Competition from other areas
8.4				Lack of confidence in tourism industry.
8.5	Increasing antagonism with tourists	devel		
8.8	Surplus bed capacity avail	stagn	Tourism industry over-capacity	
8.10	Heavy reliance on repeat visitation	stagn	Declining proportion of first-time visitors.	
8.11	Increased percentage of mass tourists	stagn		

Source: Ted Berry, 1999, Cairns Regional Questionnaire

been made it was assumed that the response to Question 8.1 was the more accurate answer because, being a time-series question, respondents would have had to think more about the answer than for Questions 1.3 and 1.5. If the mistake was deemed to be honest the total response was not rejected as being inconsistent.

Question 8.2 was also concerned with increased control of tourism by outsiders, but related to the geographical source of management in the tourism industry rather than ownership. In cases where the business was not directly involved in tourism, no response was recorded even if there was a response to the question. Question 8.9 looked at the origin of bookings, as this feature may have also influenced the degree of external control and dependence on tour operators located outside the region (Butler 1980; Ioannides 1992:727).

Butler's (1980:8) "stagnation stage" criteria that "capacity levels for many variables will have been reached or exceeded, with attendant environmental ..... problems" was tested using the response to Question 2.1. The purpose was to assess if respondents thought that the natural beauty and scenic attributes of the region, which attracted tourists in the first place, had been damaged by development and tourists to the extent that potential visitors no longer wish to come to the Cairns region.

Question 3.1 was concerned with once-off decisions by politicians. It was included to test Cooper's (1990:63) assertion that "political interference on decisions" is a factor in the decline of resort areas. The question reads, "Do you think that the region has been affected because of once-off decisions by politicians, federal, state or local (eg. Cairns Central)". Cairns Central was used as an example because it was thought that respondents would assume the question referred to public service decisions rather than decisions made by politicians. Although the use of the example may prejudice the response, it was considered so obvious and well-known throughout the region that if the respondent understood the question, he or she would be bound to mention the shopping complex anyway. The Cairns Central example was only one of a number of similar decisions.

Question 3.2 was designed to test Cooper's (1990:63) assertion that where an LGA amalgamation occurs it "dilutes" the political power of resorts and is a factor in the decline of resort areas. The question aimed to find out respondents' opinions about the effects of LGA amalgamation. Regardless of what respondents think, however, an LGA amalgamation did take place and Cooper's threat refers to the amalgamation itself, not what people think about it. The inclusion of this question in the questionnaire was to see if respondents agree with Cooper's assertion.

As the TALC progresses, economic problems occur, manifested by tight or negative profits and squeezed budgets. Butler's (1980) "stagnation" stage criteria predicted the former while Haywood's (1986:161) leading indicator of stagnation stated that "declining profits of the major tourist businesses" precede decline in the resort area. Cooper (1986:63) also suggested that "financial restrictions and low budgets are a threat to the survival of cold water resorts" and by implication, warm water resorts. Questions 4.1, 8.7 and 8.13 were designed to identify the existence of these problems in the study area. All three questions were also designed to be used as validity checks against each other. If, for example, a respondent stated that profits were declining but budgets were getting easier, the rest of the questionnaire was scanned for inconsistencies. If more inconsistencies were found the complete questionnaire would be rejected. The main objective, however, of picking the completed questionnaires up in person was to identify and remedy inconsistencies and incomplete answers before leaving the organisation's premises.

Responses to these Questions 4.2 and 8.6 were also cross-checked for validity purposes. The main aim of these questions, however, was to test Haywood's (1986:161) "stagnation stage" indicator that there was a "decline in the elasticity of advertising". If the effectiveness of advertising decreased it can be assumed, by definition, it was declining in elasticity. At the same time, if the level of advertising in relation to total expenditure was increasing, it can be assumed that this trend was a reaction to its decreasing effectiveness in order to maintain the same income and/or market share.

Cooper (1990:63) lists "a lack of professional, experienced staff" as a threat to resort regions and Question 4.3 asked respondents if they thought such a shortage applied to the Cairns region. Another of Cooper's threats to resort regions is that as the TALC matures, there is a "growth in low spending, low status, tourists". Ioannides also tests for this variable (Ioannides 1992:724). Accordingly, Question 4.4 asked respondents if they thought that tourists were tending to spend more or less.

Question 5.1 tested Butler's (1980:8) "consolidation" stage criterion that "depending on the length of time involved, old facilities may now be regarded as second rate and far from desirable". The question also tested Cooper's (1990:63) suggestion that "out-dated and poorly maintained facilities" are a threat to cold water resorts regions. Even though Cooper referred to cold water resort regions, this criterion would apply to any tourism area. The next question (5.2) tested a related statement by Cooper that "lack of wet weather and out-of-season facilities" could also be a threat to resort region's survival.

Cooper further suggested that poor access is another threat to a cold water resort region. As the Cairns International Airport is the main access for international tourists, Question 5.3 asked respondents if they thought that airline access to the region from major world markets such as the USA, Europe and parts of Asia was, "excellent, good, OK, not very good or poor". This question was similar to Question 3.1 regarding LGA amalgamations in that access to the region by air is a matter of public record, rather than a matter of opinion. The reality is, there has been no direct access to Cairns from North America, the world's largest market, since 1994. The opinion of respondents is interesting, but does not change the situation.

One of Butler's (1980:9) "stagnation stage" criterion is that the "resort has a well established image but is no longer fashionable". Question 6.1 asked respondents if they thought that the Cairns region is becoming more or less fashionable over the last five years. Question 7.1 cross-checks against Question 8.12 which was designed to obtain time-series data about the level of competition that the Cairns region had

been facing from newer and more accessible resort regions. The two questions tested Butler's "decline" stage criterion that the region will not be able to compete with newer attractions and will face a declining market. Haywood's (1986:161) "stagnation level" indicator that there is the "appearance of new and accessible (competing) destinations" is also tested. In addition, the two questions test Cooper's (1990:63) threat to cold water resorts of "competition from abroad and new domestic facilities in non-resort locations".

Question 8.4 was a time-series question, testing Cooper's (1990:63) threat that there existed a "lack of confidence in the tourism business community". Question 8.5 sought to test Butler's (1980:9) "development stage" criterion that there "is increasing local antagonism towards tourists". The question also ties in with Doxey's (1975:195) "Irridex" (Index of Irritation) where the degree of irritation towards tourists grows as the cycle progresses. The question requires respondents to plot how they perceived the general public's attitude to tourists between 1976 and 1998.

Question 8.8 was concerned with business operating capacity and sought to test Butler's (1980:9) "stagnation stage" criterion that the region will experience "surplus bed capacity". The question also checks Haywood's (1986:161) "stagnation stage" leading indicator of "tourism industry over capacity". Another of Haywood's leading indicators of the "stagnation" stage was that "there is a declining proportion of first-time visitors" as the cycle progresses. Accordingly, Question 8.10 asked respondents the percentage of first-time visitors handled by their business over the period 1976 to 1998. The question also tests Butler's (1980:8) "stagnation" stage indicator that there will be heavy reliance on repeat visitation.

The next Question, 8.11, tested Butler's (1980:9) "stagnation" stage criterion that as the TALC progresses there will be an increase in the percentage of organised mass tourists visiting the area. This feature is also one of the criterion tested by Ioannides (1992:727). Respondents were required to draw a time-series graph

representing the percentage of group travellers over the period 1976 to 1998 relevant to their experience.

4.2.5 Newspaper Search

The main daily newspaper in the Cairns region is the *Cairns Post,* which was published six times a week during the study period (1976 to 1998), making it the logical choice for time-series data based on a newspaper search. The search was conducted in the James Cook University library and in the archive section of the *Cairns Post* office. No search was conducted of any other newspapers because no other papers have the continuity, circulation or coverage of the *Cairns Post.* Being the main newspaper in the region, it was reasonable to expect the search to reveal an accurate picture of historical events.

In terms of effort, the search was by far the most time consuming part of the data search. On average it took eight hours to go through four months of papers, the twenty two-year period absorbing well over five hundred hours. In terms of results, it is very doubtful whether the search was worth the effort. Nevertheless, it is a standard research technique and needed to be done if just to find out how effective it was in this application. Newspaper reports and letters-to-the-editor can also be subjective, further reducing their value in a TALC study.

The newspaper search was intended to identify a list of variables, such as the level of advertising and the level of confidence in the tourism industry (see Appendix 2). Main events and issues between 1976 and 1998 such as the building of Sky Rail, the proposed mudflats development off the Cairns Esplanade and the listing of the Wet Tropics World Heritage Area were also recorded. The record was compiled into a list with brief discussion accompanying each item in order to provide a reference point for later discussion about the forces driving the industry and its evolutionary process.

The search recorded the frequency of each of the variables on a tally sheet (see Appendix 8). One sheet was sufficient for a month's worth of data which was

then transferred to an EXCEL spreadsheet that could also be read by SPSS. Each time an article, letter to the editor, or advertisement was found on a certain topic, one point was recorded on the tally sheet. A problem with this method is that it does not measure varying degrees of importance associated with each occurrence of a particular topic, it just allocates one point. With the more important items, however, there were usually a number of articles spread over some days or even weeks. In such cases one point is recorded for each occurrence and so the more important issues will record more points. On the other hand, newspapers can be selective in what they publish so that a lot of attention is given to some topics at the expense of others. Variables can also be interpreted in a subjective manner by the person doing the search and so it would not appear to be a good idea to have a number of different people involved in the search. In this study, consistent interpretation of variables was assured as the author was the only researcher involved in the search.

Column one of the tally sheet (Appendix 8) recorded one point each time a tourism-related advertisement was found. Restaurants and night club advertisements were not included, even though it could be argued that such businesses were serving the tourism industry. Examples of advertisements included in this category were advertisements for trips to the Great Barrier Reef, hotel and motel accommodation, hire car firms and rainforest tours. The variable in this column addressed Butler's (1980:8) "consolidation" stage criterion that "industry responds to the decline in the growth rate by wide ranging advertising campaigns and efforts to extend the tourism season and market area". Results can also be measured against Haywood's (1986:161) assertion that there is a decline in the elasticity of advertising and an increase in price elasticity as the cycle progresses. Questions 4.2 and 8.6 of the questionnaire were designed to measure the same variable and a comparison of the results was done during the analysis.

The end result was assessed in the knowledge that the *Cairns Post* was not the only place where such businesses advertise. As the region's tourism industry developed during the study period (1976 to 1998), specialised advertising media appeared such as ITV, a local cable television station catering solely for tourists. The

station transmitted only to places where tourists found accommodation. The result was less advertising in the *Cairns Post*. Also, a large proportion of the advertising budget was spent trying to reach people in their own geographical area and not in the region covered by the *Cairns Post*. Allowance for all these points was made during analysis stage.

The next two columns tallied the variable, "attitude to visitors" which was aimed at testing Butler's (1980:9) "development" stage criterion that there "is increasing local antagonism towards tourists". This variable was checked against the results for Question 8.5 of the questionnaire. The variable also tested Doxey's (1975:195) "Irridex". One point was recorded for each letter-to-the-editor or article which displayed some attitude towards visitors. Items were classified into the following categories:

1. locals happy to see visitors;
2. locals apathetic towards visitors;
3. locals showing annoyance towards visitors;
4. locals showing antagonism towards visitors.

Recognition was given, however, to the fact that newspapers may not be inclined to print articles or letters which are not sensational or controversial, and so negative items are more likely to be printed than positive ones, thus introducing bias to the survey. The variable also included negative attitudes displayed through the bureaucracy. An example of such an attitude was the case of a Swiss lady being forced to fly to Papua New Guinea by the Customs and Immigration Department to renew her visa because she could not get a return flight home until five days after her current visa expired. The lady said that she had in fact applied for an extension in July when her visa expired on August 9 (*Cairns Post,* 16 September 1986:Letters-to-the-editor).

The variable in column 4 of the tally sheet refers to changes in the study region's central business district (CBD) and is not backed up by any question in the

questionnaire. A greater degree of reliance is, therefore, placed on the results obtained from the newspaper search. The variable records any letter-to-the-editor or article which reports change or problems which may in anyway indicate a transformation of the central business district. The variable addresses Butler's (1980:8) "consolidation" stage criterion which states that resort cities will have well defined recreational business districts (RBD) in the original CBD.

The variable "level of confidence in tourism" in columns five and six tallied articles and letters-to-the-editor used to test Cooper's (1990:63) threat that there is a "lack of confidence in the tourism business community" as the region stagnates and declines. Results were compared with the results from Question 8.4 of the questionnaire, which was also a time-series question. The variable was divided into:

1. total confidence in tourism;
2. very high level of confidence in tourism;
3. high level of confidence in tourism;
4. neutral level of confidence in tourism;
5. low level of confidence in tourism;
6. very low level of confidence in tourism;
7. no confidence in tourism.

Letters to the editor and articles relating to the variable "environment under threat" were tallied in columns 7 and 8 and cross-checked with Question 2.1 of the questionnaire. The variable tests Butler's (1980:8) "stagnation stage" criterion that "capacity levels for many variables will have been reached or exceeded, with attendant environmental ..... problems". Butler was referring to the situation where the environment, the original reason why tourists came, had been damaged by development and excess usage from tourists and locals, to the extent that visitors are not attracted to the area any more. The natural environment may have to be substituted by man-made attractions in order to attract tourists. The variable did not include environmental damage due to natural occurrences such as beach erosion caused by bad weather conditions *(Cairns Post,* 2 May 1986:1). The variable,

however, did include letters-to-the-editor or articles which discussed environmental issues associated with tourism development. Issues that discussed the natural environment or the destruction of old buildings that may be considered of heritage value, were included. Residential hill slopes development issues were also included in this variable as it was considered that much of the residential growth is tourist-related.

The variable was categorised as follows:

1. no threat to the environment from tourism related development;
2. a little threat to the environment from tourism related development;
3. controllable threat to the environment from tourism related development;
4. too much threat to the environment from tourism related development;
5. irreversible threat to the environment from tourism related development.

Column 9 referred to letters-to-the-editor and articles relevant to "efforts to extend the season" but did not separate the two categories into two columns as was done in some other cases (see Appendix 8). The variable addresses Butler's (1980:8) "consolidation" stage variable that the industry responds to a decline in growth rates by efforts to extend the tourism season and market area. Such efforts include articles and letters relating to the establishment of convention centres, casinos and other tourism products.

The variable "political interference" tallied in column 10 referred to interference in decision making by politicians, and cross-checked with Question 3.1 of the questionnaire. The variable referred to Cooper's (1990:63) threat that "political interference on decisions" is a factor in the decline of resort areas. Like Question 3.1, this question did not refer to the routine decisions or interference from the public service, but to direct interference from politicians of all levels. Without specific legal knowledge as to what is a public service decision and what is not, it was difficult to assess which category a particular decision fell into. In some

instances, however, legal opinions were given and published at the time by qualified professionals. The variable was divided as follows:

1. no political control over the decision making process;
2. minimal control over the decision making process;
3. acceptable control over the decision making process;
4. too much control over the decision making process;
5. total political control over the decision making process.

The variable in column 11, "Demands for greater local government area efficiency", was similar to that in column 10. It referred to articles and letters-to-the-editor demanding, suggesting or complaining about inefficiency at that level of government. There is no questionnaire variable that cross-checks with this variable.

Column 12 was concerned with the existence of second rate facilities, and cross-checks with Question 5.1 of the questionnaire. The latter variable tests Butler's (1980:8) "consolidation" stage criterion that "depending on the length of time involved, old facilities may now be regarded as second rate and far from desirable". The variable also tested Cooper's (1990:63) threat that "out-dated and poorly maintained facilities" are a factor in resort region decline. The variables in columns 12 and 15 are associated inasmuch as column 15 recorded articles and letters-to-the-editor about beautification or urban renewal projects. The implication is that the region's facilities may have been becoming old or second rate or that there were environmental problems (Butler 1980:8). Typically, regional decision-makers attempt to rectify the situation by introducing urban renewal and beautification projects.

The variable "redirect foci of tourism industry" in column 13 recorded any evidence of new directions taken or suggested by people either within or outside the tourism industry. It tested Butler's (1980:9) assertion that it is almost "certain" that the "rejuvenation" stage will not take place without a "complete change in the attractions on which tourism is based". Butler was referring to the introduction of man-made attractions such as winter sports and gambling.

Column 14, which was used to tally the variable, "traffic problems" records articles or letters-to-the-editor, about any traffic problems and tests Cooper's (1990:63) threat that "poor access and traffic problems may precede the decline of a resort region".

Column 16 of the tally sheet recorded building and development activity within the region, testing Butler's (1980:8) "development" stage criterion that "locally provided facilities will be superseded by larger, more elaborate, more up-to-date facilities" and that "changes in the physical appearance of the area will be noticeable" (Butler 1980:8). In the main, this variable recorded only articles, although on occasions letters-to-the-editor were included. One such letter, for example, related to the decision to start an $85 million international resort development in Port Douglas, E. Buchan, Honorary Secretary of the Port Douglas Sports and Country Club said, "let it go on record ..... to congratulate Skase's Quintrex group" (*Cairns Post*, 26 September 1985). This letter counted as one point in this column.

The variable "attitude to Tourism Development" was tallied in column 17 and tested Cooper's (1990:63) threat that there will be "local opposition to tourism as the resorts' residential role increases". The variable also tested Butler's (1980:8) "consolidation" stage criterion that "the large number of visitors and the facilities provided for them can be expected to arouse some opposition and discontent among local residents". A reasonable extrapolation, if the above points proved to be true, was that there would also be opposition to tourism development for its own sake. When interpreting the results of the newspaper search, however, it was recognised that to oppose tourism development just because it is tourism-related would not be well accepted in an area where the economy is highly dependent on tourism. Accordingly, it is possible that opposition to tourism development may come disguised as something else, such as opposition based on environmental grounds, particularly from people not directly involved in the tourism industry (Butler 1980:8). The variable is divided into the following:

1. attitude is strongly in favour of tourism related development;
2. attitude is in favour of tourism related development;
3. attitude is apathetic towards tourism related development;
4. attitude is against tourism related development;
5. attitude is strongly against tourism related development.

During the period from 1976 to 1980, the *Cairns Post* published very little of relevance to TALC theory and so it was only necessary to read through two or three months of newspapers per year. The same was true of the end of the review period between June 1997 and the end of 1998. The fact that there was not much in the newspaper which was relevant to TALC at the beginning and the end of the study period is perhaps a relevant point in itself. The beginning and top of the "S"-shaped curve is relatively horizontal because the level of activity in the tourism industry is not changing much. Perhaps, there is not much to report in terms of articles and letters-to-the-editor because tourism is stable at these times. This point was examined during the analysis phase of the research.

4.3 Existing Statistical Data

Some criteria are better tested using existing statistical data. An example would be Butler's (1980:9) "stagnation" stage criterion which states that there will be "peak numbers of tourists as capacity levels are reached". Haywood (1986:161) also states that at the "stagnation stage" there will be "tourism industry over-capacity". Both of these criteria were tested using published occupancy rates for the local government areas within the study region (ABS Product No. 8635.3.40.001). Room occupancy rates and bed occupancy rates were used in conjunction with the number of rooms and bed spaces available as indicators of the level of tourism activity and as such can be used as part of the criteria for TALC.

Other data names relevant to this section are provided on page 5 of Appendix 2 under the heading; "Statistical data which may be available from sources such as

Tourism Tropical North Queensland, the Bureau of Tourism Research and the Cairns City Council". Other sources included the Centre for Applied Economic Research and Analysis (JCU) which ceased operations in 1996, and the Queensland Department of Family Services and Aboriginal Affairs. In the main, however, there was a lack of continuity of data sufficient to cover the twenty-two year period.

4.4 Strengths and Weaknesses of Data Collection Techniques.

Of all the data collection techniques, the questionnaire was the most effective and efficient. In particular, the method of collecting times-series data proved to be most suitable for this application (Section 413). Although the response rate was only about 33% the results were very consistent between respondents indicating that there was a high level of agreement about present and past trends and events. One of the strengths of this method is that it asked for a quick, subjective response rather than for historical records. Consequently, once respondents understood what was required of them, the procedure proved quick and easy. Had historical data been requested, the response rate would most likely have been much lower than it was because of the difficulty of obtained data for a the twenty-year period. In addition, the technique is versatile and could be adapted to suit numerous applications, for example core data could be collected using this method if existing statistics are not available. The cross-sectional questions which related only to the current time (the time the response was completed) was useful but not as beneficial to the project as was the time-series data.

The main weakness of the questionnaire was that, because of the unusual format of the time-series questions, respondents often found it difficult to grasp the concept of providing a subjective response. Without assistance from the researcher, potential respondents often did not complete these questions at all. It is probable that this difficulty was the main factor responsible for the low response rate (33%). With a more effective explanation presented to the respondent in the first place, however, this difficulty may be overcome and the response rate increased.

The main advantage of the newspaper search was that it provided an overview of the main events in the region during the study period. The method used, however, was tedious and time consuming. Nearly every copy of the *Cairns Post* published during the 20-year study period was examined for articles and letters-to-the-editor relating to tourism. The search took more than five hundred hours to complete (Section 4.1.5). Initially it was also intended to tally the number of tourism-related advertisements but this idea was abandoned because the gradual introduction of alternative advertising media such as magazines, tourism newspapers and a dedicated cable TV network. The information gained from the newspaper search was not consistent with the amount of effort put in. Furthermore, the overall results would not have changed had this search not been conducted. In addition to the tedious and time consuming nature of the newspaper search, newspaper articles and letters-to-the-editor are, by their very nature, highly subjective and may just reflect the opinion of the writer.

In retrospect, all that was required of the newspaper search was an overview of the major events in the region. Accordingly, it is only necessary to read the first page or two and then only the information under the major headlines, a process that would be much less time consuming than the method used. Major events are typically big news and mentioned in numerous editions. It is, therefore, probable that it is only necessary to read one or two articles on the same topic in order to gain an idea of it is about, saving even more time while achieving the same results.

The search for existing statistical data uncovered a number of organisations that publish relevant statistical data including the Australian Bureau of Statistics, Bureau of Tourism Research and the Queensland Tourism and Travel Corporation. Figure 4.1 shows, however, that even the statistics used by this study to construct Butler's (1980) "S"-shaped curve, considered the most consistent and reliable data set available, contained numerous inconsistencies. Nevertheless, in a study such as this it is necessary to investigate all secondary data sources in case useful data is overlooked. Even if existing statistics are not good enough to use for the construction

of the cubic TALC curve, there may be data suitable for use in determining the existence, or otherwise, of criteria associated with an individual stage. For the purposes of this project, the effort of locating existing data sources was well worth the effect, despite the shortcomings.

In comparison to the newspaper search the historical search was more productive in terms of results for the amount of effort put in. The latter involved about two weeks work spread over a period of some months. The sources tended to be concentrated in a small number of collections and in most cases assistance was available to do most of the searching. The Cairns Historical Society contained much of the information and several searches were conducted by the staff at no cost. A work space was provided along with the use of a copier. The North Queensland collection at the Townsville campus of the James Cook University was also a major source. The collection is well catalogued making searching quick and easy. Material was delivered to this researcher again saving a lot of time and effort. Extracting data from material was the most time consuming part of this search.

The main weakness of obtaining data using an historical search in this case was that there were plenty of pictures and descriptive text but no useable statistics. Other studies in other regions may, however, uncover statistics. Despite the latter problem the search was well worth the time invested. Any further TALC studies which may be conducted by this researcher in other regions would include a search of this type.

4.5 Analysis

Accommodation takings was selected for the TALC curve from the range of options discussed above, and plotted using SPSS and Excel. A cubic ("S" shaped) model was fitted to the data using SPSS and although there was a reasonably high correlation, when superimposed on the original data, the cubic curve did not appear to be a good fit. Excel was then used to fit a fifth degree polynomial model to the accommodation takings data. The result was a slightly higher R-squared value than the cubic model. Graphs of both models are provided in the next chapter.

Having shown that the TALC curve for the Cairns region was cubic, each Butler's (1980) criteria were examined stage by stage. The aim was to see which of Butler's criteria were present in the Cairns region, and if so, were they present during the stage that Butler suggested they should be. Emphasis was on the time-series data because of its greater relevance to Butler's (1890) theory.

The analysis of each variable commenced with an examination of frequencies, either graphically or in tabular form. In many cases this examination was sufficient to see if the data fitted any of the criteria. In the case of non-time-series variables, the frequencies may give some indication of the current position of the region on the TALC curve with respect to that variable. The order in which the variables were examined was as close as possible to their order of appearance in Butler's (1980) article. Similar variables were examined together where feasible. For example, questions relating to profit (ie. Questions 4.1, 8.7 and 8.13) were examined together so that results could be easily compared. In the case of time-series variables, it was necessary to keep a close watch on respondent numbers for each year of the study period for two reasons: first, to ensure frequencies for each year were consistent with the growth of the cycle; and second to make sure that there was sufficient frequency to form an opinion.

The nature of the TALC model meant that it was not necessary to look at any more complicated techniques than an examination of the raw scores and in some cases linear regression and measures of central tendency and dispersion. The model requires that each variable be looked at individually and so any technique that links them together must be looked at very carefully. Some variables, however, such as the degree of outside ownership, were divided into the degree of outside ownership compared to the degree of local ownership. The two data sets were then compared. The variable, "management sourced from outside the region" was divided the same fashion. Both variables were also considered subsets of a variable which measures the degree of outside control.

The results of the analysis for each stage of Butler's (1980) theory were drawn together in tabular form to give a more concise picture of the degree of compliance with that stage. A summary table showing the degree of compliance with all Butler's stages was also constructed. Dates were calculated for the beginning and end of each stage, details of which are in the next chapter and summarised in Chapter Six. Some conclusions were then possible regarding the applicability of the model to the region.

The next part of the analysis involved looking at the first five of Haywood's (1986:161) seven leading indicators of "stagnation" and Cooper's (1990:63) threats to cold water resorts as they related to the study region. The questionnaire and the newspaper search had collected information for both sets of data. The aim of this part of the project was to see if the work of these two authors supported Butler's (1980) work, and if so what was their potential for use as leading indicators. Similar analysis techniques were employed here as were used to look at Butler's criteria. A summary table was produced showing the degree a compliance between Haywood's and Cooper's work and the study region.

The final chapter looked at the results of the analysis in terms of the study objectives outlined in Chapter One including some specific suggestions about a more universal and streamlined approach for the application of the TALC model. Implications relating to the TALC model and the Cairns area were also discussed along with some suggestions for future research including the computerisation of the model.

4.6 Summary

Date gathering methodology involved a newspaper search, a survey of business people, an historical search and the procurement of suitable statistical data. Data analysis methodology started with the identification of Butler's (1980) "S" shaped TALC curve for the study region. Next, criteria relevant to Butler's (1980) stages were identified, starting with the "exploration" stage. The analysis methodology finished by looking at the relevancy to the Cairns region of Haywood's

(1986:161) leading indicators and Cooper's (1990:63) "threats". Conventional statistical techniques were used, such as regression and correlation accompanied by some measures of central tendency and dispersion. Lastly, the methodology involved a discussion of the implications and conclusions of the results of the analysis.

5. Identifying Butler's Stages

5.1 Introduction

This chapter contains an examination of Butler's (1980) Tourism Area Life Cycle (TALC) model as applied to the Cairns region. A stage by stage analysis follows, starting with identification of the "exploration" stage. The main aim of this analysis is to investigate the degree of compliance with Butler's criteria for identifying TALC stages. Argument relating to individual criteria is kept together. Major events influencing the development of tourism in the region are discussed in chronological order wherever possible. The chapter ends by testing the usefulness and appropriateness to the study region of some of Cooper's (1990:63) "threats" to the survival of cold water resort regions and Haywood's (1986:161) list of "stagnation" stage leading indicators. Although the account starts with data relating to the late 1880s, the life-cycle data used to construct the basic cubic TALC curve does not start until the time series data on accommodation takings became available in 1977. The first section establishes the existence of the latter curve, without which it is difficult to decide the timing of the stages or the presence of the criteria.

5.2 Establishing the Existence of the Life-cycle Curve

Butler (1980) used visitor numbers as the basis for his TALC curve, but this analysis uses accommodation takings (see Chapter Four for justification). The data set was then adjusted for inflation using the Consumer Price Index (CPI) (ABS. Cat. No. 6401.0, Table 1B). To find out if the data was cubic, a 3rd order polynomial (cubic regression) was fitted using the Software Package for the Social Sciences (SPSS), giving an R^2 value of 0.918, shown by the dotted line in Figure 5-1. A slightly better fit of $R^2 = 0.9225$ was then obtained using a 5th order polynomial in Microsoft Excel. The latter is shown by the solid line in the figure. The formula used for the 5th order polynomial was:

$$y = 0.00006x^5 - 0.0145x^4 + 1.2215x^3 - 35.254x^2 + 404.94x + 302.34 \quad \ldots\ldots\ldots \quad 5.1$$

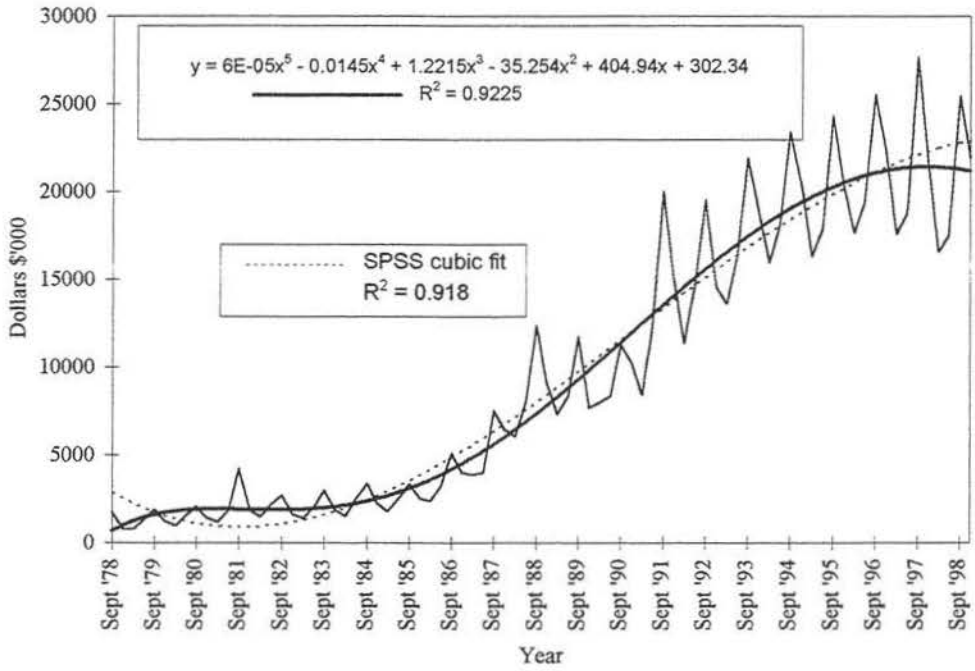


Figure 5-1: Inflation Adjusted Accommodation Takings Quarterly, ($'000) 1978 - 1989. Cairns Region (Base year = 1978).
Source: Based upon data in ABS, Cat. No. 8635.3.40.001.

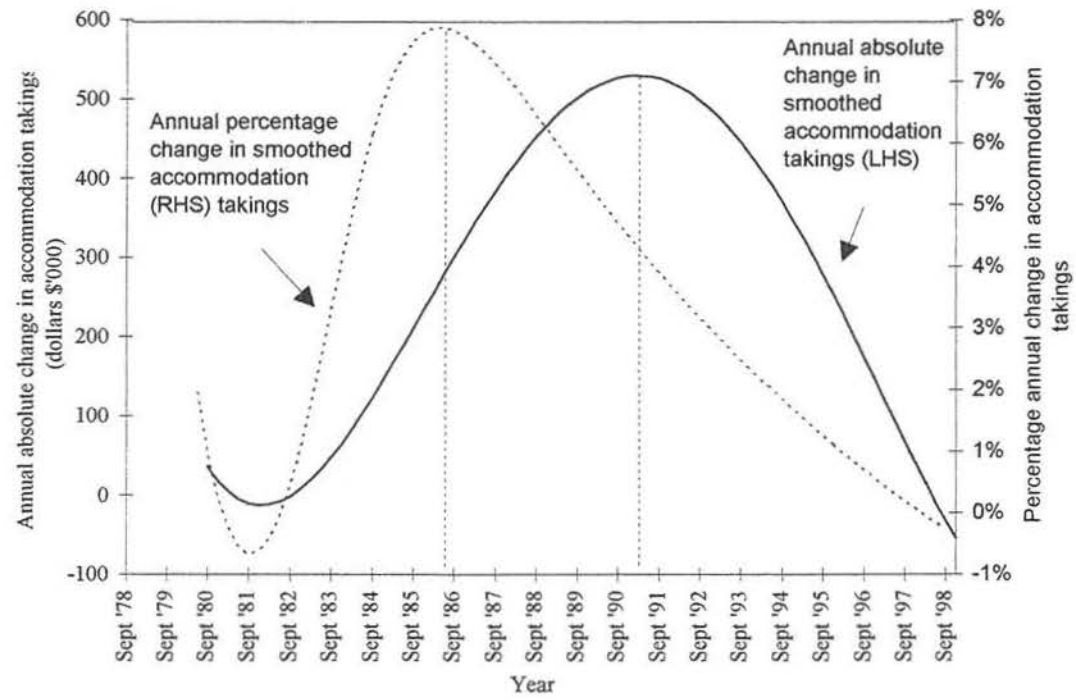


Figure 5-2: Annual Change, Inflation Adjusted Accommodation Takings Quarterly, ($'000) 1978 - 1989, Cairns region.
Source: Calculated from data in ABS, Cat. No. 8635.3.40.001.

The absolute and percentage growth in the smoothed values was calculated using the formula in 5.1 and plotted in Figure 5-2. The absolute change peaks where growth rates in accommodation takings start to decline, which is the point of inflection in Figure 5-1. Butler (1980:8) used this point as the start of the "consolidation" stage. The dotted curve in Figure 5-2 represents annual percentage growth rates of accommodation takings, often used as an indicator of economic growth. The graph shows that for TALC purposes, percentage growth rates are less appropriate than absolute growth rates because the annual percentage change varies in line with the absolute value of the preceding year. For the long-term study of the economic effects of accommodation spending on the community, the absolute values and absolute change, are more appropriate than percentage change from the previous year.

Some difficulty was encountered in attempting to use the Excel generated polynomial formula to calculate the expected values because the parameters provided by the software had been truncated to four decimal places. A process of trial and error was used to estimate the actual formula. When the resulting curve, plotted on the same graph, was the same as the original Excel generated curve, the formula was considered accurate enough for the purposes of this research. The re-calculated formula was:

$$y = 0.00005645x^5 - 0.01455x^4\ 4 + 1.2215x^3 - 35.254x^2 + 404.94x + 302.34 \ldots 5.2$$

As predicted by Butler (1980), the basic TALC curve for the study region is essentially cubic despite the low values in the first two years (Figure 5-1). The graph shows that growth in accommodation takings had peaked in 1997 and the "decline" stage was imminent at the end of the study period in December 1998. The Australian Bureau of Statistics, however, changed the definition of accommodation takings in 1998. Although this study made allowance for the change in definition (see Chapter Four), two or three more years of decline would be necessary to confirm the change of direction in the longer term.

5.3 Testing Criteria for the "Exploration" Stage (1889-1912)

Theoretically, the "exploration" stage is characterised by the presence of a few adventurous tourists who are attracted to the area because of its unique and different natural and cultural attractions (Butler 1980:7). There are little or no specific tourist facilities and contact between visitors and locals is high compared to the latter stages of TALC.

Tourism has been referred to as the Cairns region's "third rush", the first rush being gold, tin and other minerals, and the second being timber (Pelgrave 1994:3-4, 21). Prior to the introduction by Queensland Railways of return tickets to Cairns from Brisbane in 1912, the two thousand kilometres to Brisbane, the nearest capital city, discouraged tourism to the region. It is probable that the income generated from visitors had a relatively insignificant impact on the economic and social life of the permanent residents of the Cairns region.

Available records do not indicate if tourists were welcome or not, although evidence of tourism within the region commenced with the completion of the railway between the Port of Cairns and Kuranda in 1889. The use of Kuranda as a summer resort was pioneered in the 1890s by three local business people: W.D. Hobson; T. Behan; and R. Sturt (Collinson 1942:137-8). Documentary proof of one-day, return excursions by rail from Cairns to Kuranda exists in the form of special souvenir tickets. On their back are high quality, colour glossy photographs of the region (presumably coloured by hand). In 1908, the price of a first-class ticket was four shillings and nine pence (Queensland Railways 1908). By that time Green Island was already established as a place for people to visit. A summary of the degree of "exploration" stage compliance between the TALC in the Cairns region and Butler's (1980) theory is provided in Table 5-1.

5.4 Testing for the "Involvement" Stage (1912-1984)

Butler's (1980) theory states that the "involvement" stage is characterised by an increase in visitor numbers and local involvement in the provision of services for

Table 5-1: Summary of Cairns Region's Compliance with Butler's (1980) "Exploration" Stage Criteria.

Butler's (1980) Criteria	Compliance (Yes/No)
Few, adventurous tourists	Yes
No specific tourist facilities	Yes
Contact between locals and visitors is high	Assume Yes

them. Contact between visitors and locals is still high and there will be some advertising to attract tourists. A market area can be identified. A tourist season develops and there will be some organisation in the travel arrangements made for tourists. Pressure will come to bear on governments to provide tourist facilities such as airports, roads and harbour facilities (Butler 1980:7,8).

5.4.1 Involvement by Local People in the Provision of Tourist Facilities

The study shows that as early as 1912 there was transport available in the Cairns region so that people could visit local beauty spots. The railway system connected Cairns to Kuranda where there were tourist attractions such as the Maze and Fairyland (see Figures 5-3 to 5-5). From 1921, Whitecars, a local bus company, offered passenger transport to attractions that the railway could not reach. Bus tours were available across the Tablelands and to Lakes Barrine and Eacham, the Malanda, Tully and Millstream Falls, as well as scenic drives up the Range Road after it was opened in 1926 (see Figure 5-6).

Whitecars made a significant impact on the tourism industry in the early days and the story of the company helps to give a better picture of the state of tourism in the region in the early days. The company was started in 1921 by Les Battle and partners of Malanda, on the Atherton Tablelands, with two, seven-passenger Dodges and a Studebaker. They operated two vehicles on a timetable between the Tableland towns of Malanda, Yungaburra, Atherton, Millaa Millaa, Jaggan and Tarzali and the third vehicle was kept as a spare and used as a taxi on demand (Pelgrave 1994).



Figure 5-3: Fairyland, Kuranda, circa 1930

Source: Anon, *A Souvenir of North Queensland - Cairns and Tableland.* n.plac: n.pub. p. 5

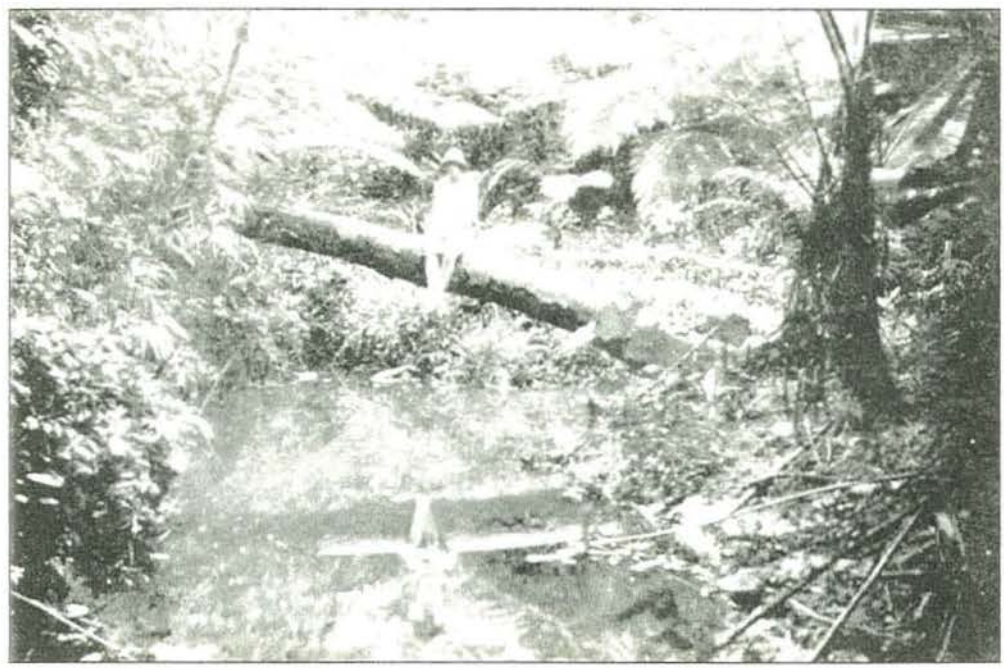


Figure 5-4: Mirror Pool, The Maze, Kuranda, circa 1930

Source: Anon, *Pictorial Grandeur of Cairns, North Queensland - Tourist Playground of the Tropics (Souvenir Booklet).* n.plac: n.pub p10.

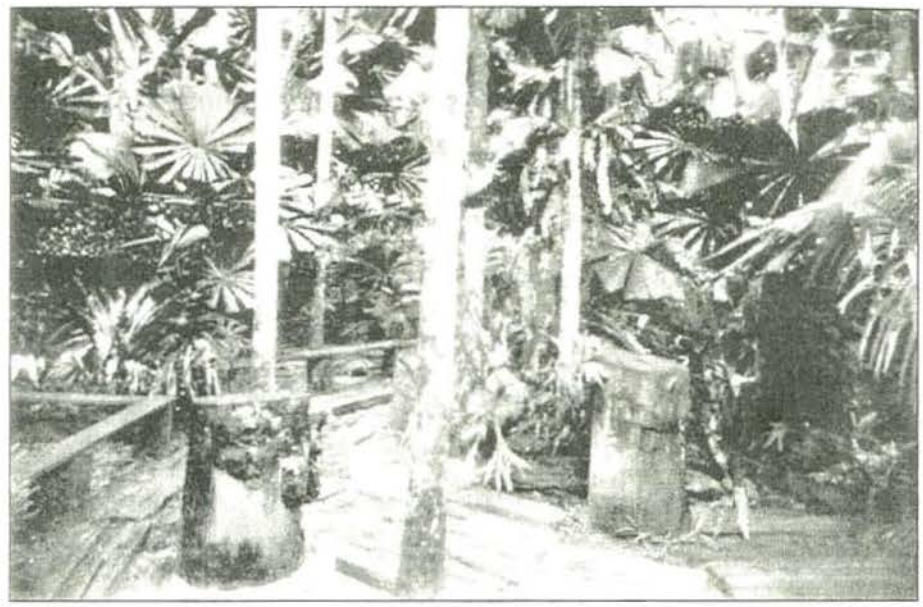


Figure 5-5: The Maze, Kuranda, circa 1930

Source: Anon, *Pictorial Grandeur of Cairns, North Queensland - Tourist Playground of the Tropics (Souvenir Booklet).* n.plac: n.pub. p7.

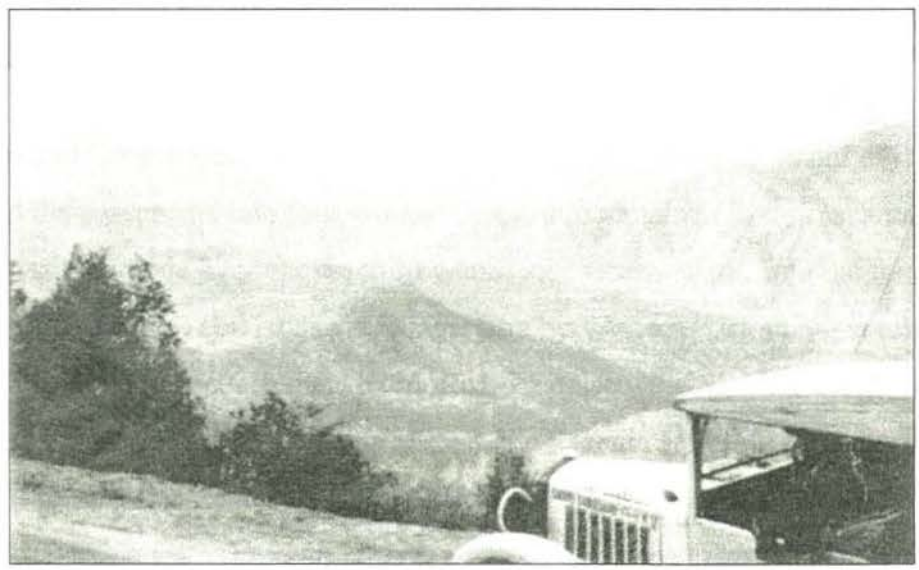


Figure 5-6: Whitecars on the Range Road between Cairns and the Atherton Tablelands, circa 1930

Source: Anon, *A Souvenir of North Queensland - Cairns and Tableland.* n.plac: n.pub. p. 14

When the Gillies Highway, the first road up the range, was completed in 1926, vehicles could get from Cairns to Yungaburra in little under three hours, much quicker than the rail journey through Kuranda. The winding mountain road was single lane and so vehicles had to wait until all the vehicles going the other way had finished their journey (Figure 5-7). A timetable was published and manned gates placed at either end to police traffic. Whitecars started operating between the Tablelands and Cairns as soon as the road was open.

During the late 1920s and 1930s, the weekly arrival of passenger ships such as the *Ormiston*, *Arundle*, *Manunda* and the *Canberra* from the southern capital cities meant that Whitecars had a steady supply of tourists (see Figure 5-8). Each ship carried up to 200 passengers, but actual visitor numbers are not known (Pelgrave 1994:21 - 28; Lander 1937:7). Visitor numbers probably increased during this period. The British cruise ship *Ulysses*, carrying tourists from the United Kingdom, also visited Cairns each year. The ship stopped at no other ports between Cairns and Brisbane due to the numerous attractions in the Cairns area compared to the regions in between (Cairns Harbour Board 1933:51).

The passenger ships remained in Cairns for up to six days and the Queensland Government Tourist Bureau, which packaged the tours out of Brisbane, divided the passengers into four groups. One group remained in Cairns, another would visit Kuranda by train, the third would visit Green Island, and the fourth would travel to the Tablelands via Yungaburra by Whitecars, stopping at all the waterfalls and other scenic spots en route. Boat passengers who did not go on the organised tours were invited to stay at the Lake Eacham Hotel in Yungaburra and go on local tours using Whitecars to visit Lakes Barrine and Eacham. By the late 1920s, the Lake Barrine tea rooms and other facilities such as the Lake Eacham bathing diving platform had been erected. Although the 1930s depression reduced Whitecars' income, tourism in the region was not badly hit and it was only necessary to shed one employee (Pelgrave 1994:21 - 28). As the construction of other roads opened up the region, Whitecars offered more regular passenger routes. Services were started between Innisfail and Ravenshoe via the Palmerston Highway in 1932 and between Cairns and Mossman in 1934 (Pelgrave 1994:32). During the Second World War,

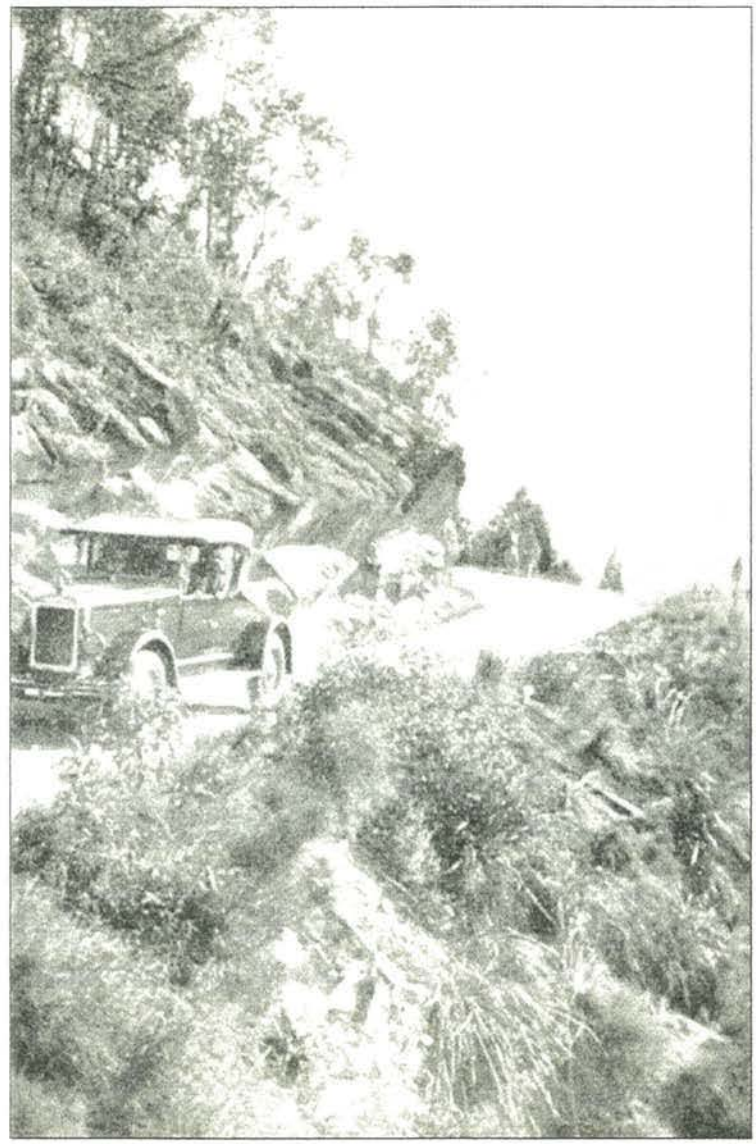


Figure 5-7: The Range Road Between Cairns and the Atherton Tablelands.
Source: Cairns and Tableland Publicity Association. 1933. *Cairns Tourist Guide Book - Winter Tours.* Cairns: Cairns and Tableland Publicity Association. p. 88



Figure 5-8: Passenger Steamer Leaving Cairns Harbour, circa 1930.
Source: Anon, *Pictorial Grandeur of Cairns, North Queensland - Tourist Playground of the Tropics (Souvenir Booklet)*. n.plac: n.pub. p27.

Cairns and the Tablelands were extensively used as a training area for Australian and US troops headed for South Pacific theatres of war as well as for those returning with injuries for rest and recreation. Whitecars were very much in demand during that period, although a number of drivers and mechanics were called away to the war (Pelgrave 1994:43).

Ansett Airways made a successful take-over bid for Whitecars in 1948, but the new order lasted only about two years and then Ansett offered the remaining vehicles to the drivers and other interested parties. Les Battle and one of the original partners then started operations again with four vehicles under the new name of Tableland Service Cars Pty Ltd, the name "Whitecars" being registered to Ansett until 1969 (Pelgrave 1994:51). At the time of writing, the company is still in operation under its original name.

In the 1920s and 1930s the Great Barrier Reef was accessible to tourists via a number of local marine operators (eg. Hayles), the most popular and easily accessible destination from Cairns being Green Island (Figure 5-9). Coral could be viewed using a plate glass box which was floated alongside a small boat, the tints and colours of the coral beds being said to "surpass any scenic view in the world". Reef fishing was also becoming popular, there being "no greater fishing grounds ..... than around the reefs of Green Island" (Cairns Harbour Board 1933:87). A sea trip amongst the numerous islands of the reef was described by a Cairns Harbour Board Pamphlet (1933:93) as being an "ideal health trip" for the "tired city dweller". The pamphlet extols the virtues of the coastal and island scenery, the safe anchorages on the various cays and the excellent fishing. Also worth seeing were the "semi-civilised" Aboriginal tribes the members of which "can be seen killing crocodiles and dugongs and roasting them over an open fire". They also collect wild honey and eat the whole nest including "the honeycomb and live bees and honey. (Native bees do not sting)" (Cairns Harbour Board 1933:94). Luggers collecting beche-de-mer were also said to make an interesting study for the tourist with their "Jap and black crews" (Cairns Harbour Board 1933:94).

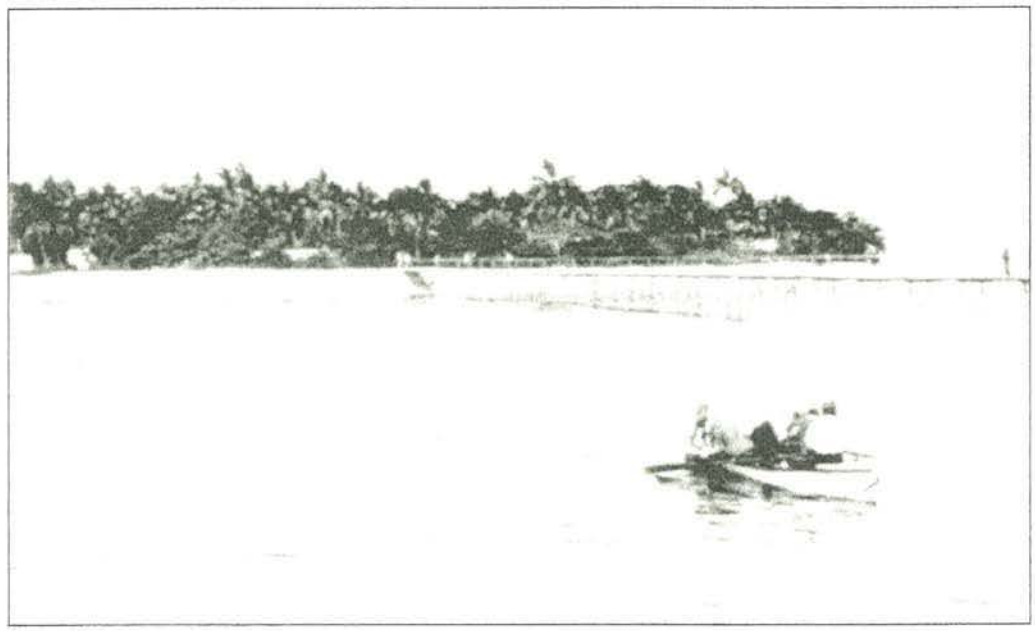


Figure 5-9: Green Island, circa 1930

Source: Anon, *A Souvenir of North Queensland - Cairns and Tableland.* n.plac: n.pub. p. 10.

5.4.2 Organisation of Tourist Travel Arrangements

Butler (1980:7) suggested that during the "involvement" stage "some level of organisation of tourist travel arrangements can be expected", meaning that a proportion of travel and accommodation arrangements will be pre-booked, as opposed to *ad hoc* arrangements. In 1912, as the railway line construction continued north from Brisbane, return tickets were sold from Brisbane to Cairns involving rail travel as far north as the railhead, and then ship travel the rest of the way. Queensland Railways encouraged passengers to use the local railway system to travel around while in the study region (see Figure 5-10). In 1924, the railway line between Cairns and Brisbane was finally completed and although no statistics on tourists numbers were located, it is likely that tourist numbers to the region increased as rail travel was cheaper than ship travel (Qld. Govt.Tourist Bureau 1939:36).

Organised tourist travel to the region came to a standstill during World War Two. Passenger ship services were suspended due to the takeover of the ships by the Royal Australian Navy (Cairns Chamber of Commerce 1946:13). By the early 1950s, however, three of the pre-war passenger ships were again making regular visits to Cairns from ports as far south as Melbourne. In 1953 the number of visiting ships was reduced to two. During the same year there was an influx of tourists from New Zealand, but again no numbers are reported (Cairns Chamber of Commerce 1953:11). For the rest of the 1950s and the 1960s, not much appears to have been written about tourism in the study region. Between 1969/70 and 1978/79, however, visitor trips to the region increased by 220% (Australian Travel Industry Association 1984).

Although the Cairns Harbour Board published records of cargo tonnages, values, port charges and other details regarding exports and imports, there were no reports of the number of passengers arriving and departing by ship (Cairns Harbour Board 1926; 1929; 1931; 1932). An early Cairns Chamber of Commerce Annual Report made mention of tourism, but again did not quote any actual figures. The report simply mentioned the "large number of ships and tourists visiting Cairns" (Cairns Chamber of Commerce 1946:13).

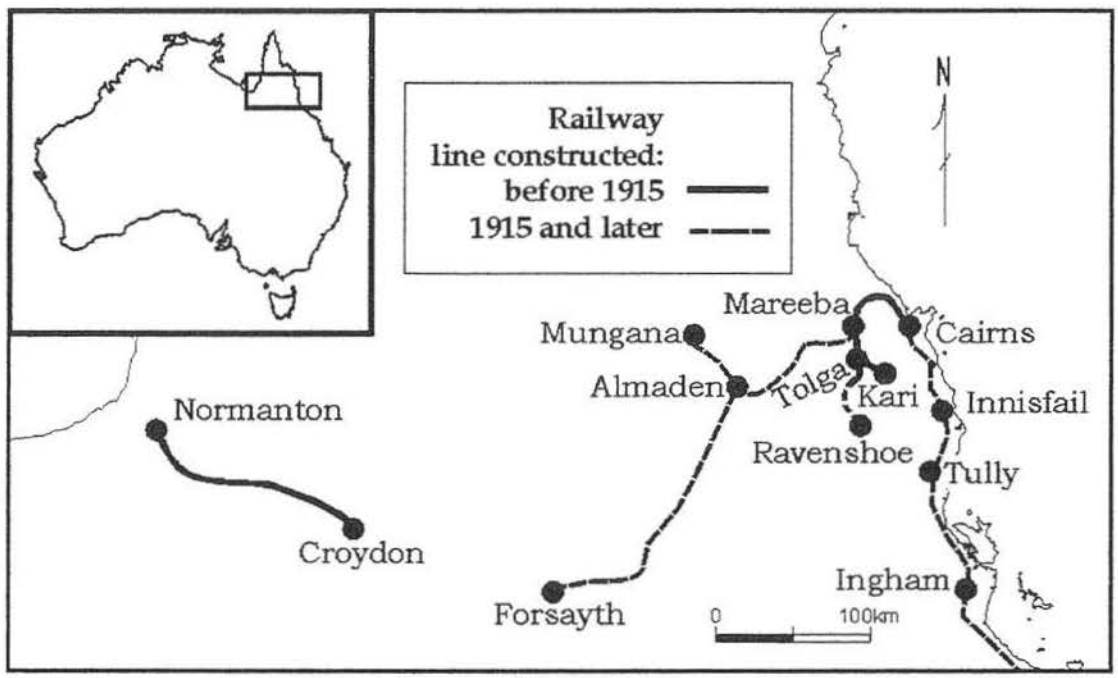


Figure 5-10: The Location of the Cairns Region Railway Network

Source: Wakely, P. 1965. *A Century of Service - The Queensland Government Railways Story 1865 - 1965*. Brisbane: Queensland Government. p. 1

5.4.3 Advertising to Attract Tourists

In 1912, the same year that Queensland Railways offered return tickets from Brisbane to Cairns, they published a 70-page pictorial handbook on the study region. This publication was clearly a promotional effort designed to entice people to visit the attractions of the region. The book contains pictures of scenery tourists might expect to see and explains how to get to Cairns by ship. A number of the steamship companies such as, Australian Steamships Limited, A.U.S.N. (Australian Union Steamship Navigation) and the Adelaide Steamship Company advertised their Cairns services in the booklet. The booklet also published timetables so that tourists could get around the region using the comprehensive network of railways and tramways. Services were advertised to places as far inland as Irvinebank, Mount Garnet and Forsyth. A number of other tourism-related services were also advertised, such as Hunter's Hotel at Kuranda, which was the first railway stop on the Atherton Tableland. The booklet includes pictures of various towns, such as Port Douglas, which at the time was just a small collection of timber buildings (now a busy resort town), and Irvinebank, a thriving mining town (now largely abandoned).

The scenic photographs in the booklet were accompanied by articles expressing the author's positive feelings about the view from the train as it passed through the region. One article by a Rev. L.L. Wirt, B.D. gives an interesting description of the countryside in 1912:

> "From Cairns the 22 mile railway journey to the (Barron) Falls is one of momentary delights and surprises. Through palm orchards, around pawpaw groves and across banana plantations, the train takes its way until the rich bench lands are left behind, and the steep climb of the range commences. Soon plain and ocean stretch out like a panorama, while the train dodges in and out of the rocky spurs of the mountain. Graceful creepers droop from the festooned trees and form a lovely tropical wall of foliage, behind which the train steadily passes on her way up the ascent. Rare tropical fruits and exquisite flowers appear and disappear before they can be half examined. Spider like bridges

> are crossed under which mountain torrents rush and plunge into the Barron Gorge, that ever narrows and deepens on your right hand"(Queensland Railways 1912:29).

In the study area, regional advertising became institutionalised with the formation of the Cairns and Tableland Publicity Association in the 1930s. In 1946, the Cairns Chamber of Commerce commenced promoting tourism by initiating a conference, which led to the formation of the Far North Queensland Tourist and Development League (The Cairns Chamber of Commerce 1946:13). The Far North Queensland Publicity Bureau (FNQPB) was formed in 1976 for the specific purpose of promoting tourism in the region.

A number of promotion booklets were published by the various tourism promotion bodies aimed at attracting visitors to the region. In the 1930s, the Cairns and Tableland Publicity Association produced and distributed brochures and souvenir pamphlets advertising the attractions of the region (Cairns and Tableland Publicity Association 1933). The brochures listed places to visit such as the Great Barrier Reef, its islands and coral cays, the numerous sandy beaches, rainforests and waterfalls, the main emphasis being on the tropical nature of the region and its outstanding scenery. Figures 5-3 to 5-9 are examples of early publicity shots of the region taken from souvenir and guide books printed around 1930.

For the last eight years of the "involvement" stage (1976-1984), the newspaper search, the business questionnaire and Tourism Tropical North Queensland (TTNQ) expenditure were used to measure the amount of advertising in the region. When the number of tourism advertisements in the *Cairns Post* were tallied as part of the newspaper search, however, the frequency fluctuated considerably and it became obvious that alternative methods of advertising appeared as the TALC progressed. Details of some of the other advertising mediums are discussed in Section 4.1.5 of Chapter Four. It was, therefore, decided that the *Cairns Post* did not reflect advertising expenditure in the industry as a whole, or even a

fixed percentage of it, and so had no integrity for TALC purposes and could not be used.

Question 8.6 of the questionnaire asked respondents what proportion of their total expenditure went to advertising over the study period. The results are shown in Figure 5-11. For the first year of the survey period (1976) there were only 33 respondent organisations, but by 1998, 198 answered the question. The response to the question left no doubt that advertising expenditure, expressed as a percentage of capital invested, increased over the period.

The last form of advertising or promotion considered is TTNQ expenditure. The reason for being of this body is to promote the study region. How the agency organises its internal budget is not important. It may be, for example, that some funds go directly towards advertising and some goes to lobbying politicians on behalf of the region's tourism industry. From the stakeholder's point of view, however, any payments channelled through the TTNQ are for promotion purposes just the same as for any private promotion agency. The organisation's whole budget, therefore, can be treated as advertising or promotion expenditure. The dotted line in Figure 5-12 is a plot of this expenditure showing clear evidence of increasing regional advertising during the last eight years of the "involvement" stage. During 1984 TTNQ tripled expenditure in preparation for the opening of the new international airport.

5.4.4 An Initial Market Area can be Identified and a Tourist Season Emerges

Between 1912 and about 1978, just before the international airport was opened in 1984, the major markets for the region were Brisbane, Sydney and Melbourne (Queensland Railways 1912; Cairns Harbour Board 1933; Queensland Government Tourist Bureau 1939; Lander 1937:7; Pelgrave 1994). As roads improved an increasing number of people arrived by car who may not necessarily have come from the capital cities. In 1984, domestic markets were still the major source of tourists (Bureau of Tourism Research 1984-1997. *Domestic Tourism Monitor*; Bureau of Tourism Research 1989-1997. *International Visitor Survey*.)

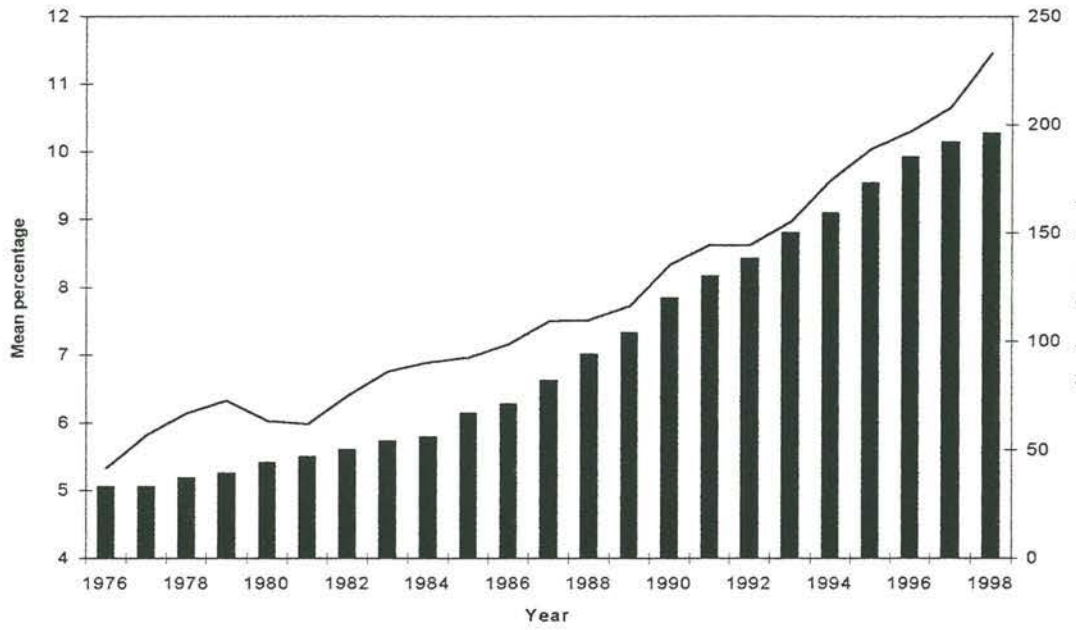


Figure 5-11: Results of Question 8.6 - Advertising and Promotion as a Percentage of Total Expenditure.
Source: Ted Berry, 1999, Cairns Regional Questionnaire

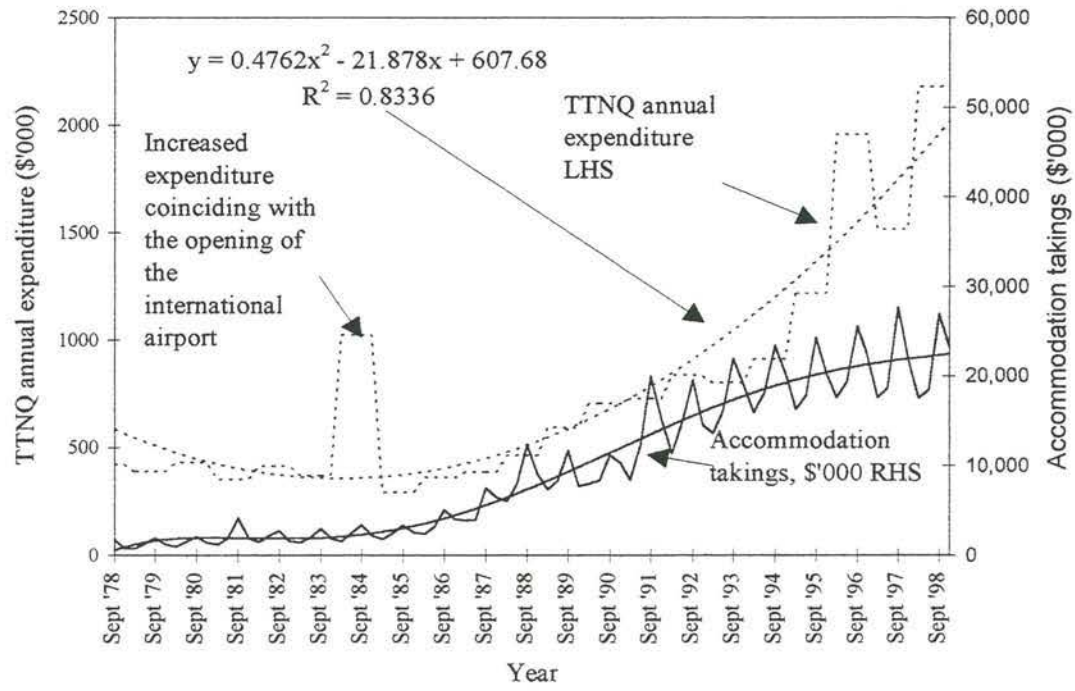


Figure 5-12: TTNQ Annual Expenditure - Advertising and Promotion as a Percentage of Total Expenditure
Sources: Tropical Tourism North Queensland, Annual Reports, 1976 - 1998
ABS, Product No. 8635.3.40.001

By 1949, a tourist season was firmly established in the region. During the winter months, southern tourists would come north to escape the cold and the Queensland Government Tourist Bureau introduced a new tour to the study region called "The Tropic Wonderland". Over seven months, during that year, the Queensland Government Tourist Bureau booked 1,009 people on the tour (Queensland Government Tourist Bureau 1950:1). By the time the ABS commenced compiling statistics on accommodation takings in 1977 and 1978 (see Figure 5-1), a pattern of seasonal visitation was easily identifiable.

5.4.5 Attitude to Visitors

Butler (1980:10) neither supports nor opposes Doxey's (1975) index of irritation (Irridex) which states that residents' attitude towards tourists will change from being positive at the beginning of the cycle, to antagonistic at the end. Butler wrote that more recent research shows residents' attitudes towards tourists is a more complex function. In the study region, the sample size from the newspaper search is not large enough to form any strong opinions either way (see Figure 5-13). The highest count was in the "happy to see visitors" category with a maximum of twenty-nine letters-to-the-editor and articles per year in 1991 (Figure 5-13a). That year the level of tourism industry activity was an improvement on the previous year but it was still not a good year because of the after-effects of the pilot's strike and the deep domestic economic recession. The next largest sample was in the "expressing annoyance towards tourists" category (Figure 5-13c) which peaked in 1987, a very good year for the tourism industry in the region. From these results there is no real evidence that Doxey's predictions have occurred in the Cairns region during the period 1976-1984. A possible hypothesis, however, is that there is some degree of negative correlation between the level of tourism activity and public expressions of sentiment towards visitors. To test this hypothesis, however, was beyond the scope and resources of this research.

To further test this criterion, Question 8.5 of the questionnaire asked for respondents' opinion about local attitudes towards tourists over the whole of the study period. The results are shown in Figure 5-14 and reflect an opinion which is

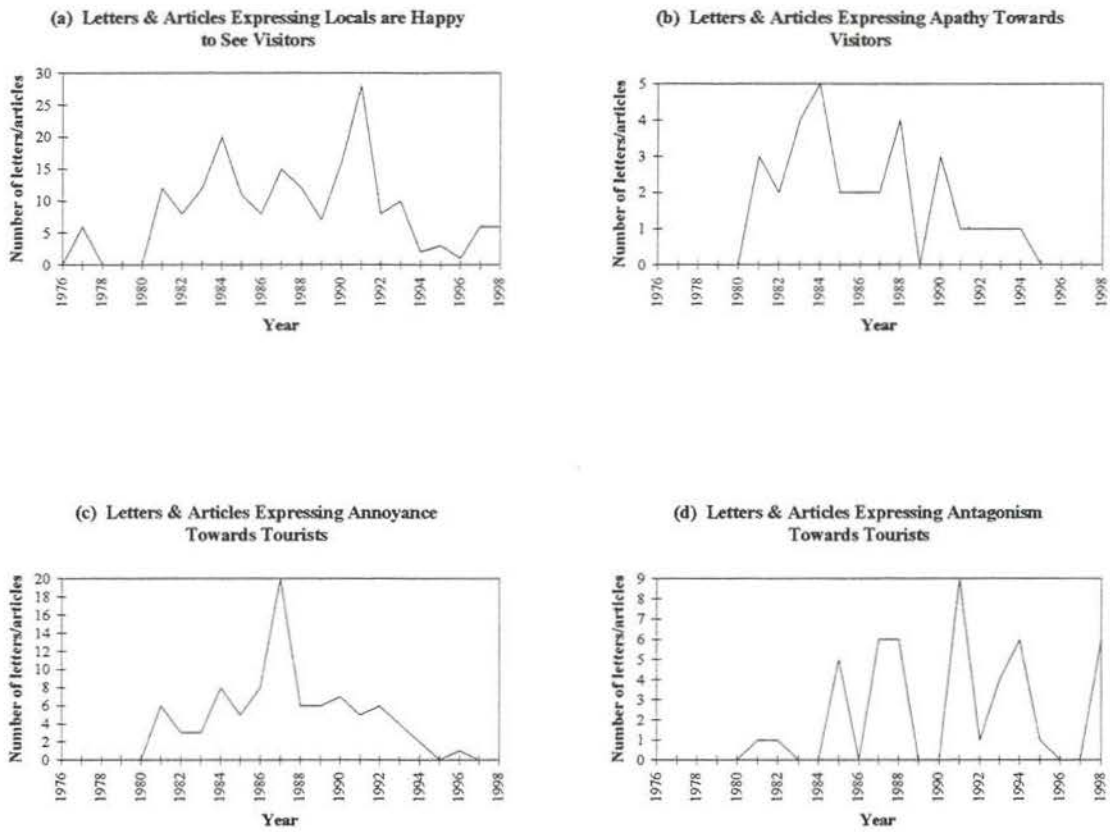


Figure 5-13: Letters-to-the-Editor and Articles Indicating Attitude to Tourists.

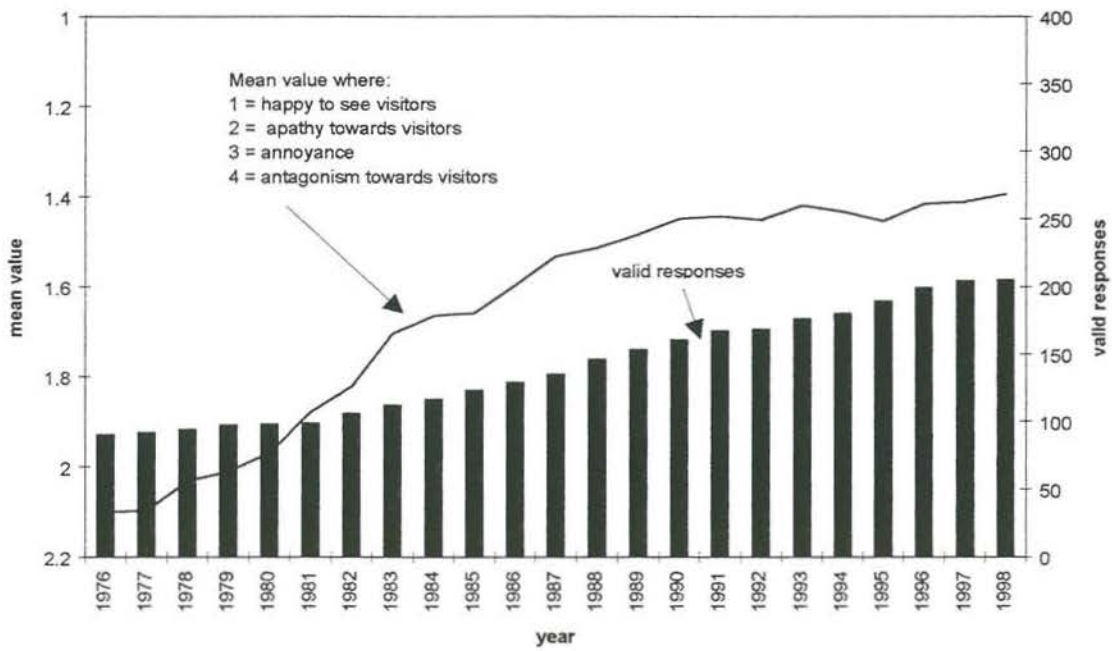


Figure 5-14: Results of Question 8.5 - Attitude Towards Tourists.

Source: Ted Berry, 1999, Cairns Regional Questionnaire.

opposite to Doxey's (1975) theory. Four options were provided: (1) happy to see visitors; (2) apathy toward visitors; (3) annoyance; and, (4) antagonism towards visitors. The results also indicate quite a high degree of consistency in that the standard deviation is low, particularly in the latter years. Also of note is the high response rate over the whole period, even the early years, relative to other questions. Although respondents may not have been working in the same company, or the same industry, they appeared to have some knowledge about local's attitude to tourists over time.

The reasons for the inconsistency between the results of the business survey and Doxey's (1975) theory would be conjecture. A possible explanation, however, could be that the respondents were people who make their living, directly or indirectly, from tourism. Nevertheless, respondents were not asked for their own attitudes, but rather their perceptions of the attitudes of the general public. Ideally, a separate poll of this group would have been more relevant. The difficulty in obtaining time series data using a survey in this way, however, make it not feasible.

Another possible reason for the inconsistency between Doxey's (1975) model and the questionnaire results regarding residents' attitude towards tourists could be that the response reflects local recognition of the importance of the tourism industry to the region. Knowing that more tourists means a stronger local economy, it would be reasonable to assume that people are happy to see visitors. There is also a possibility that the demographic profile of the region plays a part. A retirement community, for example, may put a high value on peace and quiet and, therefore, be antagonistic towards tourists regardless of the stage. Cairns, however, does no fall into this category. Nevertheless, Butler's (1980:10) non-committal stance towards this variable has proved to be accurate in the case of the Cairns region.

The findings of this research regarding residents' attitude to tourists is consistent with studies in other geographical areas including Hawaii (Lui and Var 1986) and Queensland's Gold Coast (Faulkner and Tideswell 1997). Possibly a more appropriate model to use would be social exchange theory which suggests a trade-off

between the advantages and disadvantages of tourism (Ap 1990; 1992). The model further postulates that when an exchange of resources (expressed in terms of power) between residents and tourism is high and balanced, or at least high for the host, tourism impacts are viewed positively by local people. Conversely, when an exchange of resources is low and balanced or unbalanced exchange occurs, the impacts are viewed negatively (Costa and Ferrone 1995:27). To develop this line of inquiry further, however, would involve entering a paradigm which is beyond the scope of this research project.

5.4.6 Pressure on Government to Provide Tourism Infrastructure

The historical search did not reveal any evidence to indicate that there was pressure on governments in the 1920s and 1930s to provide infrastructure related to tourism. In the 1970s, however, there were numerous attempts to gain Federal and State government assistance, the most notable being the unsuccessful lobbying for the provision of an international airport in Cairns. Eventually, there was a proposal that the Cairns Harbour Board take over the existing airport and build a new one adjacent to the old site (*Cairns Post*. 6 May 1981:9). There was considerable public debate regarding financing and other issues, but work finally commenced on the airport in 1982. The International Airport was completed in 1984 and non-stop flights to the US commenced that year and to Japan two years later (*Cairns Post*. 7 April 1986).

5.4.7 Summary - "Involvement" Stage

The "involvement" stage in the Cairns region starts with the active promotion of holiday packages to the region by Queensland Railways in 1912 and the resulting involvement of local people in catering for needs of tourists on their arrival in the region. The fledgling tourism industry capitalised on the region's natural beauty but due to its geographical isolation tourism numbers remained small until the advent of cheap air travel in the late 1970s. The region was well serviced by passenger steamers between the 1920 and 1960 (with the exception of the war period) as well as a direct rail link to Brisbane after 1924. The rapid development of an extensive

regional railway network no doubt also encouraged tourists with money, time and an adventurous spirit. These visitors, however, were not the mass tourist of the later stages of Butler's (1980) model (see Figure 5-10). The stage ends with the construction of the Cairns International Airport by the Cairns Port Authority. The opening of the airport in 1984 signalled the change to Butler's "development" stage by encouraging a new wave of tourism infrastructure development, mostly financed with capital from outside the region. Table 5-2 provides a summary of the study region's compliance with Butler's (1980) "involvement" stage criteria.

5.5 Testing for the "Development" Stage (1984-1991)

Butler's (1980:8) "development" stage is characterised by a well-defined tourist market area which is partly the result of heavy advertising. At the same time natural and cultural attractions will be marketed specifically and supplemented with human-made attractions. Local involvement and control of development will decline rapidly and locally-owned facilities (particularly accommodation) will give way to large scale facilities provided by external investors. Butler also noted that during the "development" stage changes in the physical appearance of the region will be noticeable and sometimes these changes will not be welcome. Regional and national involvement in planning, and provision of facilities will occur, and again, this will not necessarily be welcomed by the local residents. The number of visitors will exceed locals in peak periods and imported labour will be used. Auxiliary industries, such as laundries, will start to appear and the type of visitor will change towards Plog's (1991:64) "mid-centric".

5.5.1 Well-defined Tourist Market Area and Heavy Advertising

Before 1984, the main market area was metropolitan Australia. After 1984, charter flights from the USA generated sufficient demand to warrant the introduction of regular direct services. For that year TTNQ expenditure almost tripled before dropping back again the following year (Figure 5-12). By 1991, the end of the "development" stage, Japan had become the major international market. Japanese

Table 5-2: Summary of Cairns Region's Compliance with Butler's (1980) "Involvement" Stage Criteria

	Butler's (1980) Criteria	**Compliance (Yes/No)**	**If "Yes", when?**
1	Visitor numbers increase and start to assume regularity	Yes	From early 1920s
2	Limited involvement in tourism by locals	Yes	From early 1920s
3	Contact between visitors and locals is high.	Assume "Yes"	During this stage.
4	Some advertising of services to attract tourists	Yes	From 1912
5	Initial market area for visitors can be defined	Yes	From 1912
6	Pattern of seasonal visitation starts to appear	Yes	From 1920s
7	Organisation of tourist travel arrangements	Yes	From 1912
8	Pressure on government to provide tourism infrastructure eg transport and local amenities	Yes	Particularly in the early 1980s (eg. airport)

companies, led by Daikyo, had invested heavily in tourism-related infrastructure in the study area, and along with TTNQ and some of the major tourism operators such as Great Adventures[1], commenced major advertising campaigns in that country.

5.5.2 Natural & Cultural Attractions Marketed, Supplemented by Human-made Facilities

The natural and cultural attractions marketed included the Great Barrier Reef, rainforest, wildlife and Aboriginal culture. As Butler (1990:8) predicted, human-made facilities supplement natural attractions. Examples of such facilities included additional floating facilities and boats for reef viewing; retreats, markets, tours to, through and over, the rainforest; wildlife theme parks and the Tjapukai Aboriginal culture experience. Most of these facilities were introduced during the "development" stage, but there was some overlap into the "consolidation" and "stagnation" stages (see Figure 5-15).

5.5.3 Local Involvement and Control of Tourism Declines

Indicators of external control considered here include the place of residence of the owners of the businesses, the region from which the manager was hired, and the city and country where the tourism bookings originated. The latter is particularly important, because tour operators or travel agents have the power to redirect the business elsewhere should the area be perceived as being out of fashion or not as desirable as alternative destinations.

The newspaper search revealed that most of the starts and announcements of major projects in the study region occurred between 1981 and 1995 with a peak around 1986, two years after the Cairns International Airport was opened (see Figures 5-15 and 5-16). A period of rapid growth in the number of bed spaces available in the region occurred about two years after the peak in major project starts

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[1] Great Adventures was later taken over by Daikyo.

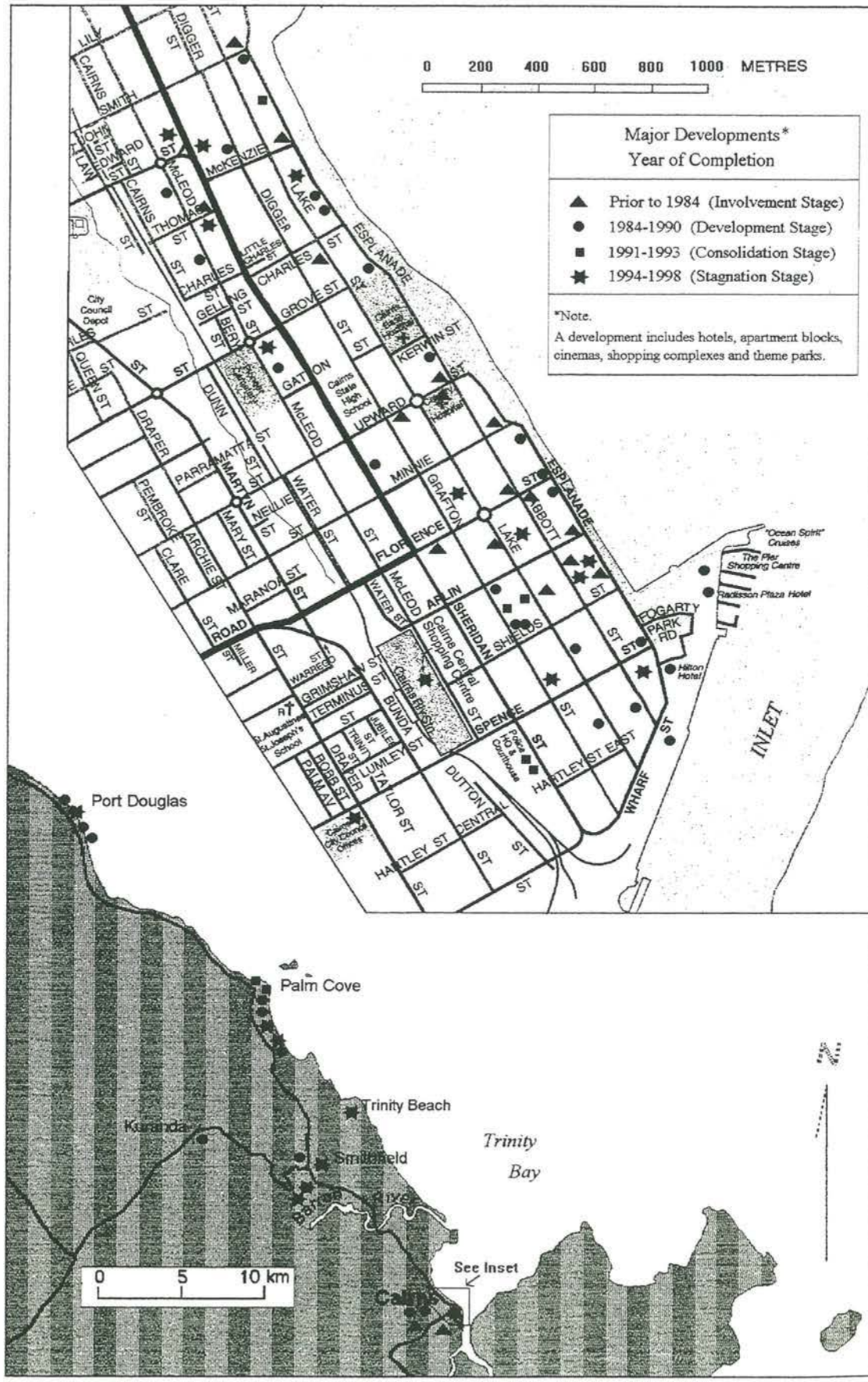


Figure 5-15 Map of Cairns Area Showing Completion Year of Major Developments.
Source: Building Department, Cairns City Council. 2000.

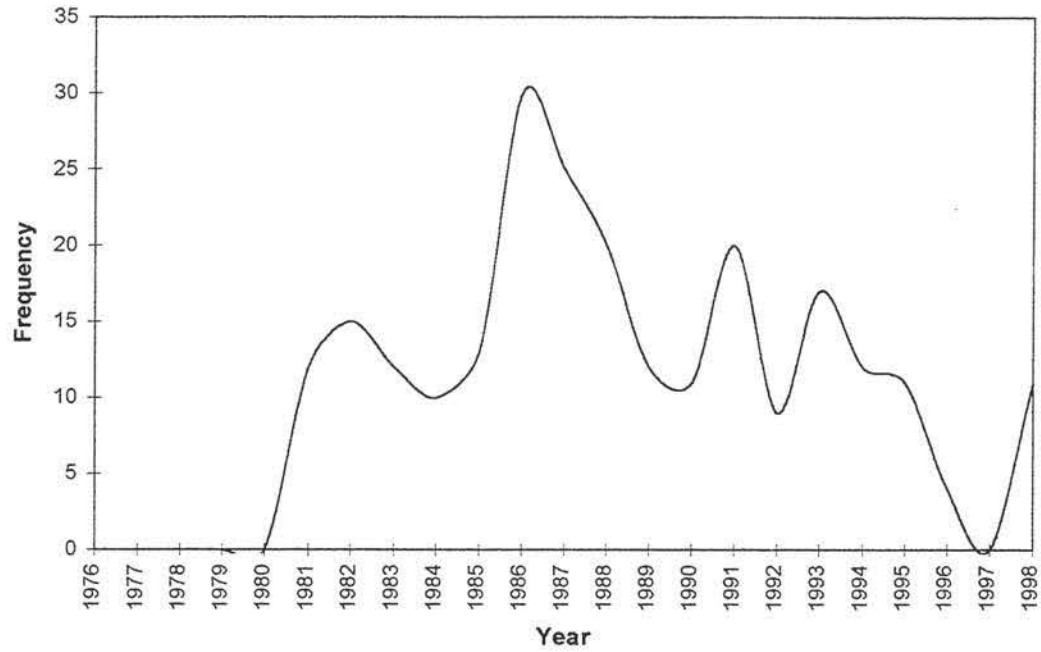


Figure 5-16: Major Projects, Starts and Announcements; *Cairns Post* Letters-to-the-Editor and Articles.
Source: *Cairns Post* newspaper search 1976 - 1998

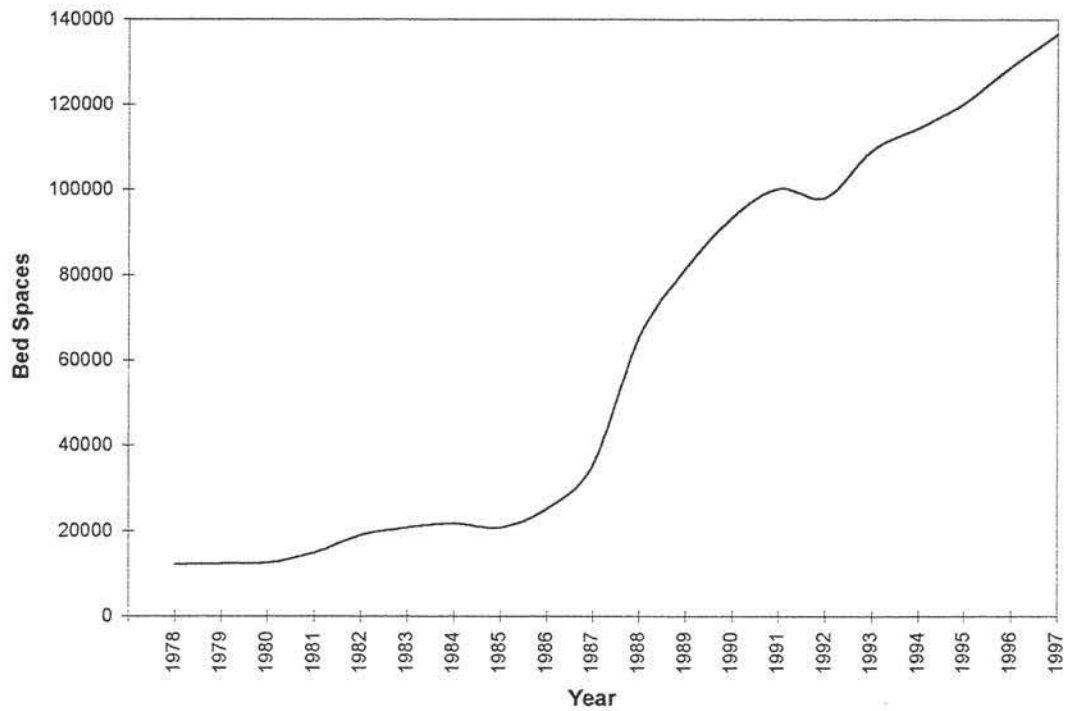


Figure 5-17: Annual Number of Available Bed Spaces Cairns, Douglas, Mareeba and Atherton LGAs
Source: Calculated from ABS Cat. No. 8635.3.40.001.

and announcements indicating a two-year lag between the two data sets (Figure 5-17). The timing of the peak in development activity appears to confirm the view that the opening of the airport was the catalyst for the rapid tourism growth in the region, much of which was financed from overseas. A large proportion of foreign investment in the region came from the Japanese who started buying land and businesses in the early 1980s (Forsyth and Dwyer 1990). Such was the concern within the local community that a society called "Australian Citizens Against Foreign Ownership" was formed. On Saturday, 25th February 1989, the Channel Nine Network conducted a "60 Minutes open forum" in Cairns on the topic. The nationally televised program was conducted with Japanese investment consultant, Dr Bungo Ishizake of EIE Pty Ltd, responding to mostly hostile questions, from the audience and from the interviewer, Richard Carleton. Concerns expressed during the program ranged from the fear of a Japanese desire to colonise Australia to the need for Australians to take a stand and decide their own future. The inflationary effect on the affordability of land and houses for the locals was also discussed, an argument not new to the region's populace (*Cairns Post*. 7 May 1987:1). Mr Ishizake said that five percent of all Japanese foreign investment was finding its way to Australia and, according to another source, more than half of that ($6,500 million) was being invested in Tropical North Queensland (*Cairns Post*. 27 February 1989:1; 27 March 1989:13).

Public sentiment regarding Japanese investment was such that the head of the Australian Citizens Against Foreign Investment, Ms Zita Pobucky of Cairns, reported receiving several death threats (*Cairns Post*. 11 July 1989:3). Strong views for and against foreign investment were expressed by numerous public figures (*Cairns Post*. 28 September 1987:1). In 1995, during the "stagnation" stage, the Foreign Investment Review Board made a secret trip to the region to investigate the number of foreign owned properties laying vacant. The inquiry was in response to local accusations that overseas interests were "deliberately land banking" (*Cairns Post*. 28 April 1995:1). No action, however, resulted from the inquiry. At the same time, foreign investment was also being directed into businesses as well as land.

Table 5-3 shows the results of Question 8.1 of the questionnaire, which refers to the geographical location of the business owners. Figure 5-18 is a graph of all local versus all outside ownership and it clearly shows a long-term decline in the percentage of locally-owned businesses and a long-term increase in the percentage of outside ownership. This trend is consistent with Butler's (1980:8) theory for the "development" stage.

Table 5-4 shows the results of Question 8.2 of the questionnaire which relates to sources of management, the results of which are strikingly similar to the ownership trends. Figure 5-19 confirms this point in relation to locally sourced, versus outside sourced, managers. The proportion of local managers declining significantly over the whole of the "development" stage (1984-1991).

The results of Question 8.9 of the questionnaire, relating to the place of origin of the bookings for tourism related businesses, are shown in Table 5-5 and Figure 5-20. The term "origin of bookings" refers to location of the agent who made the booking for the tourist. The results are the number of respondents who said that most of their bookings originated from local agents, or overseas agents, or Australian metropolitan agents. The answers to this question were not as straight forward as the ownership and management questions, discussed above, because 30% of respondents ticked multiple boxes, most of which involved overseas and interstate agents. Because of the difficulty in categorising these entries, the multiple entries have been treated as invalid in Table 5-5. Despite this complication, it is possible to recognise distinct trends. The proportion of local bookings fell markedly during the "development" stage but remained fairly stable after that. The proportion of bookings originating overseas has shown a steady increase over the period starting 1986, two years after the international airport was opened, through the "consolidation" (1991-1993) and "stagnation" (from 1993) stages until 1998. The percentage of bookings arising from interstate agents has moved in the opposite direction to overseas bookings indicating, that in percentage terms, one has gained at the expense of the other, although in actual quantity, interstate bookings did not start to fall until the last four years.

Table 5-3: Results of Question 8.1, Degree of Outside Ownership.

Year	all local ownership (frequency)	all local ownership (percent)	some outside ownership (frequency)	some outside ownership (percent)	majority outside ownership (frequency)	majority outside ownership (percent)	all outside ownership (frequency)	all outside ownership (percent)	Total responses
1976	31	81.6	2	5.3	2	5.3	3	7.9	38
1977	33	82.5	2	5.0	3	5.0	4	7.5	42
1978	35	83.3	2	4.8	2	4.8	3	7.1	42
1979	37	82.2	3	6.7	2	4.4	3	6.7	45
1980	40	80.0	3	6.0	2	4.0	5	10.0	50
1981	38	74.5	6	11.8	2	3.9	5	9.8	51
1982	41	71.9	6	10.5	3	5.3	7	12.3	57
1983	42	67.7	8	12.9	4	6.5	8	12.9	62
1984	46	69.7	7	10.6	5	7.6	8	12.1	66
1985	51	68.0	5	6.7	8	10.7	11	14.7	75
1986	53	65.4	8	9.9	7	8.6	13	16.0	81
1987	61	64.2	7	7.4	10	10.5	17	17.9	95
1988	67	61.5	9	8.3	12	11.0	21	19.3	109
1989	73	60.8	10	8.3	13	10.4	24	20.0	120
1990	78	58.6	15	11.3	13	9.8	27	20.3	133
1991	79	56.8	17	12.2	15	10.8	28	20.1	139
1992	81	55.9	16	11.0	17	11.7	31	21.4	145
1993	84	55.3	21	13.8	15	9.9	32	21.1	152
1994	89	55.6	20	12.5	20	12.5	31	19.4	160
1995	93	55.4	20	11.9	22	13.1	33	19.6	168
1996	101	56.3	23	12.9	20	11.2	34	19.1	178
1997	105	57.1	21	11.4	19	10.3	39	21.2	184
1998	108	57.8	22	11.8	18	9.6	39	20.9	187

Source: Ted Berry, 1999, Cairns region Business Questionnaire

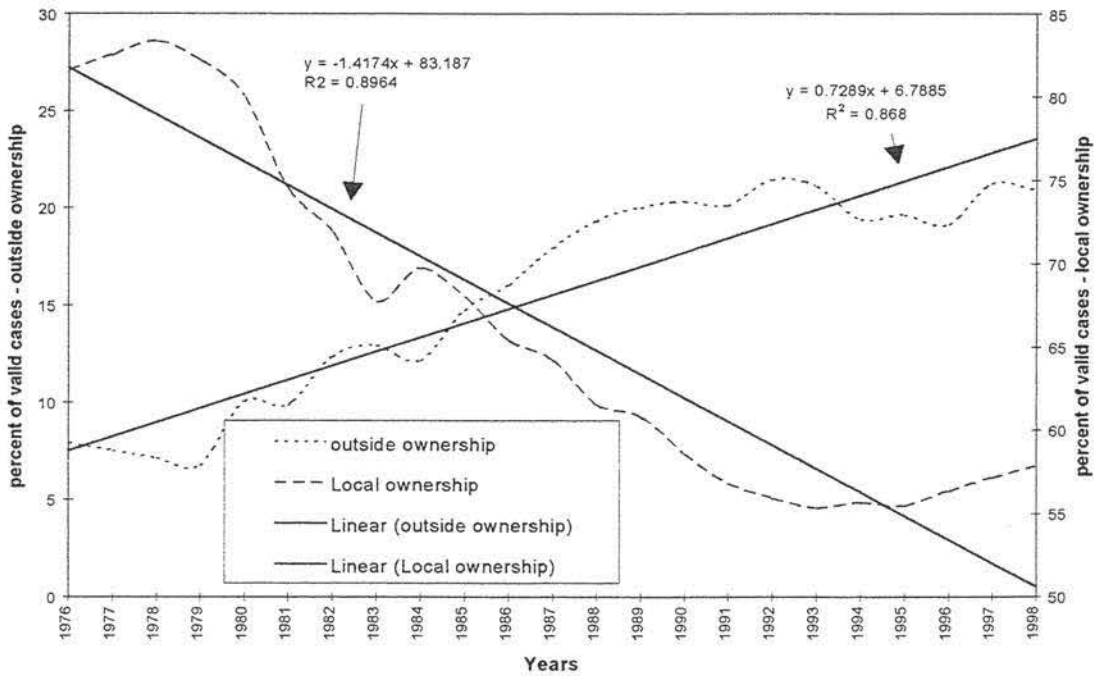


Figure 5-18: Response to Question 8.1 - Local/Outside Ownership of Tourism Resources (Derived from Table 5-3).

Source: Table 5-3 above.

Table 5-4: Results of Question 8.2 of the Business Questionnaire, Degree of Outside Management

Year	All local mangmnt (frequency)	All local mangmnt (percent)	Some outside mangmnt (frequency)	Some outside mangmnt (percent)	Maiority outside mangmnt (frequency)	Maiority outside mangmnt (percent)	All mangmnt outside (frequency)	All mangmnt outside (percent)	Total responses
1976	27	71.1	5	13.2	4	10.5	2	5.3	38
1977	27	71.1	5	13.2	4	10.5	2	5.3	38
1978	28	68.3	7	17.1	4	9.8	2	4.9	41
1979	32	71.1	7	15.6	4	8.9	2	4.4	45
1980	35	68.6	7	13.7	7	13.7	2	3.9	51
1981	36	67.9	8	15.1	7	13.2	2	3.8	53
1982	37	63.8	9	15.5	9	15.5	3	5.2	58
1983	40	64.5	7	11.3	10	16.1	5	8.1	62
1984	44	66.7	7	10.6	10	15.2	5	7.6	66
1985	53	69.7	7	9.2	10	13.2	6	7.9	76
1986	55	67.9	7	8.6	13	16.0	6	7.4	81
1987	67	69.8	7	7.3	14	14.6	8	8.3	96
1988	72	66.7	12	11.1	15	13.9	9	8.3	108
1989	79	65.8	16	13.3	15	12.5	10	8.3	120
1990	86	65.6	16	12.2	18	13.7	11	8.4	131
1991	88	64.2	17	12.4	21	15.3	11	8.0	137
1992	92	64.8	17	12.0	21	14.8	12	8.5	142
1993	100	64.9	22	14.3	20	13.0	12	7.8	154
1994	98	61.3	28	17.5	20	12.5	14	8.8	160
1995	105	61.0	32	18.6	19	11.0	16	9.3	172
1996	117	63.9	31	16.9	17	9.3	18	9.8	183
1997	121	63.7	31	16.3	17	8.9	21	11.1	190
1998	128	66.3	28	14.5	17	8.8	20	10.4	193

Source: Ted Berry, 1999, Cairns region Business Questionnaire

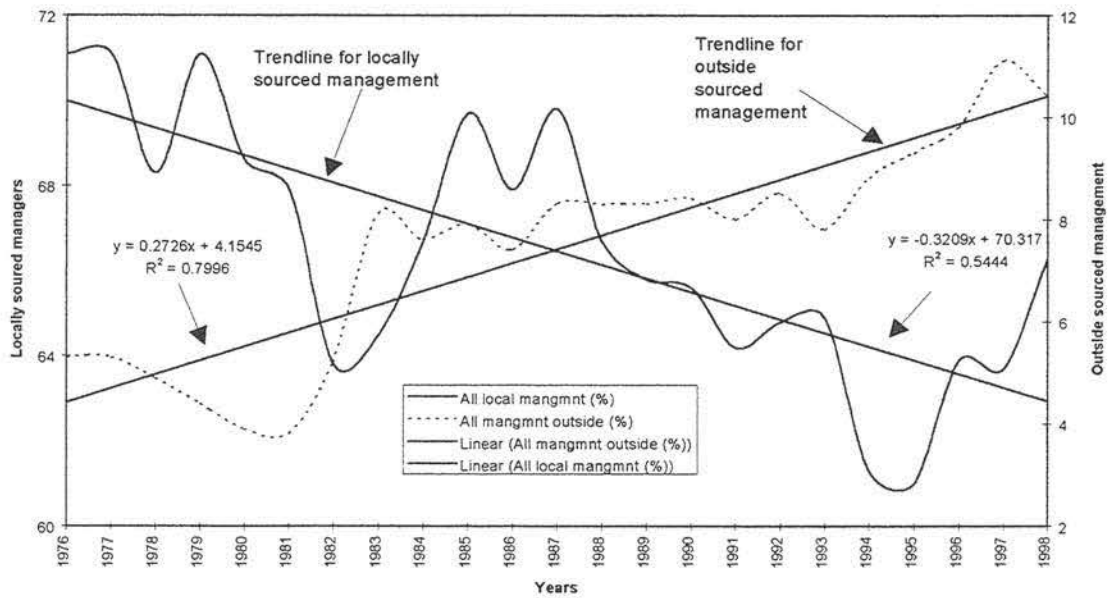


Figure 5-19: Results of Question 8.2, Local Versus Outside Sourced Management of Tourism Resources.

Source: Table 5-4 above.

Table 5-5 Results of Question 8.9 of the Business Questionnaire - Origin of Bookings.

Year	mostly local (frequency)	mostly local (percent)	mostly interstate (frequency)	mostly interstate (percent)	mostly overseas- (frequency)	mostly overseas (percent)	Invalid (frequency)	Invalid (percent)	Total frequency
1976	7	38.9	7	38.9	1	5.6	3	16.7	18
1977	7	38.9	7	38.9	1	5.6	3	16.7	18
1978	8	42.1	7	36.8	1	5.3	3	15.8	19
1979	10	47.6	7	33.3	1	4.8	3	14.3	21
1980	10	41.7	9	37.5	1	4.2	4	16.7	24
1981	9	34.6	12	46.2	1	3.8	4	15.3	26
1982	7	26.9	14	53.8	1	3.8	4	15.3	26
1983	6	21.4	16	57.1	1	3.6	5	17.9	28
1984	7	24.1	16	55.2	1	3.4	5	17.2	29
1985	11	28.9	21	55.3	1	2.6	5	13.1	38
1986	11	28.2	19	48.7	4	10.3	5	12.9	39
1987	13	25.5	23	45.1	6	11.8	9	17.7	51
1988	16	25.4	26	41.3	9	14.3	12	19.0	63
1989	13	19.4	28	41.8	9	13.4	17	25.4	67
1990	17	21.5	26	32.9	16	20.3	20	25.3	79
1991	18	20.7	28	32.2	17	19.5	24	27.4	87
1992	19	20.9	32	35.2	17	18.7	23	25.3	91
1993	19	19.2	34	34.3	19	19.2	27	27.3	99
1994	23	20.7	35	31.5	23	20.7	30	27.0	111
1995	21	17.9	35	29.9	26	22.2	35	29.9	117
1996	23	18.0	33	25.8	31	24.2	41	32.1	128
1997	26	19.4	34	25.4	33	24.5	41	30.6	134
1998	27	19.9	34	25.0	34	25.0	41	30.1	136

Source: Ted Berry, 1999, Cairns region Business Questionnaire

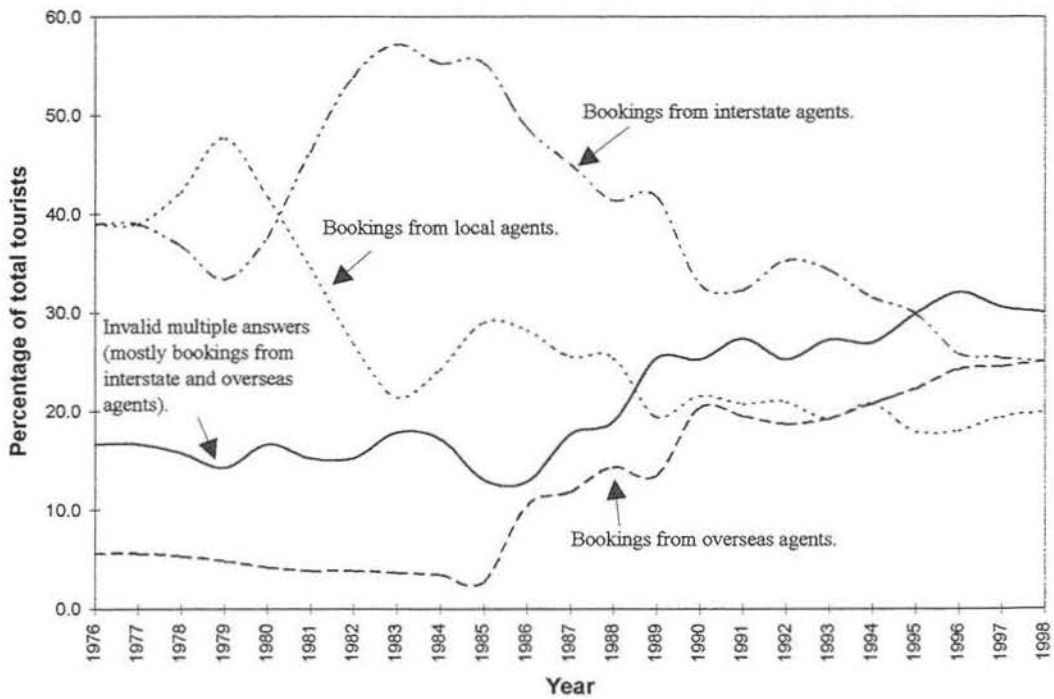


Figure 5-20: Results of Question 8.9 of the Business Questionnaire - Origin of Bookings.

Source: Table 5-5 above.

Conclusions to be drawn from the above are that the region has, and continues to receive, an increasing number of its bookings from overseas, and less from the domestic market. The management and ownership data discussed above also shows a significant loss of local control up to 1994, half way through the "consolidation" stage. After 1994, local management and ownership increases.

5.5.4 Changes in the Physical Appearance of the Study Region

In 1989 a James Cook University lecturer, Dr Glen Ross, conducted a survey asking an unspecified number of people if they felt that the natural environment ultimately suffered with the growth of tourism. Sixty-seven percent of those surveyed felt that the statement was true while twenty-five percent disagreed and eighty percent felt that the damage could be controlled through long-term government planning (*Cairns Post*. 27 May 1989:3).

The results of the newspaper search for this thesis were consistent with the survey mentioned above. A recurrent theme in the *Cairns Post* during the study period (1976-1998) was that tourism was being linked to environmental destruction. Figure 5-21 (d) shows that during the "development" stage there was a steady increase in letters to the editor and articles indicating that there is a threat to the environment over the period. Figure 5-21 (d) however, is partially balanced by (a) which indicates that over the period there were a small number of articles and letters voicing no concern about environmental issues. Graphs (b), (c) and (e) of the Figure do not have sufficient sample size to reach any conclusions.

Figure 5-21 and the discussion above suggest that environmental problems associated with tourism were a major concern for the *Cairns Post* readership. Of nineteen major issues identified by the newspaper search, eleven were environmentally related. The figure shows that the environment has been an issue, not only during the "development" stage, but from 1980 until the end of the study period.

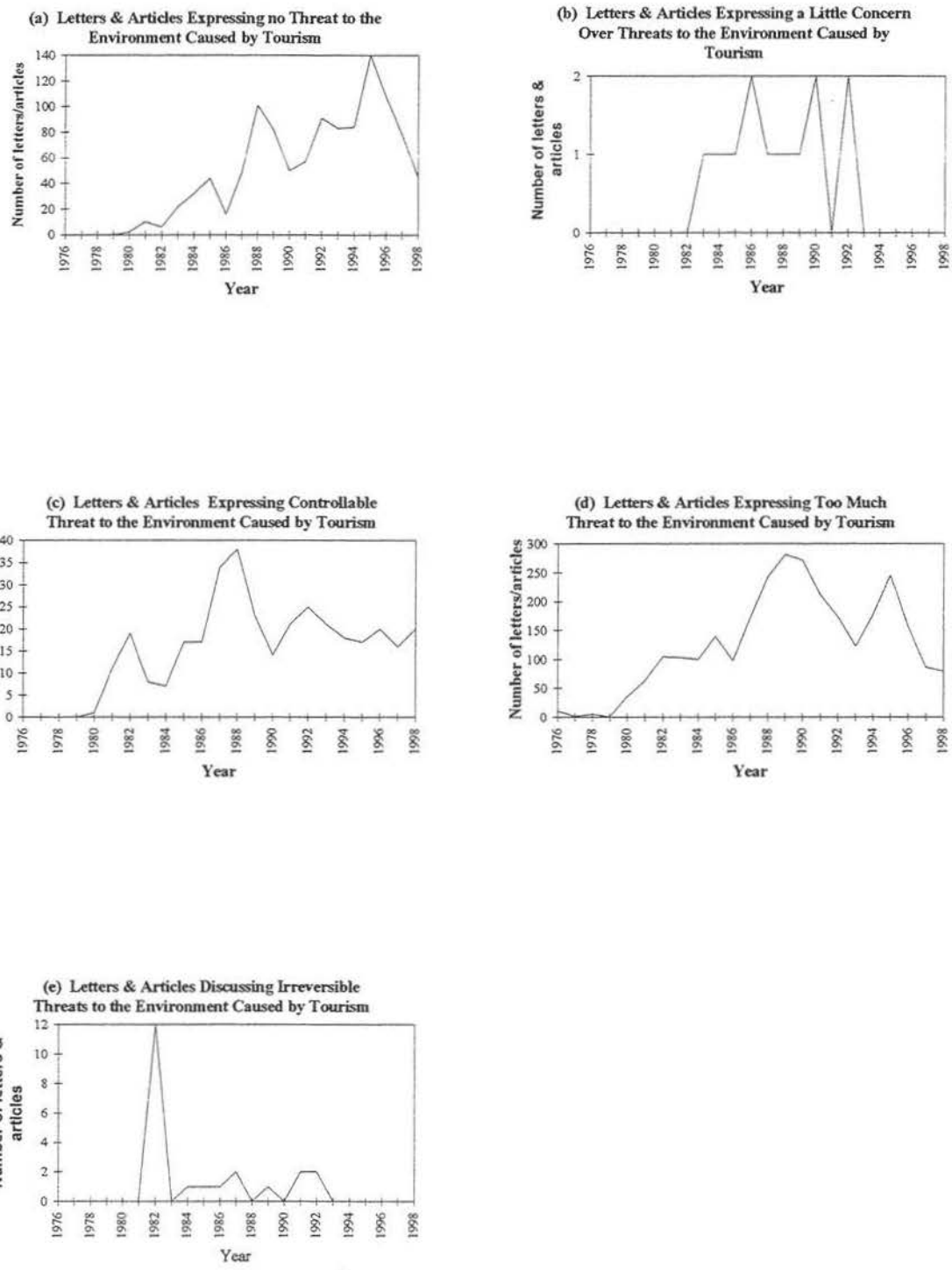


Figure 5-21: Environment Under Threat? - *Cairns Post* Newspaper Search

Although there were many additional environmental issues which occurred during other stages and were referred to in the *Cairns Post,* the following issues started during the "development" stage (1984-1991) and some continued through to the "stagnation" stage: the hill slopes; high rise buildings, particularly on the Cairns Esplanade; wet Tropics World Heritage Area; the Bloomfield Road; Trinity Point (mudflats development); and, Quaid Road.

The hill slopes issue refers to the hills surrounding Cairns city and suburbs and the perceived need for their protection from development, including housing (*Cairns Post.* 26 September 1994:1). Prime Minister Keating, on a visit to the region, described the Cairns/Mulgrave region's mountain backdrop as "a mindless knocking down [of trees] to accommodate brick veneer homes". A year prior to this comment he had accused the City of "heading the way of the Gold Coast" (*Cairns Post.* 21 July 1994:1). Presumably the latter comment related to concern regarding the environmental effects of high rise buildings in the CBD, particularly along the Esplanade, an on-going debate in the Cairns region for many years (*Cairns Post.* 9 January 1988:1; 2 September 1997:12; 10 September 1997:4).

The Wet Tropics World Heritage Area was established in 1988. Most of the newspaper publicity regarding this issue revolved around the vocational and economic dislocation suffered by certain groups, especially the timber workers in the Ravenshoe region, west of Cairns. Residents could no longer make a living by cutting and milling timber, the economic mainstay of the town. The 1984 controversy over the Bloomfield road was due to the fact that it ran through a National Park. The road was intended to allow more direct access to and from Bloomfield from the Cape Tribulation area north of Port Douglas. The road ran along the coast and it was feared that the run-off in the wet season would damage the Great Barrier Reef as well as the surrounding pristine rainforest. Numerous protests were conducted, resulting in many arrests (*Cairns Post.* 9 Sept 1987:7).

Cairns City does not have a sandy beach, it has mudflats which go out several hundred meters at low tide. The first proposal to develop the mudflats was in the 1920s and 1930s by the Cairns Harbour Board but the plan never eventuated (Cairns Harbour Board 1926; 1929; 1931; 1932). The Trinity Point project was a plan to utilise the mud flats for a complex of canals, marinas, parks, tourist accommodation and other facilities. The development was approved in principal by the Cairns City Council in letters to the developer in 17 October 1987 and 13 January, 1988. The project, which was to be fully funded by the developer, was cancelled in October 1989 by the incoming Cairns City Council led by Mayor Keith Goodwin. The winning party had campaigned against this and other projects in the lead-up to the election. The main argument against the project was that parts of the mud flats were a bird habitat (*Cairns Post.* 13 October 1989). Compensation amounting to A$4.5 million was paid to the developer in 1993 (*Cairns Post.* 29 January 1993). Ironically, in 2000, a much scaled-down version of the project (A$26 Million) has been started by the local government as part of the city beautification, but this time at tax-payer expense.

Mayor Keith Goodwin and ten other local government officials from the region, were killed in a commuter jet crash on 14th May, 1990, whilst returning from a local government conference (*Cairns Post.* 14 May 1990). Despite the recovery of the "black box" and a civil aviation investigation, the inquest into the deaths of those on board recorded that the cause of the crash was "indeterminate". The contents of the flight recorder were not permitted at the inquest (*Cairns Post.* 25 March 1991).

The Quaid Road was built in 1987 by a property developer, Mr George Quaid, between the coast north of Cairns and the Tablelands just north of Mareeba, to give access to a proposed residential development on the Tablelands. Mr Quaid claims to have obtained all the relevant permits to build the road but despite a need for an extra road up the range, it has not been allowed to open. The issue has remained unresolved since 1987 in the face of dangerous over-use of the nearby Kuranda range road (*Cairns Post.* 23 August 1996).

5.5.5 Regional and National Involvement in Planning and Provision of Facilities

Regional and national government involvement in planning and provision of facilities for the Cairns region started to occur during the "consolidation" stage and was still going on in the "stagnation" stage. Local government in the study area started to become heavily involved in the state government initiated FNQ2010 planning scheme in 1992 (FNQ Regional Planning Advisory Committee 1995). This wide ranging plan encompassed numerous topics including building and development zones, public transport, tourism facilities and housing affordability, and required input from local authorities and private citizens (Department of Family Services and Aboriginal and Islander Affairs and FNQ Human Services Sector. 1995). At the same time, municipalities were becoming more aware of their role in supporting and encouraging tourism through streetscape beautification and the provision of some facilities such as beach front amenities.

Indirectly, the Queensland Government became involved in planning and the provision of tourism facilities by providing government land for large developments. The Cairns Central shopping complex, for example, was built on former Queensland Government railway land. A large hotel complex was erected on the former Central School site, also state government land on the fringe of the CBD. Both developments occurred after minimal consultation with the local government. The Queensland State Government was also involved in the decision to build the casino and the Cairns Convention Centre.

5.5.6 Number of Visitors will Exceed Locals in Peak Periods.

The date of the last census was 7 August 1996. The census therefore occurred at the height of the tourists season. That night 24,400 visitors and 103,626 residents were counted at home in the LGA of Cairns. The corresponding figures for the LGAs of Douglas were 5,738 and 8,856; Mareeba 1,520 and 16,668; and, Atherton 992 and 9,259. Totals for the study region were 32,650 visitors and 130,142 residents or counted at home. (*CDATA96* Cat. No. 2721.0). The low percentage (25%) of visitors compared to residents is a result of the highly diversified nature of the regional

economy. Before the late 1970s and the rapid growth of tourism, the region's economy was driven mainly by sugar, bananas, meat (including bacon), dairy products, minerals (gold, silver, copper, lead, tin), marine products, ship building and repair and timber. With the exception of timber and some minerals such as tin, these industries are still strong in the area.

5.5.7 The Use of Imported Labour

The use of management staff from outside the study region during this stage has already been established in Section 5.5.3 above. Statistics calculated from the business questionnaire to support this criterion are provided in Table 5-4 and graphed in Figure 5-19.

5.5.8 Auxiliary Industries (eg. laundries) will Start to Appear

According to Butler (1980:8), this criterion requires no frequency or other details. All that is required is to confirm that such industries had started to appear during the "development" stage (1984-1991). The most suitable questionnaire industry category for this criterion was "tourism support services" although there were also a number of other categories such as "finance, legal, research" and "retail/wholesale" which, by virtue of their membership of TTNQ, most likely had a proportion of business generated by the tourism industry. The response to the questionnaire showed that "tourism support services" started to appear in 1985 while "finance, legal, research" and "retail/wholesale" were already present in 1984. All three categories showed increases throughout this stage.

5.5.9 Type of Visitor

According to TALC theory, the type of visitor will change towards Plog's (1991:64) "mid-centric" during the "development" stage (Butler 1980:8). The practicality, however, of retrospectively identifying the psychological profile of the average tourist over a twenty-year period is beyond the resources of this research. Allocentrics prefer individual travel arrangements and psychocentrics prefer the

familiar and like to travel with like-minded people. Cohen's (1972) work refers to the latter group as mass tourists. Mid-centrics are somewhere in between (Plog 1991:65). An alternative approach, therefore, is to examine the percentage of mass tourism. In general, as the TALC progresses towards the "stagnation" stage, the percentage of mass tourism increases (Ioannides 1992:724). Question 8.11 of the questionnaire asked respondents what the percentage of group travellers was over the study period. Figure 5-22 shows that during the "development" stage (1984-1991), the percentage of group travellers rose from 22% to almost 31%, which qualifies as being a mid-range and consistent with the theory for the "development" stage.

5.5.10 Summary - "Development" Stage

The "development" stage (1984-1991) was triggered by the opening of the international airport in 1984 and ended when growth in accommodation takings started to slow down (the point of inflection in Figure 5-1). During this stage the amount of tourist facilities increased rapidly, particularly accommodation stock (see Figure 5-17). Heavy advertising of the region also occurred along with an increase in outside ownership and control. Due to tourism activity there were major changes in the landscape, resulting in some local opposition. There was an increase in artificial attractions and regional authorities became involved in planning and the provision of tourism facilities. The dominating criterion was, however, rapid development which was predominantly funded and managed by people and organisations from outside the area. The timing of the rapid development largely coincides with the increase in advertising and increase in TTNQ expenditure in 1987 (ignoring the once-off increase in 1984 at the time of the opening of the airport shown in Figure 5-12).

Table 5-6 contains a summary of the degree of compliance with Butler's (1980:8) "development" stage criteria. Out of ten criteria, nine test positive and of the nine, seven occur in this stage. Of the remaining two, one occurred in the "involvement" stage and one in the "consolidate" stage. Inconsistencies between the study region and Butler's (1980) model included: "the number of visitors will exceed locals in peak periods" did not occur; "natural and cultural attractions marketed specifically and supplemented by man-made facilities" occurred in the

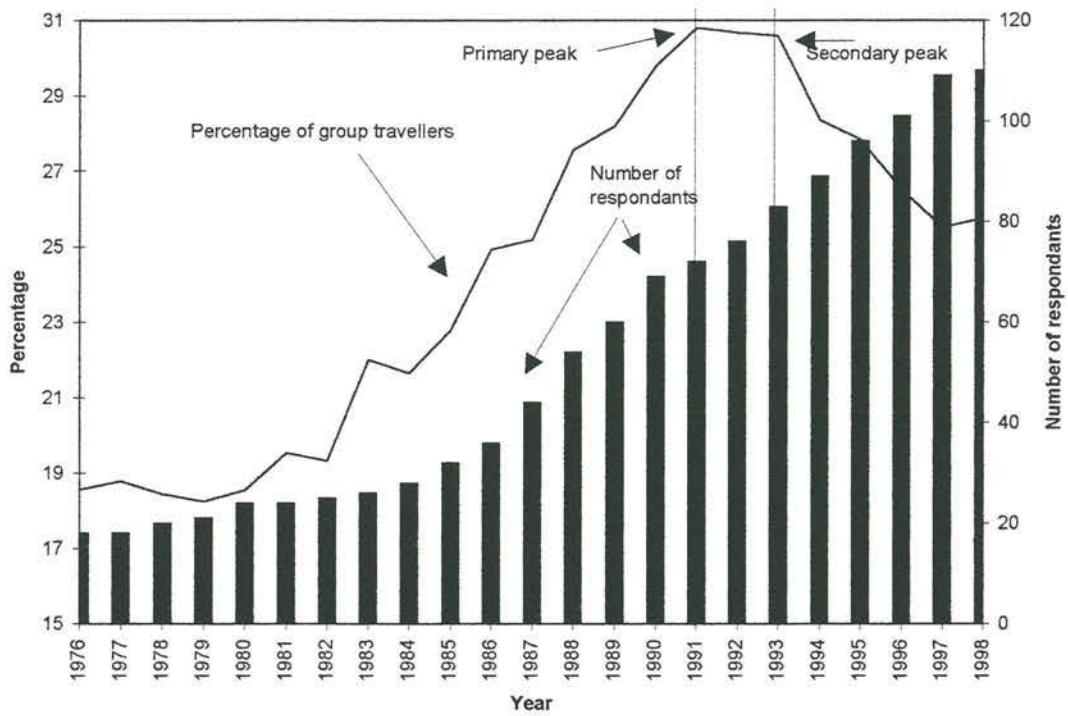


Figure 5-22: Results of Question 8.11 - Percentage of Group Travellers (All Business Categories)

Source: Ted Berry, 1999, Cairns Regional Questionnaire

Table 5-6: Summary of Cairns Region Compliance with Butler's (1980) "Development" Stage Criteria.

	Butler's (1980) Criteria	**Com-pliance (Yes/No)**	**If "Yes", when?**	**Different stage?**
1	Well-defined tourist market area and heavy advertising	Yes	From 1984	NA*
2	Local involvement and control of tourism declines	Yes	From 1984	NA
3	Old facilities (eg. visitor accommodation) superseded by larger, more elaborate, more up-to-date facilities provided by external organisations	Yes	From 1984	NA
4	Natural and cultural attractions marketed specifically, supplemented by man-made facilities	Yes	From 1920s	"Involvement" stage
5	Changes in the physical appearance	Yes	From 1984	NA
6	Regional and national involvement in planning and provision of facilities	Yes	From 1992	"Consolidation " stage
7	Number of visitors will exceed locals in peak periods	No	NA	NA
8	Imported labour will be used	Yes	From 1980	NA
9	Auxiliary industries, such as laundries, will start to appear	Yes	From 1985	NA
10	Type of visitor will change towards Plog's (1991:64) "mid-centric".	Yes	From 1984	NA

*NA = Not Applicable

"involvement" stage; and, "local government involvement in planning and the provision of facilities" over-lapped into the "consolidation" stage.

5.6 Testing for the "Consolidation" Stage (1991-1993)

Butler's (1980:8) first criteria for the "consolidation" stage is that the rate of increase in visitor numbers starts to decline. Total visitor numbers will exceed local residents and a major part of the region's economy will be tied to tourism. Marketing, advertising and promotion will be far reaching and efforts will be made to extend the tourist season. Major tourism franchises and chains will have a presence in the region, but there will not be many new additions during this stage. The large number of visitors and facilities provided for them can be expected to arouse some opposition and discontent among residents. There will be a well-defined recreational business district (RBD) and some older facilities will be regarded as second-rate and not desirable.

5.6.1 The Rate of Increase in Visitor Numbers Starts to Decline.

On Butler's "S" shaped curve, the point on the TALC curve where visitor numbers change from an increasing, to a declining, rate of growth, occurs at the point of inflection. In the case of the Cairns region, this point on the TALC curve (accommodation takings in this case) occurred in January 1991.

5.6.2 Visitors will Exceed Permanent Residents.

As stated in Section 5.5.6 above in relation to the "development" stage, with such a diversified regional economy, visitors are never likely to exceed residents. Inconsistencies such as this between the Cairns region and Butler's TALC model help to identify differences between tourism regions and in no way detract from the validity of the model.

5.6.3 A Major Part of the Economy is Tied to Tourism.

The ABS does not have the tourism industry as a separate classification for statistical purposes. Tourism, however, is part of the service sector which employed 78.5% of the workforce in the study region at the time of the 1991 census, also the start of the "consolidation" stage (*CDATA96* Cat. No. 2721.0). A more detailed explanation of the regional economy is provided in Chapter Three which leaves no doubt that by this stage tourism is a major part of the economy.

5.6.4 Advertising More Wide-reaching and Efforts to Extend Tourists Season.

Between 1993 and 1996, following the January 1991 slowdown in the growth rate of accommodation takings, the average percent of questionnaire respondents' budgets going to advertising and promotion increased by a total of 25%. In comparison, TTNQ expenditure did not significantly respond to the slowdown until 1995. Between 1994 and 1996, however, TTNQ expenditure doubled (see Figures 5-11 and 5-12). The fact that it took TTNQ three or four years to respond to the slow-down in growth rate of accommodation takings is perhaps the best argument for having an on-going TALC model to monitor key variables.

Efforts were made during this stage and the next to extend the market area to countries such as Korea, Taiwan, China and India resulting in more direct flights between Asia and Cairns. Growth in accommodation takings, however, continued to decline (Figure 5-1). While marketing efforts were concentrated on Asia, direct flights to the USA were progressively abandoned, and ceased altogether in 1994. Visitors from the USA were forced to come through Brisbane or Sydney or alternatively through Japan or Korea, both of which required stop-overs of up to a day. After the change, the trip to FNQ from the USA, the world's biggest and richest market, took up to two days and cost nearly double the direct fare. Meanwhile, during this stage local and State Governments were making efforts to extend the tourist season with plans for a casino and convention centre.

5.6.5 Major Franchises and Tourist Chains will be Represented.

Butler (1980:8) states that in the "consolidation" stage major franchises and tourist chains will be represented but few, if any, additions will be made. A number of these organisations were already represented by the beginning of this stage (1991) including Hilton, Daikyo, Holiday Inn, Matson Plaza, Novotel, Radisson, Rydges Plaza and Sheriton Mirage. The rate at which new tourism-related businesses commenced operation slowed down just after the start of the "consolidation" stage, as Figures 5-15 and 5-17 show in relation to major developments and bed spaces respectively.

5.6.6 Opposition & Discontent About Large Number of Tourists & Facilities.

Butler (1980:8) suggested that the large number of visitors and facilities provided for them could be expected to cause some opposition and discontent among residents. Feelings of this nature would be reflected in a negative attitude towards tourists. Question 8.5 of the questionnaire asked respondents their opinion of the attitude of the general public towards tourists. The newspaper search also looked for signs of this variable. The results of both the questionnaire and the newspaper search however, do not support Butler's criterion (for a discussion on this topic see Section 5.4.5 and Figures 5-13 and 5-14).

5.6.7 Recreational Business District.

This section refers to Butler's (1980:8) "consolidation" stage statement that "resort cities will have well-defined recreational business districts" (RBD). The *Cairn Post* of 13 April 1989 reported that "tourist shopping was taking over the CBD" and that conventional retailing would move out to the shopping malls, particularly the proposed $A400 million Coles-Myer Centre on the city railway station site on the fringe of the CBD. In addition, plans were made to remove some of the traditional CBD activities to the city fringe including the city hall, police station and newspaper printing facility. The transition from CBD to RBD continued through the "stagnation" stage and by October 1996, despite much opposition, most of these removals from the CBD had become a *fait accompli* (*Cairns Post*, 19th

October, 1996:9). Meanwhile, the amount of vacant CBD retail space was at historically high levels and that city retailers were experiencing "one of their grimmest periods for years" (*Cairns Post.* 10 October 1996:1). Despite efforts to revitalise the CBD through extensive publicity campaigns, it started to be referred to as exhibiting the so-called "doughnut effect", ie. everything around the outside and nothing in the middle (*Cairns Post.* 11 December 1996. "Christmas in the City Heart Supplement" :1; 23 January 1998:5). Figure 5-23 is a time series graph showing the number of letters-to-the-editor and articles in the *Cairns Post* referring to changes in the CBD or the formation of an RBD. From the figure most of the concern about the state of the CBD occurred after 1995.

5.6.8 Old, Poor or Second-rate Facilities

Question 5.1 of the questionnaire had a 90% response rate and is aimed at testing Butler's (1980:8) "consolidation" stage criterion that "depending on the length of time involved, old facilities may now be regarded as second rate and far from desirable". In cases where the respondent thought there were such facilities, he or she was asked to nominate the ones that came to mind. Cooper (1990:63) also suggested that the presence of "outdated, poorly maintained accommodation and amenities" represented a threat to cold water resort regions. It is reasonable to assume, however, that the same would apply to warm water resort regions. The questionnaire results were:

Yes (there were such facilities)	94 (43.1%)
No	102 (46.8%)
No answer	22 (10.1%)

Whilst this result does not show that a majority of respondents agree about the existence of poor facilities, it does show that a significant proportion of respondents (43.1%) believe such signs were present at the end of 1998. The "consolidation" stage, however, ends in 1993, but it is quite possible that there could have been worn out or second-rate facilities much earlier than 1998. The most frequently cited examples of such facilities are shown in Table 5-7. All, except for

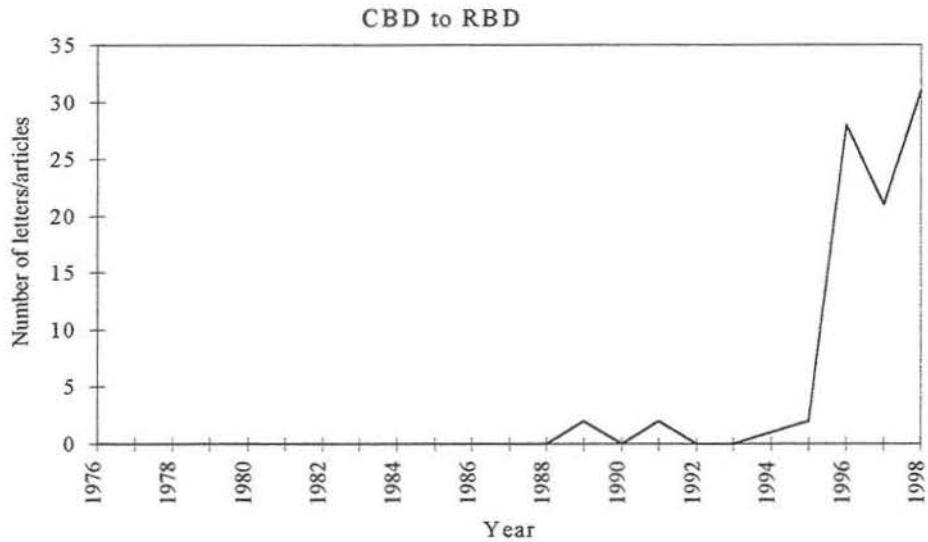


Figure 5-23: Letters-to-the-editor and Articles Referring to Evidence of Change in the Central Business District.

Source: The *Cairns Post.*

Table 5-7: Response to Question 5.1, Most Frequently Cited Examples of Worn-out or Out-of-date Facilities

Facility	Frequency	Percent
Some private motels & hotels	29	16.8
Cairns town centre dreary	22	12.7
Cairns Esplanade	19	11.0
Trinity Wharf, Cairns	18	10.4
Streetscape in general	17	9.8
Public toilets	12	6.9
Other	56	32.4
Total	173	100.0

Source: Ted Berry, 1999, Cairns Regional Questionnaire

the first category in the table (private motels and hotels), are the responsibility of either local government or a statutory government authority. For a local government which is serious about attracting tourists, the contents of the table point to work which needs to be done. Often, such work involves inexpensive maintenance. The need to clean and maintain public toilets in places frequented by tourists can make a big difference to the image presented to visitors.

The search of the *Cairns Post* revealed very few letters or articles on the subject of poor facilities, with perhaps the exception of 1997. Even then, the frequency was only eight and most of those referred to the poor state of the City Council maintained public toilets on the Cairns Esplanade.

5.6.9 Summary - "Consolidation" Stage

The "consolidation" stage started in January 1991, at the point of inflection on the accommodation takings curve and ended in 1993 with the identification of many of the "stagnation" stage criteria. Overall, there was a high degree of compliance with Butler's (1980) model, although there are some differences between the model and the study area (see Table 5-8). Of the nine criteria tested, seven tested positive, two of which occur in the "stagnation" stage. There is also one non-compliant criteria and one that is not applicable to the study area. The two "consolidation" stage criteria which occur in the "stagnation" stage serve to highlight the over-lapping or "fuzzy" concept of the demarcation between the stages.

5.7 Testing for the "Stagnation" Stage (1993-1998)

Butler's (1980) model states that during this stage, tourism numbers peak and the type of visitor changes to the organised mass tourist. Capacity levels are reached resulting in environmental, social and economic problems. The resort has a well established image, but is no longer fashionable and there is a reliance on repeat visitation. There is an increase in conventions and older property ownership turnover rates are high. New developments are still occurring, but on the periphery of the

Table 5-8: Summary of Relevance of Butler's (1980) Consolidation Stage Criteria to the Cairns Region

	Butler's (1980) Criteria	**Com-pliance (Y/N)**	**If "Yes", when?**	**Different stage?**
1	Rate of increase in tourism declines	Yes	January 1991	
2	Total number of tourists exceeds the number of locals	No		
3	Tourism is the major part of the economy	Yes	This stage	
4	Advertising more wide ranging	Yes	1993-1998	"stagnation"
5	Local efforts are made to extend the tourist season	Yes	This stage	
6	Major franchises and tourist chains will be represented but few, if any, additions will be made	Yes	This stage	
7	Local opposition and discontentment about large number of tourists and tourist facilities	No		
8	A recreational business district (RBD) has taken shape	Yes	This stage	
9	Some of the older, deteriorating facilities are second-rate	Yes	1993-1998	"stagnation" stage

original tourist area. Large numbers of imported attractions start to outnumber the natural and cultural attractions and local people consider visitors annoying.

5.7.1 Peak Numbers of Visitors Reached

The main point about the "stagnation" stage is that at sometime visitor numbers (accommodation takings in this research) will peak (Butler 1980:8). Figure 5-1 shows accommodation takings peaked in the study region in 1997. If the downward trend continues it is likely that the region's tourism industry will enter the "decline" stage within two or three years.

5.7.2 Capacity Levels Reached - Environmental Problems

During the "stagnation" stage Butler(1980:8) refers in general terms to capacity levels being reached with "attendant environmental, social, and economic problems". There are numerous capacity levels which can be looked at given time and resources. Some involve scientific techniques such as environmental capacity levels, which are specific to each tourist site. Another example of a capacity indicator is the ability of the local people to absorb more outsiders, which is reflected in their attitude towards visitors. The essential point of Butler's statement, however, is not that capacity levels are reached, but that problems will result. This section looks at environmental problems.

The natural and cultural attractions of a tourism region, often the reason the region became popular in the first place, can become in danger of being destroyed by over-development or over-use. Accordingly, Question 2.1 of the questionnaire asked if the respondent thought that the "original physical attraction of the region was threatened in any way?". The question, therefore, represents the opinion of respondents at the time the questionnaire was answered.

By far the majority of respondents (86.5%) believed that to some degree, the "original physical attraction" was under threat (Table 5-9). However, only 2.8% thought that the threat was "irreversible", and 12.1% thought it was "too much",

while 43.7% thought it was a "controllable threat". When considering these results, allowance should be made for the subjective nature of the question. Some respondents may have been thinking about the natural environment, while others may have been considering the city skyline and the intrusion caused by the new high rise buildings. Significantly, the majority of respondents consider that the environment is to some extent threatened, even though almost 85% think that it is controllable.

Table 5-9: Results of Question 2.1 of the Business Questionnaire - Is the Original Physical Attraction of the Region Threatened in Any Way?

	Frequency	**Percent**
Not at all	29	13.5
A little	60	27.9
Controllable threat	94	43.7
Too much	26	12.1
Irreversible threat	6	2.8
Invalid responses	3	
Totals	218	100.0

Source: Ted Berry, 1999, Cairns Region Business Questionnaire

The newspaper search indicated that the peak in environmentally related letters-to-the-editor and articles occurred during the "development" stage in 1989 (Figure 5-21 above). There was, however, another minor peak in 1995, but between 1995 and 1998, interest in environmental issues as reflected in the *Cairns Post* declined. There is, however, always the possibility of bias in what letters and articles the newspaper chooses to publish.

There were a number of major environmental issues during the "stagnation" stage, the first of which was the Tully-Millstream Hydro-electric power project on the Tablelands west of Cairns. The scheme has been on and off the drawing boards since the early 1980s. It was finally rejected by the State Government in 1996 on the

grounds that it would require flooding 1,491 hectares within the World Heritage Wet Tropics area. Concern over future power supply options for the region had been allayed with the approval of two new conventional power stations near Townsville (*Cairns Post.* 12 November 1996:1).

South of Cardwell, two hundred kilometres south of Cairns is the controversial Port Hinchinbrook resort development. Although outside the study region, the project is mentioned here because most resort patrons would have entered the region through the Cairns airport and so impacted on the region. The land in question borders the Great Barrier Reef World Heritage Area and approvals for the development were granted in the late 1980s. The developer ran out of money after excavating an artificial harbour, boat ramps and canals. The area was left without vegetation of any kind on the bare earth and gradually the harbour and canals started to silt up and the rest of the land suffered serious soil erosion.

In the early 1990s Mr Keith Williams, a well-known tourism entrepreneur, purchased what was by then, a wasteland of badly eroded bare earth and mud. He obtained the relevant permits from local, State and Federal governments and started work to stabilise the land. The $A100 million project was then on and off a number of times following injunctions in favour of environmentalist organisations, appeals and counter appeals. Finally, on the 27 August 1993, work was halted by the Federal minister using executive powers to override the decisions made by the various public service authorities. The intervention followed a personal appeal from the environmental lobby. Work did started again on 10 July 1996, following a change of government in Canberra (*Cairns Post.* 23 August 1996:1).

The project was scaled down to little more than an expensive housing estate and public boat ramp and club house. However, the whole exercise has sent a clear message to people or organisations considering investing in the area. Mr Williams reported that he was aware of at least $A2 billion worth of projects which had been

cancelled as a result of his company's experiences (*Cairns Post.* 26 February 1997:1).

Skyrail was another contentious environmental issue. This cableway runs over the Wet Tropics World Heritage Area between Smithfield, a northern suburb of Cairns, and Kuranda on the Atherton Tablelands. The go-ahead was given for this project on 10 August 1992 and it was operational on 1 September 1995. Despite the fact that there were very strict building requirements, there were many protests resulting in arrests (*Cairns Post.* 13 October 1994:3). In the event, very little environmental damage occurred during construction, mainly because of the use of helicopters to lift the pylons into place. No roads or tracks were put through the rainforest. The cableway runs just above tree top level to give passengers an appreciation of the rainforest.

East Trinity, another contentious issue, is a proposed satellite city development just to the south of Cairns, across Trinity Inlet, worth about $A1.5 billion over twenty-five years. The project, designed to house about twenty-two thousand people, was rejected in 1996 by the Cairns City Council mainly on environmental grounds (*Cairns Post.* 12 November 1996:1). The proposed area is mainly low lying cane-growing land and would require a bridge across the Inlet which the State government has refused to fund. In 2000 the Queensland State Government took action to halt any development of the area.

The Daintree region has long been controversial. The area is heavily used by tour companies and whilst they have a vested interest in the environment, there is an environmental cost associated with tourism in rainforest areas. In 1994, the Federal Government allocated $A11.6 million to a "rescue fund" so that remaining rainforest could be purchased for the national estate. The money was conditional on a dollar for dollar subsidy from other sources so that in all more than $A23 million was provided by all levels of government (*Cairns Post.* 11 May 1994). More recently,

there has been considerable opposition on environmental grounds to the provision of overhead mains power to the region (*Cairns Post.* 18 January 1997).

5.7.3 Capacity Levels Reached - Social Problems

At least one social indicator, the crime rate, reached a peak between 1987 and 1989, but since then has been steadily improving (*Cairns Post.* 22 June 1989:6; CJC. 1996; CJC 1999). According to Queensland's 1987 submission to the Commonwealth Grants Commission, the Cairns region's crime rate per 10,000 population was the highest in the state (*Cairns Post.* 11 December 1987:1). Similar reports continued throughout 1988, 1989 and 1992 (Kelly 1993). In 1989, police compiled separate figures for tourism related crime and found that over half the value of all goods stolen came from hostels, motels, hotels and holiday units. The clean-up rate for this sort of crime was much lower than the average clean-up rate because of the number of itinerant tourists and the lack of security at some accommodation centres (*Cairns Post.* 22 June 1989:6). During the same year, a survey by Dr Glen Ross of JCU (cited above in relation to "development" stage changes in the physical environment) found that respondents felt the crime rate had increased, but that the money from tourism benefited the community (*Cairns Post.* 27 May 1989:3). Nine years later, however, crime in the region was amongst the lowest in the state with a twelve per cent drop in property crimes and a seven per cent drop in crimes against people in the previous twelve months alone (*Cairns Post.* 17 July 1998:1).

Other social indicators have already been discussed in Chapter Three. Unemployment, for example was better than the national average in 1986 and 1991 but by the 1996 census, the region lagged behind the nation. On the other hand, in the same year, labour force participation rates in Cairns local government area were higher than the national average (ABS 1997. Product No. 2721.0). Meanwhile, the high cost of housing resulting from the rapid growth in the mid-and-late 1980s and early 1990s, was causing financial hardship for average income earners (Urban Development Co-ordinator Unit 1994:19). By the mid-to-late 1990s, however,

housing supply had caught up with population growth and dwellings were no longer scarce or expensive (see Chapter Three). There are many other social indicators, such as income and gender equity, and whilst they help to give an overall picture of the region, they do not lend weight either way to the current discussion (see Chapter Two). The social indicators considered in this section reached a peak in the late 1980s and 1990s, during the late "development", "consolidation" and early "stagnation" stages. The premature appearance of criteria such as social problems can be used as leading indicators of the "stagnation" stage.

5.7.4 Capacity Levels Reached - Economic Problems

The questionnaire uses three separate methods to assess economic problems. First, the degree of tightness of organisational budgeting is tested, followed by profit as a percentage of capital invested and profit margin per client. The picture is complicated slightly because the first variable refers to the time when the response was made (between October 1998 and January 1999) and the second two are time series responses.

Perhaps the most significant evidence of economic problems in business is the response to Question 4.1, which shows that over 70% of respondents stated that their organisation's budgeting was getting tighter (see Table 5-10). As tighter budgeting is usually associated with strained economic conditions, in the eyes of respondents, the immediate economic outlook would appear to be gloomy.

Question 8.7 of the questionnaire is a time series question which refers to profit as a percentage of capital invested, and even though a large proportion of respondents elected to leave this question blank, there were enough to make a reasonable judgement. The response rate in the last two years of the series was about 57%, or 160 out of a possible 218. The results show that actual profit levels did not reveal much because of the large range, often between -40% and over 100% of invested capital (see Table 5-11). A more meaningful statistic, as an indicator of financial stress, is the percentage of valid responses who registered zero or negative

profits and a plot of this data is shown in Figure 5-24. The data has been divided into two sections, before and after 1981, and linear trend lines have been plotted to give a visual impression of the trends in those two periods. From the questionnaire responses alone, the period between 1976 and 1981, appeared to be a reasonably healthy period for business, although it is a little hard to tell because of the small number of respondents operating in that period. From 1981 to 1998, there were large fluctuations caused by the Pilot's strike in 1989/90, the following domestic recession and the Asian economic crisis which commenced around 1997 (Norington 1990). These fluctuations make it difficult to establish a long-term trend, but even so it is safe to say that the trend is increasing over the period. In terms of Butler's model, the early period could represent the stages up to and including the "involvement" stages, where healthy profit expectations would start to arouse the interest of businesses from outside the region. However, the year 1981 seems a little early in the life-cycle for profit expectations to start declining, although in terms of financial opportunity, the region may have been seen as better than available alternatives. Perhaps, although there were increasing percentages of businesses with zero or negative profits, the alternatives were worse. Whatever the reason, increasing lack of profitability does not appear to have had any effect on the growth in the number of new businesses as can be seen by the right-hand scale in Figure 5-24.

Table 5-10: Results of Question 4.1 - Is Budgeting Getting Tighter?

	Frequency	**Percent**
Rapidly getting tighter:	46	21.1
Slowly getting tighter	108	49.5
No change	33	15.1
Slowly getting easier	23	10.6
Rapidly getting easier	2	0.9
Invalid response	6	2.8
Total	218	99.9*

Source: Ted Berry, 1999, Cairns region Business Questionnaire.

Table 5-11: Results of Question 8.7 of the Business Questionnaire, Profit as a Percentage of Capital Invested

	Frequency	Mean profit level	Minimum	Maximum	Percentage of respondents with zero or less profits	Standard Deviation
1976	17	14.118	-40	100	17.6	27.848
1977	18	15.5	-35	100	16.7	26.567
1978	22	17.955	-30	100	9.1	24.552
1979	25	17.24	-25	100	12.0	22.21
1980	27	17.63	-20	100	3.7	20.794
1981	29	17.966	-15	100	3.4	19.369
1982	32	16.125	-20	100	9.4	19.347
1983	36	14.306	-40	100	11.1	20.142
1984	38	14.368	-35	100	10.5	18.923
1985	47	14.277	-30	100	14.9	17.748
1986	50	15.24	-20	100	8.0	16.508
1987	62	13.887	-10	100	19.4	16.046
1988	71	14.507	-30	100	19.7	19.646
1989	81	13.506	-40	100	21.0	22.183
1990	95	14.326	-40	120	16.8	22.526
1991	102	14.941	-40	150	18.6	23.755
1992	107	16.43	-30	170	14.0	24.31
1993	117	17.65	-30	180	12.0	24.281
1994	129	17.736	-30	180	16.3	25.807
1995	139	15.928	-38	150	20.9	25.024
1996	153	15.314	-50	100	22.2	23.5
1997	159	15.314	-50	100	20.1	24.514
1998	160	16.663	-50	100	15.6	25.489

Source: Ted Berry, 1999, Cairns region Business Questionnaire

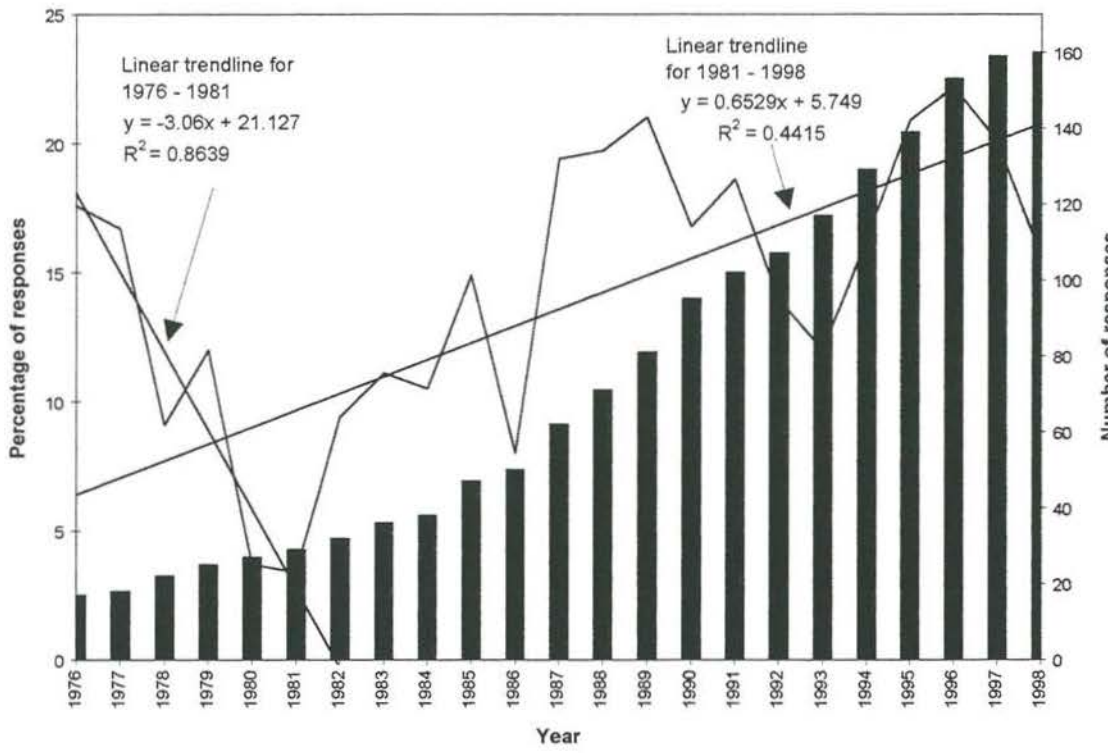


Figure 5-24: Results of Question 8.7, Percentage of Respondents Registering Zero Profits or Less

Source: Ted Berry, 1999, Cairns Region Business Questionnaire

Question 8.13 of the questionnaire is about profit margin per customer. As with Question 8.7, although response numbers were low due to the delicate nature of the question, enough information was obtained to form a reasonable judgement. Respondents were asked if their company's profit margin per client was "very high", "high", "medium/high", "medium", "medium/low", "low", "none" or "negative". The mean response was between "medium" and "medium/low". However what is of more significance than the actual mean level of profit per client is the direction of the trend over time. Figure 5-25 shows the direction clearly. In the earlier years of the cycle up to 1982, profit margins appeared to be reasonably healthy. After 1982 there was a decline, culminating in a low about the time of the disastrous Pilot's strike in 1989/90. A possible explanation is that as the volume of tourists increased, particularly after the international airport was opened in 1984, higher turnover was expected to make up for lower profit margins. After the Pilot's strike, margins picked up in 1991, but since then there has been an uninterrupted decline. These results should be viewed in conjunction with response numbers, which were as low as 24 in the early years and up to 166 in the final year.

In summarising the questionnaire responses to the three financially-oriented questions discussed above, the direction of the trend is of greater significance than absolute values. Both sets of time series data point to 1981 or 1982 as being the first point at which profitability stopped improving and started declining. Both sets of data again reinforce each other during the periods 1987 to 1989 and 1995 to 1997, which were particularly difficult periods in terms of profitability. The responses to the two time-series questions show that there is a high degree of consensus regarding the main directions and turning points of trends in profitability.

5.7.5 Well Established Image But no Longer Fashionable

Question 6.1 of the questionnaire refers to respondents' opinions as to the degree of fashionability of the resort at the current time. The question had a 97% response rate and the results, in terms of the percentage of valid responses, are shown in Table 5-12. Nearly 48% of respondents believed that the region is becoming less fashionable and only 28.3% believed that it is becoming more

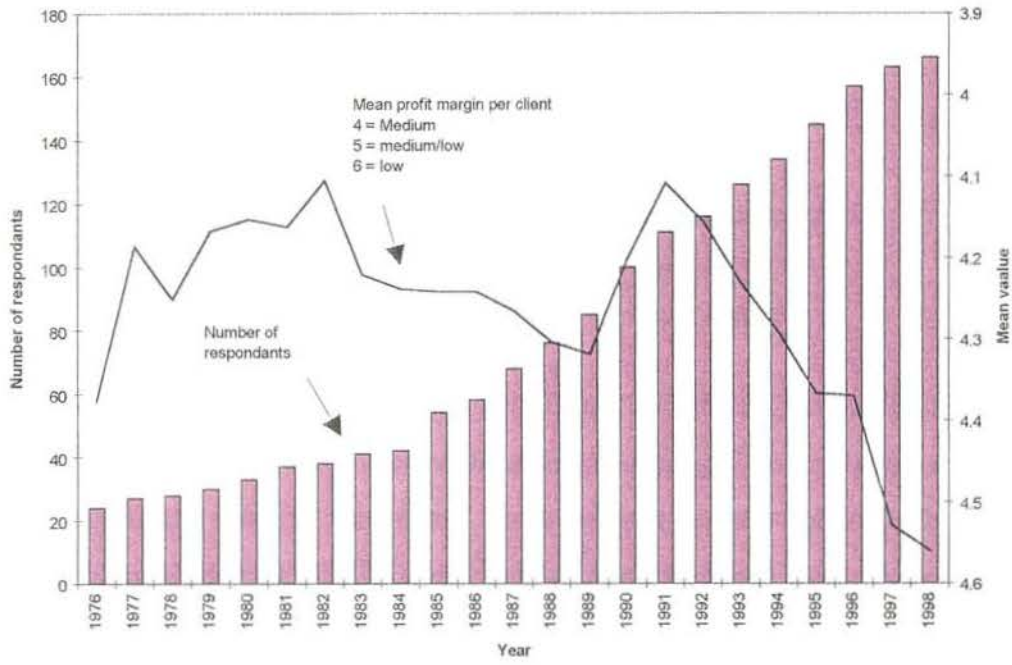


Figure 5-25: Response to Question 8.13 - Profit Margin per Customer/client
Source: Ted Berry, 1999, Cairns Region Business Questionnaire

Table 5-12: Results of Question 6.1, Fashionability of the Region

Response category	Frequency	Percent
Becoming much more fashionable	3	1.4
Slowly becoming more fashionable	57	26.9
Staying the same	50	23.6
Slowly becoming less fashionable	91	42.9
Becoming much less fashionable	11	5.2
Total	212	100.0

Source: Ted Berry, 1999, Cairns region Business Questionnaire

fashionable. This result is consistent with Butler's (1980:8) "stagnation" stage criteria that "the area will have a well established image but it will no longer be in fashion" (Butler 1980:8). This result, however, is at best the opinion of businesses which are members of TTNQ. A more appropriate approach would be to obtain the opinion of prospective tourists or agents located in different parts of the world, but logistics and costs preclude such methods. In 1996, however, there was a survey of a hundred North Queensland tourists, forty of whom returned negative opinions about what they found in the Far North. This survey came immediately after the release of a Japanese report expressing disappointment with the city (*Cairns Post.* 9 September 1996:44). The report also quoted an Australian Tourist Commission report quoting Japanese calls for the city to be scrapped as an international air hub (*Cairns Post.* September 9 1996:44). These reports would appear to reinforce the questionnaire results.

5.7.6 Heavy Reliance on Repeat Visitation, Conventions and Gambling.

Question 8.10 of the questionnaire asks, "If your business serves visitors, what is the percentage of first-time visitors over the relevant time period [1976-1998] handled by your business?". The results show that the percentage of first-time

visitors increased steadily until 1993 when it reached 67.5% and from then on there has been a levelling off or even a small decline (see Figure 5-26). Whilst this does not represent a "heavy reliance on repeat visitation", there is a move in that direction from 1993 onwards (Butler 1980:8). There is a probability that this trend would have been more pronounced had it not been for the completion of the new Cairns Convention Centre in 1996 and the formation of the "Convention and Incentives" department within the TTNQ in 1995. The opening of the Cairns Casino in 1995 would also help counter the trend towards reliance on repeat visitation. The appearance of these two establishments also conforms to Butler's statement about increased reliance on "conventions and other forms of traffic" (Butler 1980:8).

5.7.7 Surplus Bed Capacity Will be Available

Butler suggests that in the Stagnation stage there will be "surplus bed capacity" and "strenuous efforts will be needed to maintain the level of visitation" (Butler 1980:8). This criterion is addressed by Question 8.8 of the questionnaire and the results are shown in Figure 5-27. The figure shows that, apart from the period of the Pilot's Strike and the following recession in 1990-1991, occupation rates tended to increase until 1994, despite the steady increase in the number of businesses. For the last four years of the data series, however, there has been a steady decline in occupation rates. Whilst it would not be statistically correct to extrapolate the last four years into a long term trend, there is some validity in acknowledging that it could be a short-term trend. This point, combined with the increase in advertising, suggests that, according to this criteria, the region is in the "stagnation" stage from 1994.

Bed occupancy rates were selected as being a reasonably accurate indication of physical capacity levels in terms of the available accommodation resources. The percentages shown in Figure 5-28 appear to be a bit on the low side in that they rarely get above 50%. Bed occupancy rates, however, are likely to be much lower than room occupancy rates bearing in mind that rooms often have maximum sleeping for four people, but may be occupied by just one or two people. Bed occupancy rates were chosen because some categories such as Hostels, and Flats and Units, do not

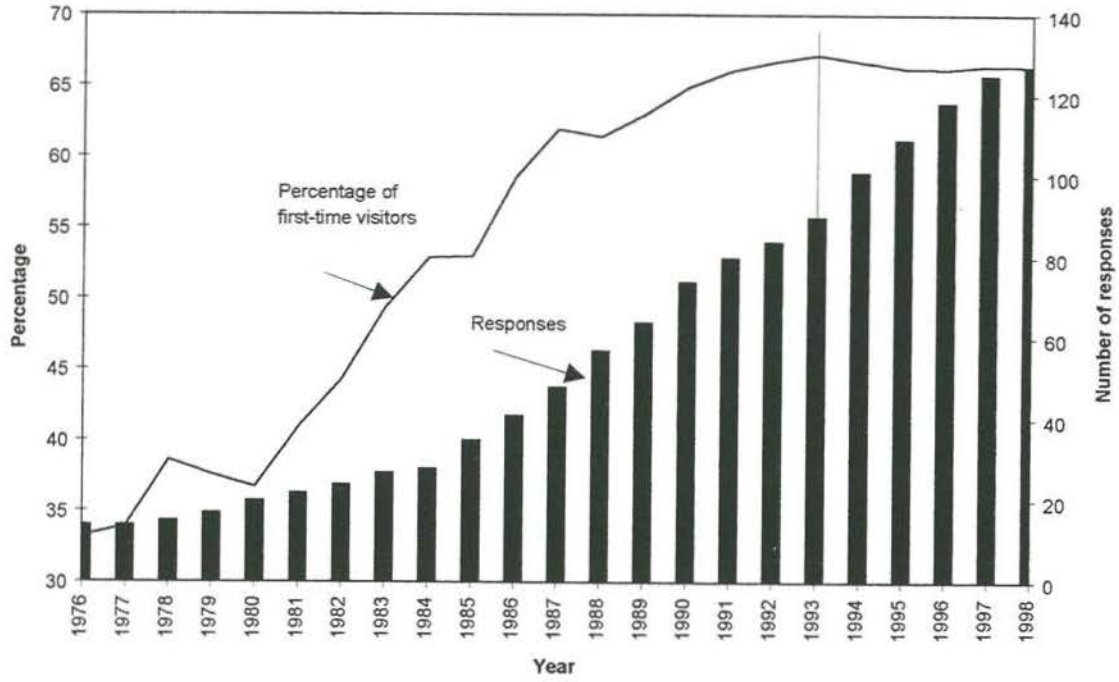


Figure 5-26: Results of Question 8.10 - Percentage of First-time Visitors
Source: Ted Berry, 1999, Cairns Regional Questionnaire

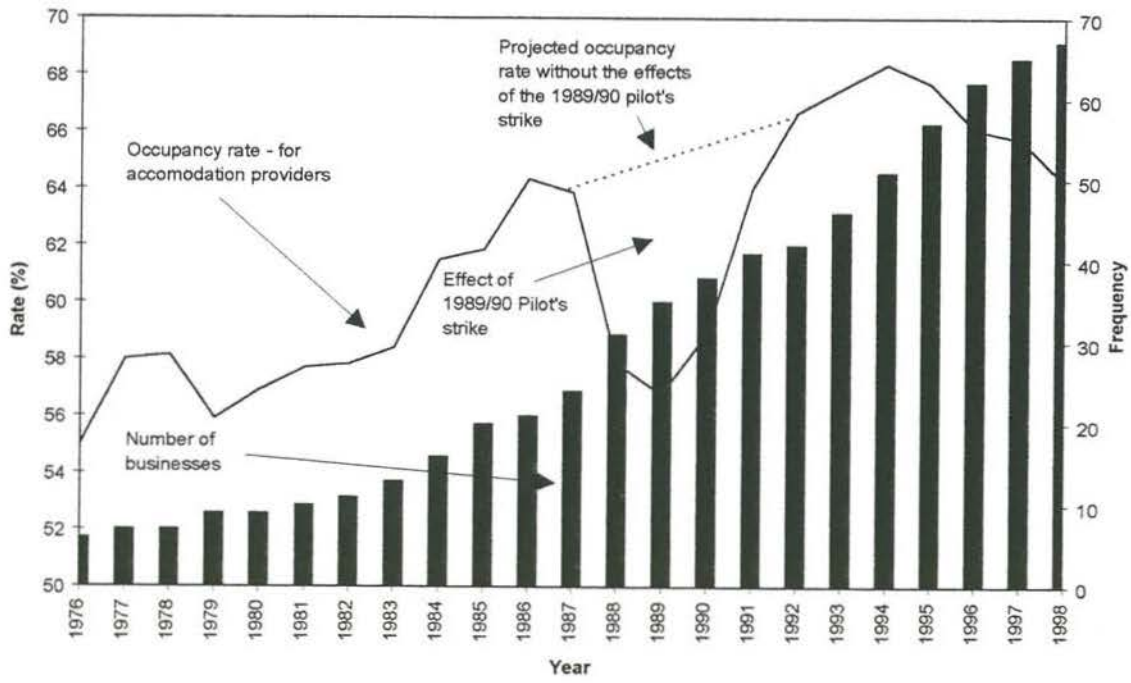


Figure 5-27: Results of Question 8.8 - Occupation Rates for Accommodation Providers.
Source: Ted Berry, 1999, Cairns Regional Questionnaire.

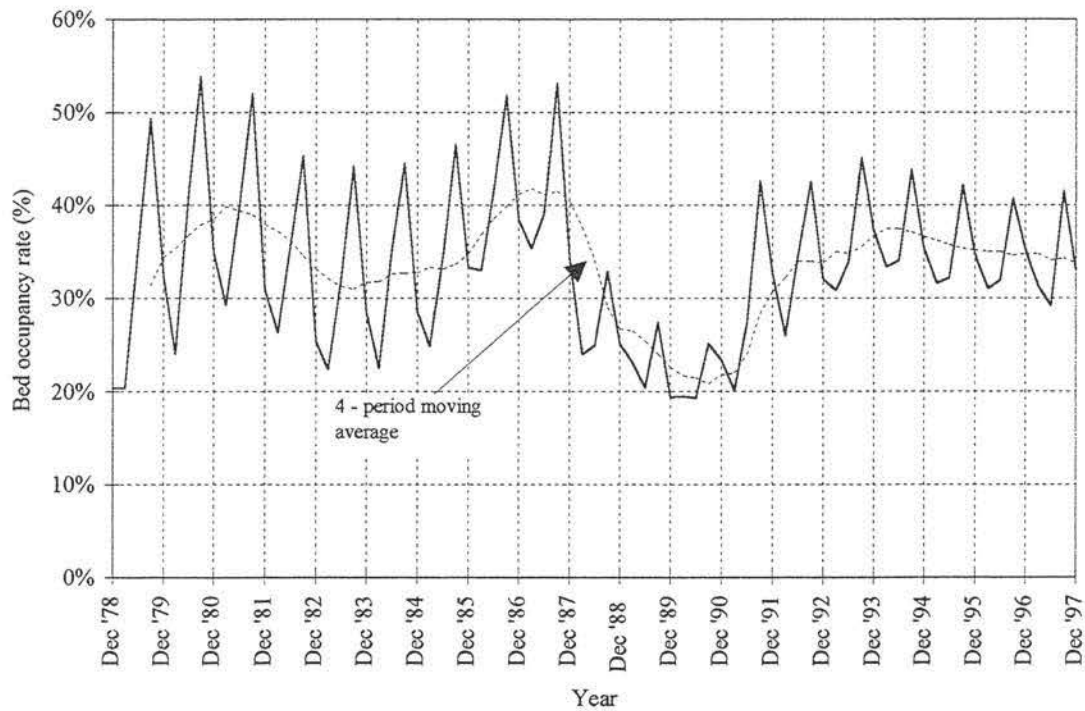


Figure 5-28: Bed Occupancy Rate (Quarterly)

Source: Calculated from ABS Tourism Accommodation Small Area Data Quarterly, Queensland, Cat. No. 8635.3.40.001, Using Guest Nights as a Percentage of Bed Spaces Available per Day.

use room occupancy rates. All categories, however, use statistics from which bed occupancy rates can be calculated, that is, bed spaces and guest nights.

Figure 5-28 indicates that, across the spectrum of accommodation types on offer, bed occupancy rates were below the December 1986 peak from 1988 onward. There was a large increase in bed spaces from 7,632 in June, 1987 to 17,682 in December 1988 which lowered overall bed occupancy rates considerably (ABS Product No. 8635.3.40.001). The next two years, 1989 and 1990, were also disastrous in terms of bed occupancy rates, however, the cause this time was the domestic Pilots' strike which also had an effect on international tourists. The rest of the data series has never reached the occupancy rates achieved in the late 1970s and 1986/7, in fact, the last five years of the series appears to be declining according to the figure. The data does not support Butler's (1980:8) hypothesis that capacity levels, at least in terms of bed spaces, have been reached in the latter years.

Notwithstanding the above discussion, capacity levels in some areas of the economy, say backpacker hostels, may well be healthier than others, for example, five-star hotels. TALC however, is a holistic model and it is important not to get bogged down discussing individual market segments or their characteristics. The purpose of the model is to look at the economy as a whole and then, if action is warranted, the next step in the planning process is to examine specific issues finer detail.

5.7.8 Strenuous Efforts Needed to Maintain the Level of Visitation

In the "stagnation" stage, strenuous efforts are needed to maintain the level of visitation (Butler 1980:8). In the case of TTNQ, the rapid increase in annual expenditure from 1993 indicated that extra efforts were made to promote the region (see Figure 5-12). From 1993 to 1998, the TTNQ expenditure long-term trend was increasing exponentially, while at the same time the rate of increase in accommodation takings declined significantly. In this five year period, TTNQ expenditure tripled. Efforts were made to extend the market area to countries such as Korea, Taiwan, China and India. The results of the business survey also indicated

that private expenditure on advertising and promotion expressed as a percentage of total expenditure increased exponentially (see Figure 5-11). Total spending on promotion and advertising, therefore, increased rapidly during the "stagnation" stage.

5.7.9 Percentage of Mass Tourism.

Butler (1980:9) suggests that during the "stagnation" stage, "the type of visitor can ..... be expected to change towards the organised mass tourist identified by Cohen (1972) and the psychocentric described by Plog". Figure 5-22 shows that, according to questionnaire respondents, the rise in the mean percentage of group tourists occurred before 1991 and reached almost 31% of total tourists. This criteria, therefore, is premature by at least three years and so can be used as a leading indicator of "stagnation".

5.7.10 Natural and Cultural Attractions Superseded by Man-made Attractions.

There is no disputing that some human-made facilities have been introduced such as Skyrail, the Wool Shed, the multi-million dollar Paradise Palms golf course and pontoons for viewing the Great Barrier Reef. At the same time, however, it could not be said that these facilities have superseded the natural and cultural attraction, rather, there has been an attempt to more efficiently use them.

5.7.11 The Resort Image is Divorced from its Geographic Environment

By the "stagnation" stage, the resort will have become known primarily as a holiday area for fun and recreation, rather than as a place to appreciate the geographic environment such as the reef, rainforest and scenery (Butler 1980:8). To test this criterion it would have been necessary to interview potential visitors in various different parts of the world and this was not possible in view of the limited resources for this research. It was, therefore, not possible to form an opinion either way regarding this criterion.

5.7.12 New Development Occurs but Peripheral to the Original Tourist Area

This criterion has some support in the study region. As stated earlier, the CBD has been referred to as exhibiting the so-called "doughnut effect". New, significant developments are located on the edge of the CBD, giving the city the characteristic of a doughnut with everything around the outside and nothing in the middle (*Cairns Post*. 11 December 1996. "Christmas in the City Heart Supplement" :1; 23 January 1998:5). Examples of new developments on the edge of the CBD include the Cairns Central shopping mall, the city chambers, the police station and court house. The shopping mall attracted many businesses from the CBD, resulting in a serious glut of retail space.

5.7.13 Existing Properties Likely to have Frequent Changes of Ownership

There is no evidence to suggest that there are frequent changes of ownership of existing properties in the study region. Sixty-four percent of questionnaire respondent organisations had only ever had one owner and 24% and 7.5% had two and three respectively. In addition, the Real Estate Institute of Queensland (REIQ) reported that turnover of residential property in the LGAs of Cairns and Douglas fell from 2,509 in 1993 to 1,959 in 1999 (Thoi 2000).

5.7.14 Summary - "Stagnation" Stage.

The study region's TALC curve shows accommodation takings peaked in 1997 (see Figure 5-1). Some evidence of continuity of 1998's downward trend is required before a firm conclusion can be reached regarding the change in direction. Additionally, the change in the definition of accommodation takings which occurred in 1998 may have some effect even though allowance was made. Out of fifteen "stagnation" stage criteria listed in Table 5-13, ten tested positive, one of which occurred in the "development" stage and one in the "consolidation" stage. The latter two criteria can be used as leading indicators of the "stagnation" stage.

Table 5-13: Summary of Responses to Butler's (1980) "Stagnation" Stage Criteria.

	Butler's (1980) Criteria	**Com-pliance (Y/N)**	**If "Yes, when?**	**Different stage?**
1	Peak of accommodation takings reached	Yes	Peaked 1997	
2	Environmental problems	Yes	Peaked 1995	
3	Social problems	Yes	Peaked 1991	"development"
4	Economic problems	Yes		
5	Well-established image but resort region is no longer fashionable	Yes	At 1998	
6	Reliance on repeat visitation	Yes	Since 1993	
7	Decrease in occupancy rates	Yes	Since 1994	
8	Strenuous efforts needed to maintain the level of visitation.	Yes	Progressive throughout this stage	
9	Type of tourist changes to the organised mass tourist.	Yes	Peaked 1991 to 1993	"consolidation"
10	Natural and cultural attractions superseded by man-made attractions.	No		
11	Resort image is divorced from its geographic environment.	NA*		
12	New developments still occurring but on the periphery of the original tourist area	Yes	Progressive throughout this stage	
13	Large number of imported attractions which start to outnumber natural & cultural attractions	No		
14	Frequent changes of ownership	No		
15	Locals consider visitors annoying	No		

*Not Applicable

5.8 Testing for the "Decline" Stage

Butler's (1980:9) "decline" stage is characterised by a declining market and an inability to compete with newer attractions. Holiday-makers will stay away, but the number of day-trippers will increase if the region is located close to a centre of population. Property turnover is high and tourist facilities are converted to other uses. Hotels may become apartment blocks, retirement or convalescent homes. Local involvement and control increases as residents are able to buy back into the tourism industry at reduced prices. This remainder of this section discusses only those "decline" stage criteria which test positive in the study region.

5.8.1 Increased Competition from Other Resort Areas

Question 8.12 is a time series question and attempts to record, over time, respondent's perceptions regarding the degree of competition experienced from resorts elsewhere. The question is aimed at testing Butler's (1980:9) "decline" stage criteria that the region will not be able to compete with the newer attractions of other resorts (Butler 1980:9). The question is also consistent with Haywood's assertion that as the cycle progresses, new and accessible competing destinations will appear (Haywood 1986:161). The questionnaire required respondents to indicate, for every year during the study period, whether competition from outside was "high", "medium/high", "medium", "medium/low", "low" or "none". The results show a high degree of consistency with Butler's theory. At the beginning of the period the most common response was that there was a low level of competition from outside the region, but that as the cycle progressed competition increased, until by the end of the study period the most common response was "high" (Figure 5-29).

Question 7.1 of the questionnaire is similar to Question 8.12, except that it is a cross-sectional question (relating to the present time period), rather than a time-series one and is designed to act as a check for the responses to the latter question. The responses from the two questions were compatible with over 70% of valid responses saying that there were "new and competing destinations appearing outside the region". When asked to nominate, over 14% of valid respondents nominated

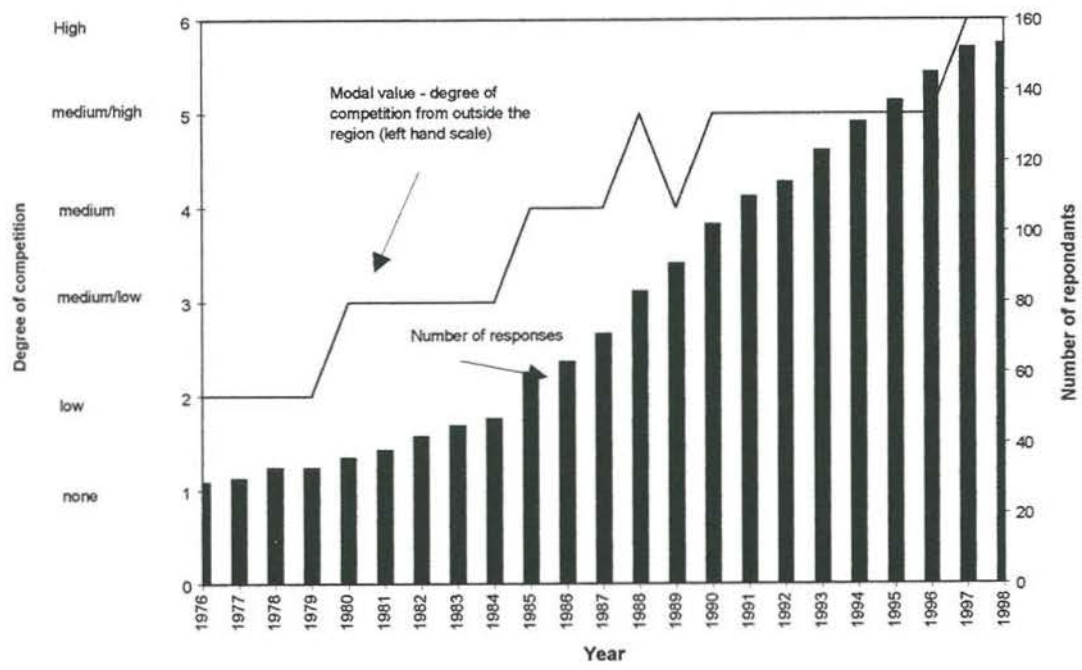


Figure 5-29: Results of Question 8.12 - Degree of Competition from Outside the Region

Source: Ted Berry, 1999, Cairns Regional Questionnaire

"parts of Asia" as being the major source of the competition. It terms of Butler's model, the responses to this question and the time-series question would indicate that the region is feeling the competition, but not necessarily that the region will "not be able to compete" (Butler 1980:9). There is no doubt, however, that the region is finding it harder to compete as time progresses. Although the Cairns region was in the "stagnation" stage at the end of the study period, this "decline" stage criterion tested positive and could, therefore, be considered a leading indicator of "decline".

5.8.2 The Viability of Tourist Businesses Becomes Questionable

A definite indication that an increasing percentage of tourism-related businesses are not viable is shown in Figure 5-24 above. The figure shows that in the long-term, the percentage of questionnaire respondent companies making zero or less profits had been increasing since 1981. The long-term linear trend rose from 9% to 21% over the period from 1981 to 1998. Figure 5-25 shows that profit margins were also decreasing and Table 5-10 reveals that budgeting was becoming tighter.

5.8.3 Local Involvement in Tourism will Increase

Figure 5-18 above shows that for the period 1995 to 1998 the long-term trend appears to be reversing, and local ownership was showing clear signs of increasing while outside ownership levelling off (see Table 5-3). In the case of "majority outside ownership" there was a marked decline during the last four years. This trend indicates that outside investment in the region was falling, possibly because profitability was declining. There is also a possibility that some local buying-back was going on as outside investors transfer their funds elsewhere. Whatever the reasons behind the shift in ownership, its existence indicated the presence of a "decline" stage criterion (Butler 1980:9).

The proportion of local managers was also increasing over the last three or four years of the study period, after a long period of decline (Figure 5-19). Similarly, the "majority of managers from outside the region" and "some managers from outside the region" showed significant signs of trend reversal in the last four years

both in actual quantity as well as percentage terms. This trend, however, was not supported by the "all managers from outside the region" category except in the last year, although it should be noted that this latter category represented only 10% of the total responses in the final year of the series.

There was also a trend developing for increased local bookings. Whether this referred to clients walking in off the street or whether it referred to people using the telephone or internet to book with local agents is not known. Local control over bookings had declined significantly until the last four years of the study period, when there appeared to be a change in direction at the expense of bookings originating from Australian metropolitan agents.

5.8.4 Summary - "Decline" Stage

Three "decline" stage characteristics were present in the Cairns area as at the end of 1998 (see Table 5-14). Whilst these criteria are not enough to be able to say that the region is in the "decline" stage, they can and should be used as leading indicators for that stage. For example, according to questionnaire responses, the degree of competition from other resort areas has been "high" since 1997 and "medium/high" since 1990. Competition had, however, been rising since 1979 (see Figure 5-29). The opportunity was there to measure the level of competition at an early stage and take appropriate action.

5.9 "Rejuvenation" Stage

Butler's (1980:9) "rejuvenation" stage will almost certainly not be reached without a complete change in the attractions on which tourism in the region is based. Such a change can be done by either introducing human-made attractions such as theme parks and casinos or by making better use of previously untapped natural resources. Winter sports at Aviemore in Scotland is an example of the latter. In this section all "rejuvenation" stage criteria are mentioned regardless of whether or not they test positive in the Cairns region. Criteria which test negative are mentioned

because they point to strategies which can be employed to help in the rejuvenation process. The first group to be discussed are those which test positive.

Table 5-14: Summary of Responses to Butler's (1980) "Decline" Stage Criteria

	Butler's (1980) Criteria	**Com-pliance (Y/N)**	**If "Yes", When?**	**Different stage?**
1	Increased competition from other resort areas with newer attractions.	Yes	Medium/High since 1990	First signs appeared late "development" stage
2	The viability of tourist businesses becomes questionable	Yes	Since 1993	First signs appeared in "stagnation" stage
3	Local involvement in tourism will increase	Yes	Since 1994	First signs appeared in "stagnation" stage

5.9.1 Government/Private Efforts & Encouragement of Special Interest Groups

Butler (1980:9) suggests that in order to rejuvenate a resort area, the combined efforts of government and private organisations are necessary to look for new markets such as special interest or activity groups. In the study region, the use of public funds has been employed to some extent and there has been some success in attracting conventions, conferences and other special interest groups such as the 1996 mountain biking world championships. The resulting increase in tourism business, however, was not sufficient to bring about regional "rejuvenation" by the end of the study period.

5.9.2 Human-made Attractions such as Casinos and Theme Parks

As mentioned above, a casino and convention centre had been built in Cairns the mid-1990s. Moreover, while the region had no Disneyland-style theme parks, a number of small wildlife centres featuring crocodiles, cassowaries and other

indigenous animals and birds were present around Cairns. There is, therefore, partial compliance with this criterion.

5.9.3 Take Advantage of Previously Untapped Natural Resources

As with man-made attractions discussed above, there is only partial compliance with this criterion. While there has been some change towards the greater use of untapped natural resources, there has not been a complete change. Skyrail is perhaps the best example of the use of previously untapped rainforest for viewing purposes. As mentioned above, the region hosted the world mountain bike championships in 1996 using tracks through the rainforest. On the other hand, between 1996 and 1999 there was no growth in adventure tourism such as canoeing, white-water rafting, fishing/hunting and bushwalking (Peart 2000).

5.9.4 Change of the Attractions on which Tourism is Based

The *Cairns Post* newspaper search revealed no activity relevant to a change in the attractions on which the region's tourism was based until 1988 and very little until 1997. It was only in the last two years of the study period (1997-1998) that a frequency of any significance was recorded, there being fifteen letters and articles in 1997 and twenty-two in 1998. Most were letters and articles discussing the need for a complete change in the region's approach to tourism, whether it be looking for new markets or developing new natural or artificial attractions. It could, therefore, be argued that according to Butler's theory, no rejuvenation of tourism in the region was likely as a complete change had not yet taken place.

5.9.5 Beautification/Urban Renewal

This variable is not one of Butler's (1980:9) rejuvenation strategies, rather it is a response to the "consolidation" stage criterion that there may be old and second rate facilities. In 1997 and 1998 thirty-eight and seventy-two articles and letters respectively appeared in the *Cairns Post* on the subject of "beautification and urban renewal". Most of the cases cited discussed the need for, or local government plans for "beautification and urban renewal", rather than reports of cases which had

actually taken place. Perhaps the biggest issue in 1998 was the need for beautification of the Cairns Esplanade. An artificial sandy beach, parks and a swimming pool to replace part of the mud flats were all suggested as ways to improve the area. Earlier in the 1990s, such plans had been rejected (*Cairns Post.* 13 October 1989).

5.9.6 Summary - "Rejuvenation" Stage

Of five "rejuvenation" stage criteria, two test negative and three have partial compliance (see Table 5-15). All of those with partial compliance occurred during the "stagnation" stage. There is no doubt that the interpretation given to the criteria is subjective and is open to argument. The main point, however, is to identify areas where improvements can be made rather than to argue about compliance or otherwise with the various criteria. For example, with respect to the section on beautification/urban renewal, there are a number of specific suggestions arising from the questionnaire results that local government can immediately address. Criteria which test negative can also be addressed along with those which have limited compliance.

5.10 Testing for Leading Indicators

This section considers the use of leading indicators as an addition to Butler's (1980) TALC model. Two sets of indicators are considered, the first put forward by Haywood (1986:161), and the second suggested by Cooper (1994:63) as threats to the survival of cold-water resorts.

5.10.1 Haywood's (1986:161) "Stagnation" Stage Leading Indicators

This section looks at the timing of Haywood's (1986:161) "stagnation" stage leading indicators in the study region to determine which, if any, are relevant.

Table 5-15: Summary of Responses to Butler's (1980) "Rejuvenation" Stage Criteria

	Butler's (1980) Criteria	**Com-pliance (Yes/No/ other)**	**If "Yes", when?**	**Different stage?**
1	Complete change of the attractions on which tourism is based	No		
2	Introduction of man-made attractions such as casinos and theme parks.	Partial	1996	"Stagnatio n"
3	Take advantage of previously un-tapped natural resources	Partial	1996 (eg Skyrail)	"Stagnatio n"
4	Combined government and private efforts are necessary to look for new markets and encouragement of special interest groups	Partial	Ongoing	Started in the "stagnation " stage.
5	Beautification/urban renewal projects (response to "old" and "second rate" facilities of "consolidation" stage).	Not much	Due in 2000. (Esplanade)	

5.10.1.1 A Declining Proportion of First-time Visitors

Section 5.7.6 contains evidence that the percentage of first-time visitors to the Cairns region started to decline in 1993. This leading indicator of "stagnation" was, therefore, present in the first year of that stage and so was not acting as a leading indicator. The presence of the indicator does, however, serve to reinforce the existence of the "stagnation" stage and provide a warning that the region's tourism industry will continue to stagnate given a no-change policy.

5.10.1.2 Declining Profits of the Major Tourist Businesses

This leading indicator refers to "major" tourist businesses, a sub-group not subject to separate inquiry in this research. On the other hand, it is only necessary to know if profits are rising or falling, not absolute profit levels. Question 8.13 of the questionnaire, relating to profit margins per client, provides the required information assuming variable costs and sales prices are similar between businesses in the region. A low standard deviation of 1.446 for the results of the question verifies this assumption. Figure 5-25 shows that profit margins per client have been falling since 1991, two years before the region entered the "stagnation" stage according to Butler's (1980) model. This conclusion is reinforced by the long-term increase in the percentage of companies operating with zero or less profits (see Figure 5-24).

5.10.1.3 Tourism Industry Over-capacity

As discussed above in Section 5.7.2, the assessment of capacity levels is a multi-faceted concept and there is no reason to suspect that capacity levels have been reached in the study region.

5.10.1.4 Appearance of New and Accessible Destinations

Figure 5-29 above shows that the degree of competition from outside the region first went above the "medium" level in 1988 and then again, permanently, in 1990. If tests had been undertaken to identify the degree of competition at that time

it is quite possible that this "stagnation" leading indicator would have been identified three years before the stage started.

5.10.1.5 Decline in Advertising Elasticity

A decline in the elasticity of advertising and an increase in price elasticity means that the advertising dollar becomes less effective in terms of sales. Figure 5-12 shows the regional promotion body's (TTNQ) annual expenditure, which for the purposes of this research is considered to be advertising expenditure. On the same graph, for comparison purposes, is accommodation takings with the same trendline used in Figure 5-1. The Figure clearly shows that TTNQ advertising expenditure and accommodation takings start to go in opposite directions from the point of inflection of the latter curve in January 1991. TTNQ expenditure appears to be increasing exponentially and the rate of increase in accommodation takings is falling, indicating reducing effectiveness for every dollar spent by TTNQ. A similar trend is evident in private organisations in that advertising as a percentage of overall expenses is increasing (see Figure 5-11). This leading indicator of "stagnation" was therefore present in 1991, two years before the region entered Butler's (1980:8) "stagnation" stage. Note, however, that there is no suggestion here that there is a causal relationship between the degree of advertising elasticity and accomodation takings, just that there is a changing relationship the cause of which is unimportant at this stage.

5.10.1.6 Summary: Haywood's (1986:161) Leading Indicators

Haywood (1986:161) suggested seven leading indicators of "stagnation", of the five which were tested, four proved to be relevant to the study region. Three out of the four gave at least two years warning of impending stagnation (see Table 5-16). There is no doubt that Haywood's leading indicators add a short-term forecasting capability to Butler's TALC model.

Table 5-16: Summary: Haywood's Leading Indicators of "Stagnation".

Leading Indicator	**Yes/No**	**If "yes", Year of occurrence & stage**
A declining proportion of first-time visitors	Yes	1993, "stagnation"
Declining profits of the major tourist businesses	Yes	1991, "consolidation"
Tourism industry over-capacity	No	
Appearance of new and accessible destinations	Yes	1990, "consolidation
Decline in advertising elasticity	Yes	1991, "consolidation

5.10.2 Cooper's (1990:63) Threats Facing Cold Water Resorts.

This section contains a discussion of some of Cooper's (1990:63) threats to cold-water resorts in northern Europe. The list of threats are not specific to any particular stage of TALC and are more in the nature of negative factors associated with the decline of resort regions. In this research the threats are assessed for their value as leading indicators of Butler's (1980:8,9) "stagnation" and "decline" stages. Some of Cooper's suggestions reinforce Butler's criteria and are similar to Haywood's (1986:161) leading indicators and need not be discussed again. An example of the latter is Butler's "stagnation" stage criterion regarding economic problems which is similar to Cooper's "financial restrictions and low budgets" and Haywood's "declining profits of major tourist businesses".

5.10.2.1 Political Interference on Decisions

Question 3.1 of the business questionnaire refers to possible threats from the effect of influence exerted by politicians on business or local government decision making (Cooper 1990:63). It does not include routine decisions made by public servants, but it does include once-off decisions made by politicians which affect businesses within the region. An example is the building of Cairns Central shopping mall on state government land. The decision to build the complex was made by the government minister responsible and was not subject to local government scrutiny or approval. Once finished, the air-conditioned complex, which consists of more than a hundred shops, several cinemas and food outlets, took much of the CBD trade away

from existing businesses. Cairns Mayor, Tom Pyne, belatedly responded to this sort of political decision by demanding "a guarantee from Queensland's political leaders that no more of the city's crown land will be sold for retail use" (*Cairns Post.* 24 January 1998:1). The results from Question 3.1 clearly show that the largest group were those who believed that there was too much political influence on decision making (see Table 5-17 and Figure 5-30). At the same time, so-called "bashing" politicians is a popular pastime in Australia and may have influenced the results. Many respondents, however, provided specific instances indicating that these are not just vague accusations. According to this variable, therefore, the study region's tourism industry is under some degree of threat.

The newspaper search did not return a big enough frequency to draw any conclusions regarding this variable. Furthermore, without specific knowledge of the law and of details surrounding each case, there is difficulty in deciding which decision is attributable to a politician and which is due to routine public service decision making processes. If, during the data collection, there was any doubt, a point was not recorded. Table 5-18 shows that the largest sample recorded was seventeen letters, indicating "total political control" and articles in 1994. The next largest sample was twelve in 1998 indicating "no political control".

5.10.2.2 Diminishing Domestic Market Share.

This section is based on data from the Domestic Tourism Monitor (DTM) compiled by the Bureau of Tourism Research (BTR) between 1984/85 and 1996/97. The time unit used is the Australian financial year (July 1 to June 30). The DTM series was discontinued in 1997, a year before the end of the study period. According to Cooper (1990:63), a drop in a tourism region's share of the domestic market can be considered a threat to the survival of the region's tourism industry. The weighted estimate of visits and nights of visits for Far North Queensland, expressed as a percentage of Australia, reached a peak in 1991/2. Since that year, there has been a steady decline in the Cairns region's share of the domestic market (see Table 5-19).

Table 5-17 Results of Question 3.1 of the Business Questionnaire- Degree of Political Influence on Decision Making.

Degree of political influence	Frequency	Valid percentage
None at all	6	2.8
Minimal	32	15.0
Acceptable	70	32.7
Too much	96	44.9
Total	10	4.7
Missing	4	
Total	218	100.1

Source: Ted Berry, 1999, Cairns region Business Questionnaire.

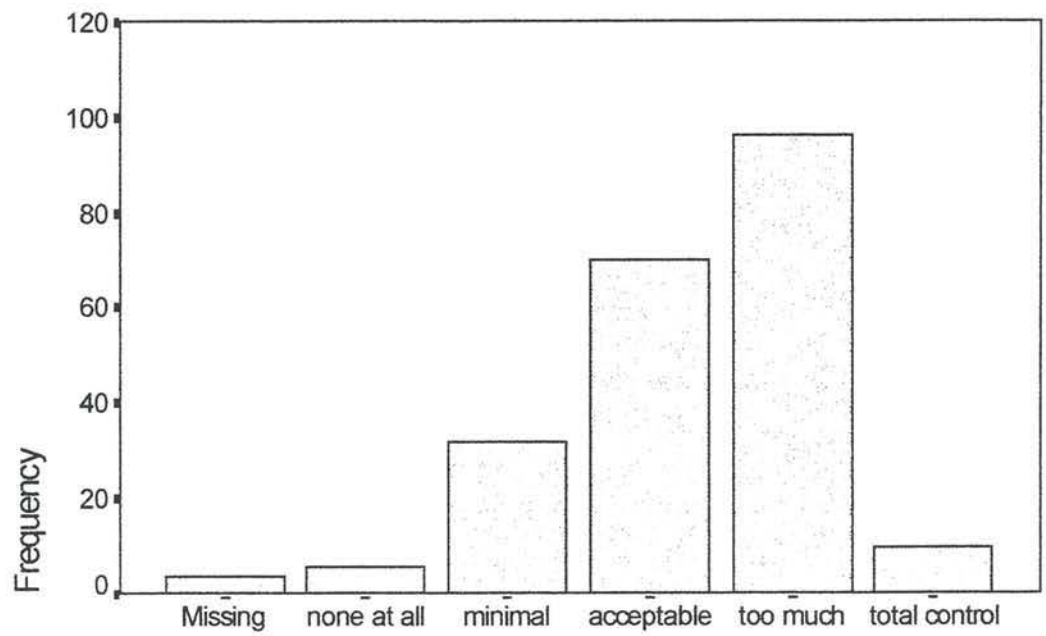


Figure 5-30: Results of Question 3.1 - Degree of Political Influence on Decision Making.
Source: Ted Berry, 1999, Cairns Regional Questionnaire.

Table 5-18: Degree of Political Control over the Decision Making Process.

Year	None	Minimal	Acceptable	Too much	Total
1976	0	0	0	0	0
1977	0	0	0	0	0
1978	0	0	0	0	0
1979	0	0	0	0	0
1980	0	0	0	0	0
1981	0	0	0	0	0
1982	0	0	0	4	0
1983	0	0	0	1	0
1984	0	0	0	1	0
1985	0	0	0	0	0
1986	0	0	0	1	0
1987	0	0	0	0	0
1988	0	0	0	1	0
1989	0	0	0	1	0
1990	1	0	0	3	0
1991	0	1	0	1	5
1992	1	0	0	2	0
1993	2	0	0	4	0
1994	0	0	0	2	17
1995	0	0	0	2	0
1996	0	0	0	1	0
1997	0	0	0	0	0
1998	12	0	6	0	0

Source: *Cairns Post* newspaper search 1976 to 1998

Table 5-19: Far North Queensland's Share of the Domestic Market.

	Weighted Estimate ('000) of Visits*			**Nights ('000) of Visits****		
Financial year	**Far North**	**Australia**	**Far North as a % of Australia**	**Far North**	**Australia**	**Far North as a % of Australia**
1984/85	772	53890	1.43%	3354	200889	1.67%
1985/86	731	54026	1.35%	4553	208929	2.18%
1986/87	820	53352	1.54%	5445	210934	2.58%
1987/88	915	55608	1.65%	5615	216897	2.59%
1988/89	979	54823	1.79%	5189	214026	2.42%
1989/90	1163	58446	1.99%	5486	223850	2.45%
1990/91	931	56672	1.64%	4535	215446	2.10%
1991/92	1344	57943	2.32%	6482	216260	3.00%
1992/93	1153	57561	2.00%	5975	210404	2.84%
1993/94	1317	58704	2.24%	6177	211372	2.92%
1994/95	1097	71941	1.52%	5584	246339	2.27%
1995/96	1319	75952	1.74%	6813	256473	2.66%
1996/97	1192	74980	1.59%	6513	250996	2.59%

*Visit: A component of a trip. A visit is defined as being made to each place where one or more nights is spent while being on a trip. Hence there may be many visits on a trip (DTM Quarterly report December quarter, 1992:7).

**Nights of visits: Number of nights undertaken in association with a visit to the region.

Source: Bureau of Tourism Research. 1984-1997. *Domestic Tourism Monitor*. Canberra: Bureau of Tourism Research.

The resort region's share of the international market does not appear in Cooper's (1990:63) list of threats. It is, however, equally useful to monitor a tourism region's share of the international market as it is the domestic market. Like the DTM, the International Visitor Survey (IVS) was compiled by the Bureau of Tourism Research and has also been discontinued. It was compiled between 1989 and 1997 and is reproduced in summary in Table 5-20. The table shows North Queensland's percentage of international visitors to Australia in terms of the weighted estimate of visits and nights of visits. Despite the short duration of the data, the table shows that the region appeared to reach a peak in 1992, indicating that there is some increased competition from other regions in Australia. Since 1992, the region's share of international visitors has declined.

5.10.2.3 Traffic Problems

Most of the *Cairns Post* letters-to-the-editor and articles about traffic problems in the study region occurred during the latter years of the study period and reached a peak between 1995 and 1997 (see Figure 5-31). As Butler's "stagnation" stage started in 1993, this variable cannot be used as a leading indicator. Moreover, the maximum frequency, at 24 for 1995 is not enough to form any strong conclusions about the variable.

5.10.2.4 Poor Access

"Poor access" (Cooper 1990:63) implies that if tourists find it hard, or expensive, to get to a tourism region, they are less inclined to go. Direct flights into Cairns from the USA, the world's biggest and richest market, were dropped by Qantas in 1994 (*Cairns Post.* December 16 1993). Continental Airlines had halted direct flights in 1991 (*Cairns Post.* July 5 1991). Both airlines cited lack of demand as being the reason for dropping the flights. Since that time tourists originating in America, and wishing to get to the Cairns region, have to go through either Brisbane or Sydney, or travel via one of the Asian countries which have direct flights into Cairns. Either way, the extra expense adds up to several hundred dollars per

Table 5-20: Far North Queensland's Share of the International Market.

	Weighted Estimate of Trips*			**Nights ('000) of Visits**		
Year	**Far North**	**Australia**	**Far North as a % of Australia**	**Far North**	**Australia**	**Far North as a % of Australia**
1989	302216	1937011	15.60%	2687	55337	4.86%
1990	367763	2065364	17.81%	3404	65340	5.21%
1991	392751	2216552	17.72%	3284	64645	5.08%
1992	508383	2425776	20.96%	3312	61444	5.39%
1993	507689	2783367	18.24%	3326	64931	5.12%
1994	589223	3104648	18.98%	3719	73726	5.04%
1995	604551	3104648	19.47%	3770	79480	4.74%
1996	689968	3944985	17.49%	4199	90152	4.66%
1997	731196	3944985	18.53%	4752	91971	5.17%

*Trips Same as a "visit" in the Domestic Tourism Monitor, above.

Source: Bureau of Tourism Research. 1989-1997. *International Visitor Survey.* Canberra: Bureau of Tourism Research.

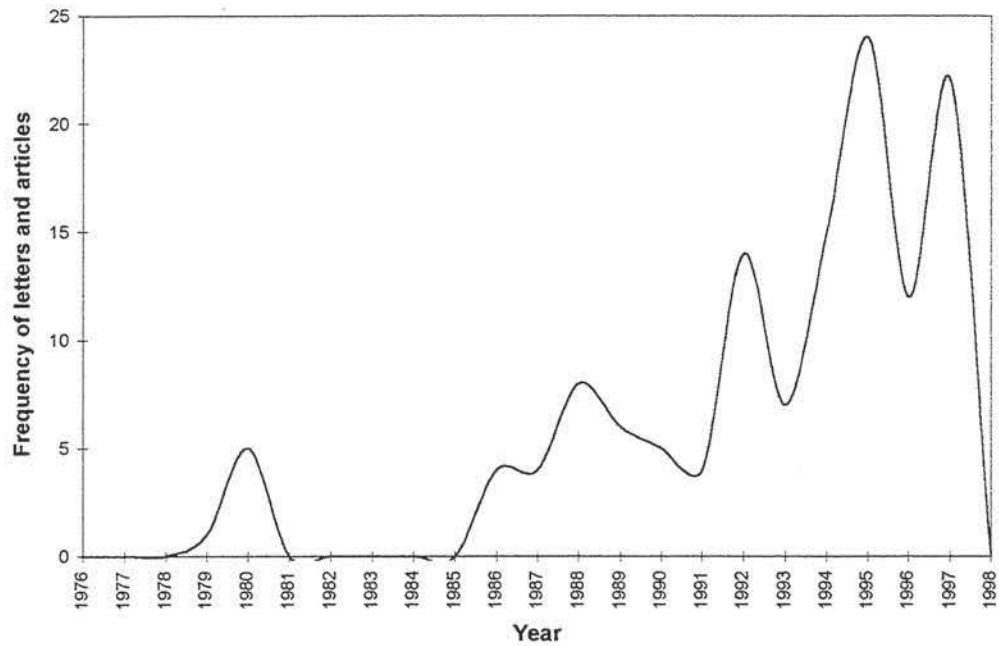


Figure 5-31: Traffic Problems - Cairns Region

Source: *Cairns Post* newspaper search, letters-to-the-editor and articles 1976-1998

passenger and up to a day extra in time lost if the tourist goes through Japan or Korea and has to have a forced stopover.

Question 5.3 of the questionnaire asked "do you think airline access to the region is excellent, good, OK, not very good or poor". The response, shows slightly more respondents on the negative side (see Table 5-21 and Figure 5-32). These results suggest that most respondents are either not aware that the study region has no direct airline connection with the world's biggest market or are of the opinion that it makes little or no difference to the local tourism industry. This latter point may be because the majority of businesses are small and so do not have the capacity to market outside the region, this task being left to TTNQ. Regardless of the awareness of local businesses or the reasons for lack of awareness, the fact remains that the region does not have direct air access to North America. As the withdrawal of direct flights started in 1991, this variable could have been used as a leading indicator of "stagnation" from that year, two years before the start of the "stagnation" stage.

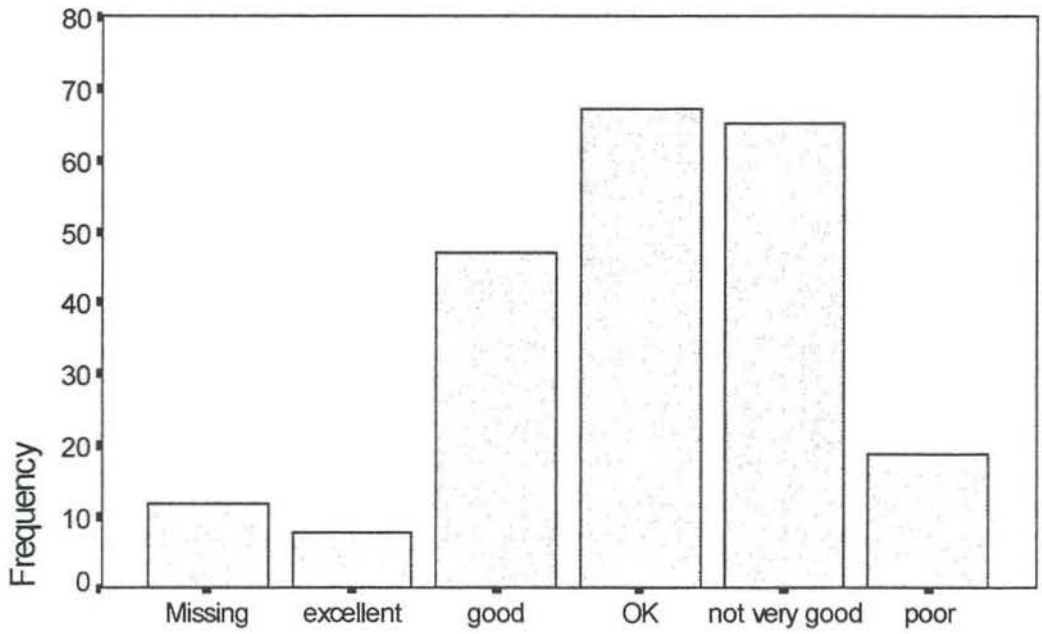
5.10.2.5 LGA Amalgamation

Question 3.2 of the questionnaire asked if respondents thought that the effect of amalgamation of Cairns City and Mulgrave Shires in 1996 was: "highly negative"; "negative"; "none"; "positive"; or, "highly positive". The results show that in the opinion of most respondents, the effects are fairly neutral (see Table 5-22 and Figure 5-33). In reality, however, the amalgamation itself poses the threat to the region because it dilutes the bargaining power of individual resorts by making the local government larger and more powerful in relation to the former (Cooper 1990:63). The opinions of local people are interesting but do not change the reality that an LGA amalgamation occurred in the study region. The variable can, therefore, be used as a leading indicator of continued "stagnation" or "decline" in the study region. Conversely, it may be more accurate to regard it as a negative influence or "threat" as Cooper (1990:63) originally intended.

Table 5-21: Results of Question 5.3 of the Business Questionnaire, Airline Access to the Region from Major Markets.

Airline access to the region from major markets	Frequency	Valid percentage
Excellent	8	3.9
Good	47	22.8
OK	67	32.5
Not very good	65	31.6
Poor	19	9.2
Missing	12	
Total	218	100.00

Source: Ted Berry, 1999, Cairns region Business Questionnaire



Source: Ted Berry, 1999, Cairns Regional Questionnaire

Figure 5-32: Results of Question 5.3 - Airline Access from Major Markets

Table 5-22: Results of Question 3.2 of the Business Questionnaire- Effect of Amalgamation of Local Government Areas on Respondent Organisations

Effect of amalgamation	Frequency	Valid percentage
Highly negative	8	3.8
Negative	33	15.6
None	131	62.1
Positive	38	18.0
Highly positive	1	0.5
Missing	7	
Total	218	100.00

Source: Ted Berry, 1999, Cairns Region Business Questionnaire.

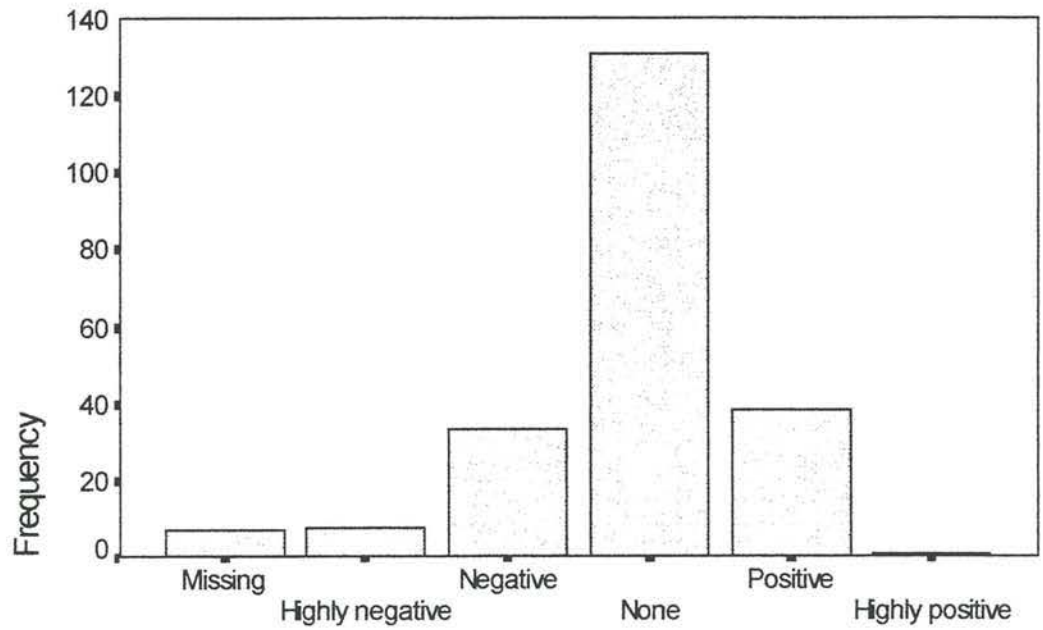


Figure 5-33: Results of Question 3.2 - Effect of Amalgamation of Local Government Areas on Respondent Organisations.

Source: Ted Berry, 1999, Cairns Region Business Questionnaire

5.10.2.6 Confidence in Tourism

Cooper (1990:63) stated that in cases where a region faces the possibility of decline, there will be a "lack of confidence in the tourism business community". Figure 5-34 shows the seven categories used to rank letters and articles in the *Cairns Post* relevant to "confidence in tourism". Although the frequencies are not significant enough to make any strong conclusions, they are provided here for the record. Figures (a) and (b), which have the highest frequency, only show a maximum of 40 letters and articles per year, an annual rate of less that one a week. In 1984, however, the year that the international airport was opened, it is noticeable that the level of confidence is higher than at other times. The year 1984 is marked by a dotted line in graphs (a), (b) and (c). The other noticeable point is that confidence tends to decline as the cycle progresses. Apart from these points, the small sample size makes further speculation unwise.

The "level of confidence" variable was also tested by Question 8.4 of the questionnaire which asks respondents their opinion as to the level of confidence in the local tourism industry over the study period. The results indicate that the most common response in the last four years of the study period was "neutral" (see Figure 5-35). At the same time the mean for the final year was 4.3 indicating that, if anything, there is upward pressure towards "low". Furthermore, there was a steady, unbroken decline in confidence from 1990 to 1998, when the modal level was "very high". Overall, whilst there was not exactly a "lack of confidence", confidence was heading towards "low". If the industry continues the way it was going, there is a high probability that the modal value will continue its negative trend.

5.10.2.7 Demands for Greater Efficiency in Local Government

The *Cairns Post* search revealed a rising linear trendline of articles and letters-to-the-editor demanding greater efficiency in local government, although the frequency was not large enough to give it much significance (see Figure 5-36). There is very little activity before 1984, the year that the international airport was opened, but after that, the subject became more frequent. Notwithstanding the small sample

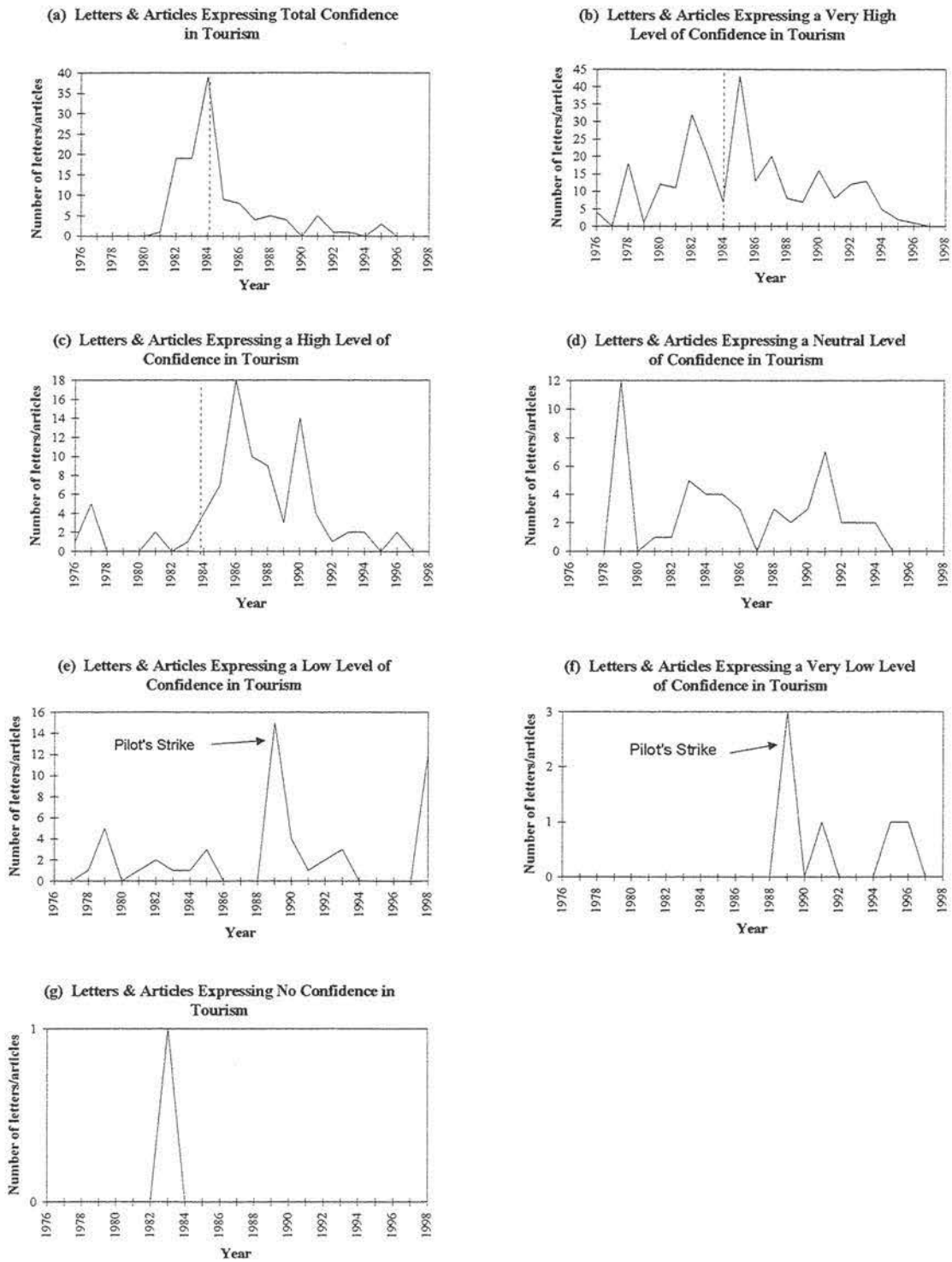


Figure 5-34: Confidence in Tourism.

Source: *Cairns Post* newspaper Search 1976-1998.

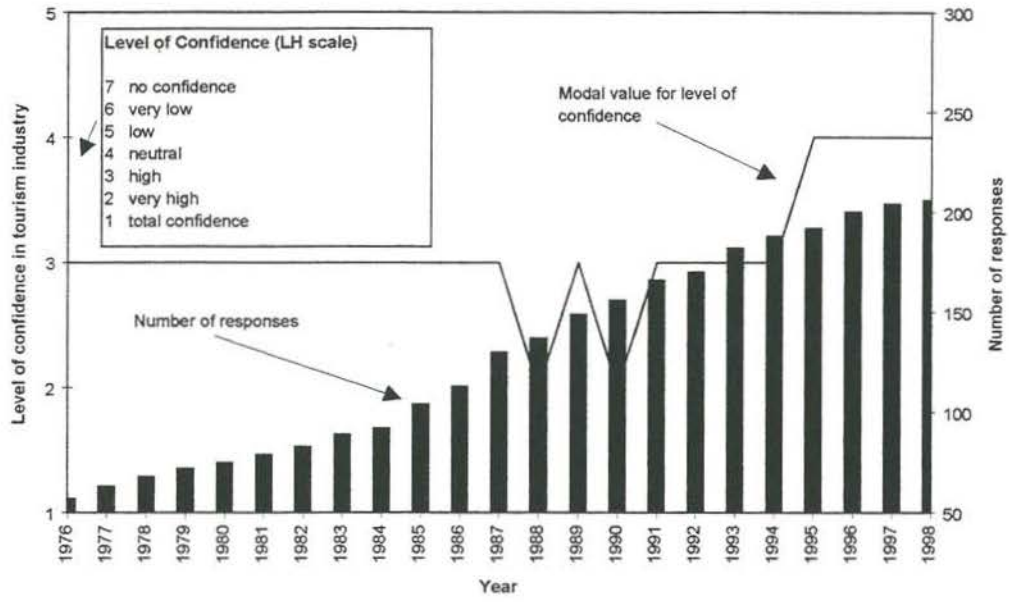


Figure 5-35: Results of Question 8.4 - Level of Confidence in Tourism.

Source: Ted Berry, 1999, Cairns Regional Questionnaire

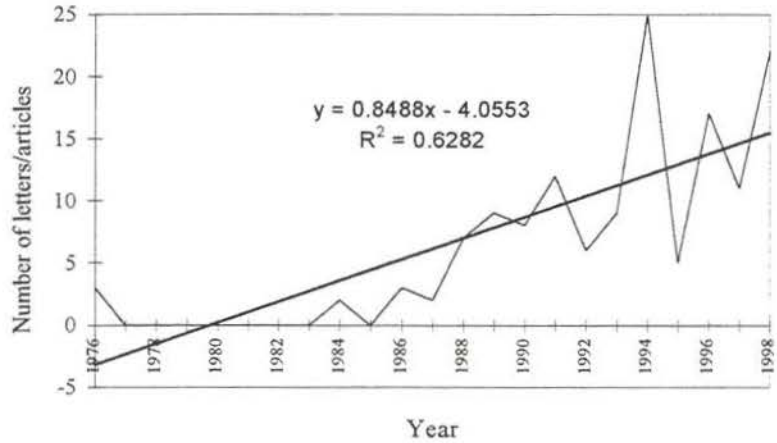


Figure 5-36: Demands for Greater Local Government Efficiency

Source: *Cairns Post* newspaper search 1976 to 1998

size, the rising trend was identifiable from 1990 and so could have been used as a leading indicator of "stagnation" three years before the region entered that stage.

5.10.2.8 Lack of Professional, Experienced Staff.

Question 4.3 of the questionnaire asked respondents if they thought that there was a shortage of skilled staff. The rationale for the question is that as the region declines, good staff go after better career opportunities which may be available in more successful resort regions. Results indicated that at the time the survey was completed, 62.4% of respondents thought that there was a shortage whilst 27.1% said it was about right and 10.5% said the experienced staff were readily available. This result, therefore, can be used as a leading indicator of further deterioration of the region's tourism industry.

5.10.2.9 Growth in Low-spend Visitors

This statistic refers to visitor spending per head per day and is expected to fall as the cycle matures (Cooper's 1990:63). Assuming Cohen's (1972) organised mass tourists spend less per head than individual mass tourists, Cooper's threat is consistent with Butler's (1980) theory in that visitor spending will fall as the type of tourist changes from the individual tourist to the mass tourist in the mature stages of the cycle. Question 4.4 of the questionnaire asks TTNQ members if they think that over the preceding five years visitor spending has become: "much more"; "more"; "the same"; "less"; or, "much less". The valid responses indicate that visitor spending is less than it was five years ago (see Table 5-23 and Figure 5-37). These responses can be verified against the ABS data shown in Figure 5-38. Between 1988 and 1997 visitor spending per day (in terms of 1978 dollar values) declined from A$22 to just over A$20 (ABS Cat. No. 8635.3.40.001). In the last five years of the series, however, there appears to be very little change, if any, although it is not possible to say exactly because 1998 figures are not available at the time of writing. Visitor spending reached a peak in 1988 and the long-term trend from that year appears to be down. Cooper's assertion that a growth in low-spend tourists may be considered a threat to a resort could have been clearly identified by 1991 and also

Table 5-23: Results of Question 4.4 of the Business Questionnaire - Visitor Spending

Change in visitor spending over the last five years	Frequency	Valid percentage
Much more	3	1.5
More	30	15.2
The same	49	24.7
Less	97	49.0
Much less	19	9.6
Missing	20	
Total	218	100.00

Source: Ted Berry, 1999, Cairns region Business Questionnaire

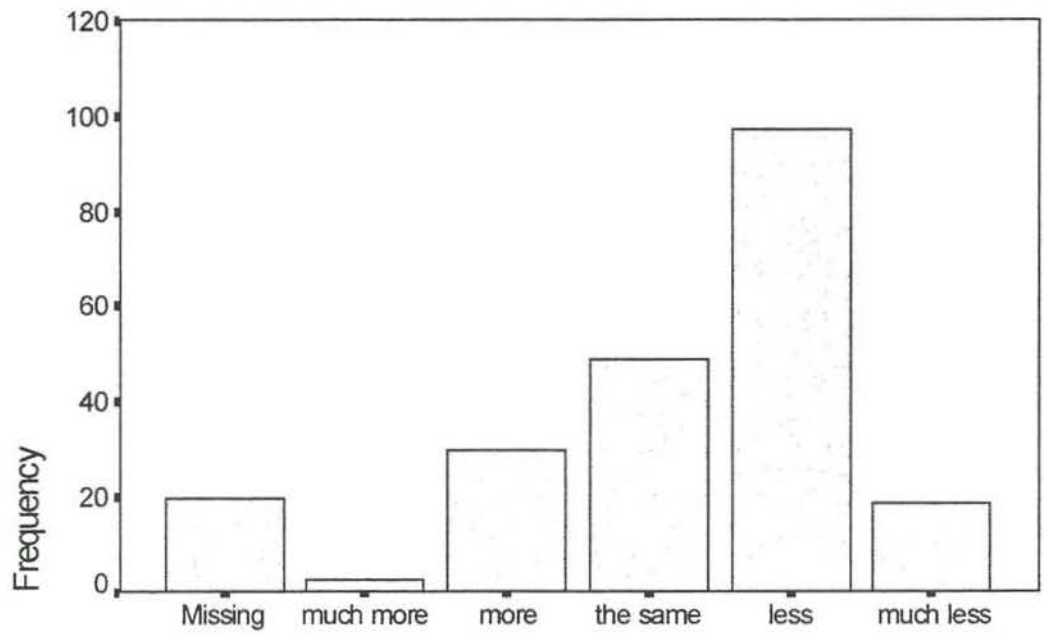


Figure 5-37: Results of Question 4.4, Visitor Spending (with Normal Distribution for Comparison).
Source: Ted Berry 1999. Cairns Regional Questionnaire.

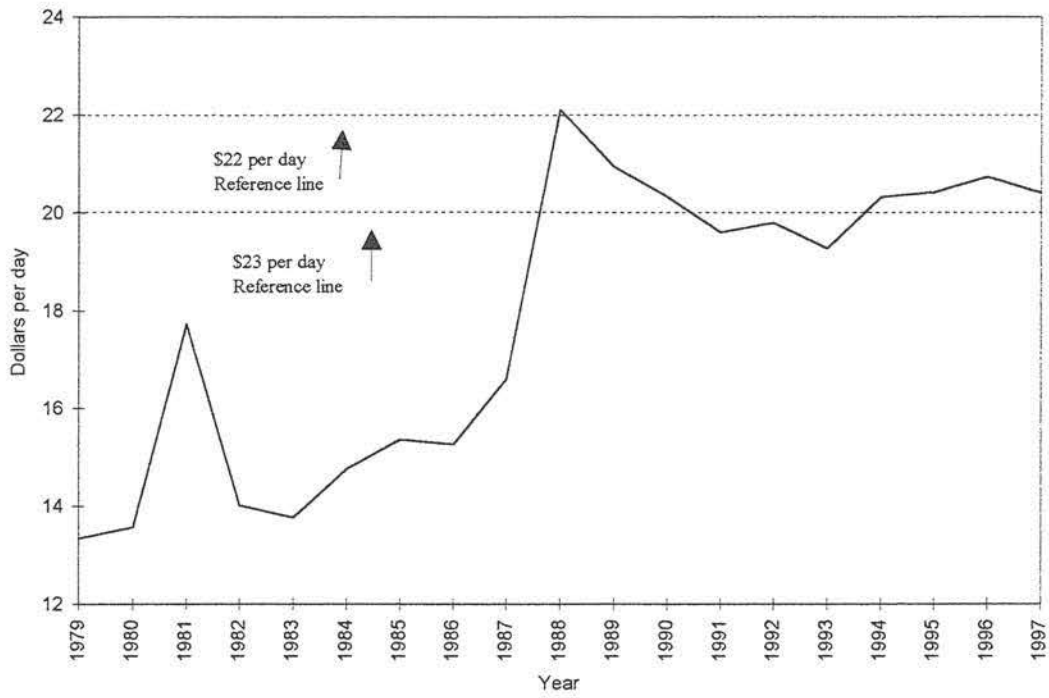


Figure 5-38: Average Visitor Spending on Accommodation per Day - CPI adjusted, base = 1978.

Source: Calculated from ABS Cat. No. 8635.3.40.001

interpreted as a leading indicator of "stagnation" two years before the region entered that stage (see Figure 5-38).

5.10.2.10 Lack of Wet Weather Facilities and Out-of-season Activities

Lack of "wet weather" and "out-of-season activities" can contribute to the decline of a cold-water resort region (Cooper 1990:63). Although there was a possibility that this threat was not such a significant factor in warm water tourism regions like Cairns, it was decided to include this threat in the business questionnaire (Question 5.2). The decision was made despite the fact that the Cairns region tourism season lasts at least six months and even during the so-called "off-season" tourism still continues. The "off-season" is the summer which is hot and often punctuated with tropical downpours and cyclones. Far from detracting from the enjoyment of the region, the rain is quite warm and at the same time provides some relief from the hot summer sun. There were 189 responses to the question out of a possible 218 but, 55% indicated that this variable was not a problem. Of the 45% (85 respondents) who thought that it was a problem, 28 cited indoor activities, 13 cited more covered walkways in the CBD and 10 cited amusement theme parks as being the missing factor. These results would seem to indicate that this problem is not as big an issue in this region as it would be in the cold-water resorts of Europe and the United Kingdom.

5.10.2.11 Summary - Cooper's Threats

Of the nine threats tested, eight tested positive and could, therefore, be considered threats to the long-term survival of the region as a successful tourism area. Of the eight, six occurred at least two years prior to the study region entering Butler's (1980:8) "stagnation" stage and would, therefore, qualify as leading indicators (see Table 5-24). There is no suggestion here that the same nine threats are relevant to all tourism regions facing possible decline. Cooper (1990:63) listed twenty possible threats, any of which could be used to assess the long-term viability of a resort region, some of which will appear early enough to be used as leading indicators of "stagnation" or "decline".

Table 5-24: Summary of Responses to Cooper's "Threats" (Cooper, 1990:63).

	Threat	**Yes/No**	**If "yes", when?**	**Suitable as a leading indicator?**
1	Political interference on decisions	Yes	Early 1990s	Yes
2	Diminishing domestic market share.	Yes	Since 1991	Yes
3	Poor Access and Traffic Problems	Yes	Since 1991	Yes
4	LGA amalgamation	Yes	1996	No
5	Confidence in tourism industry	Yes	Declining since 1990	Yes
6	Demands for Greater Efficiency in Local Government	Yes	From 1990	Yes
7	Lack of Professional, experienced staff	Yes	As at 1998, (not a time-series question)	No
8	Growth in low-spend tourists	Yes	Declined since 1988, identifiable from 1991	Yes
9	Lack of wet weather and out-of-season activities	No		No

5.11 Summary and Conclusions

Figure 5-39 shows that the core data - accommodation takings - forms a distinct "S" shape with the point of inflection being January 1991, a time when the region was still reeling from the effects of the Pilot's Strike. The top of the curve occurs in 1997 and 1998 is declining, however, it is too early to be able to state without doubt that a new trend has been established. With the existence of the basic "S" curve established, the way is clear to examine the criteria and to attempt to locate the positions of Butler's stages on the curve.

Table 5-25 summarises the application to the Cairns region of Butler's (1980) stages, Haywood's (1986:161) leading indicators of "stagnation" and Cooper's (1990:63) threats to cold-water resort regions. Of 56 of Butler's criteria tested, 43 (76.8%) were positive and of those 15 (35%) overlapped into stages other than the one that Butler suggested. Of the fifteen, four were "decline" stage and four were "rejuvenation" stage criteria occurring in the "stagnation" stage. The eight "post-stagnation" stage criteria can be used to provide guidance for strategic planners, the aim being to reinforce the "rejuvenation" stage criteria and eliminate the "decline" stage criteria.

The seven criteria in the "stagnation" and "pre-stagnation" stages which overlap into other stages do not invalidate the model. On the contrary, the fact that these criteria can be used as leading or lagged indicators, adds to the utility of the model. The method used to decide the position of the boundaries between the stages, albeit subjective, was deemed to be most suitable. The nature of the model is such that the demarcation between stages does not have to be specific. Not all of Butler's (1980) suggested criteria apply to the study region, a point which again does not detract from the model, but serves to highlight the difference between regions.

Table 5-25 shows that Haywood's (1986:161) leading indicators of "stagnation" and Cooper's (1990:63) threats to cold-water resorts have a high success rate in the Cairns region (80% and 89% respectively). Of the latter, 75% have timing which makes them suitable for use as leading indicators. Not all,

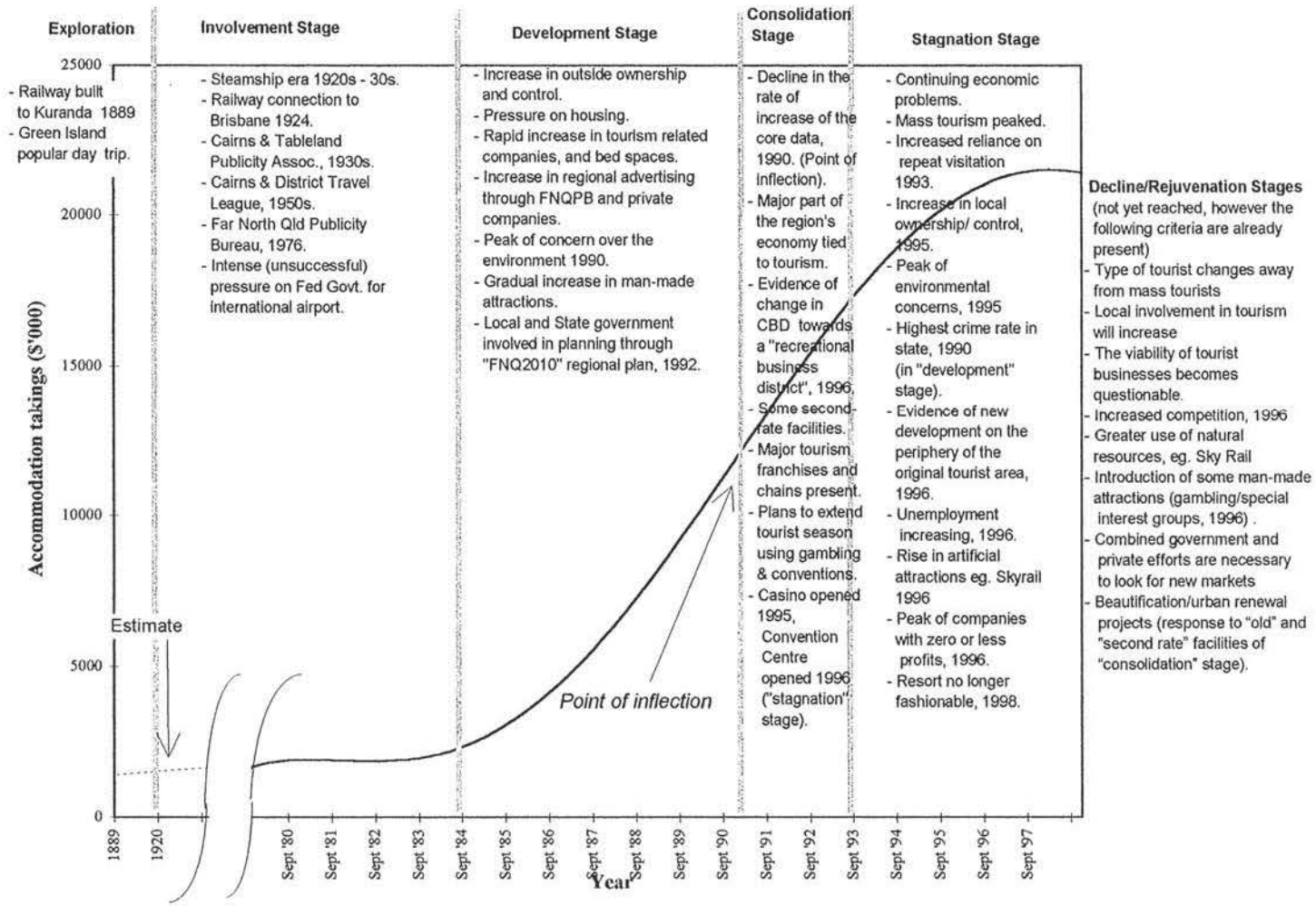


Figure 5-39: Summary of Application of Butler's (1980) Theory to the Cairns Region - Major Criteria Only.

Table 5-25: Summary of Overall Compliance of the Cairns Area with Butler's (1980) Model, Haywood's (1986) Leading Indicators of "Stagnation" and Cooper's (1990) Threats to Cold-Water Resort Regions.

1	2	3	4	5	6	7	8
Butler's (1980) stages	Period	No. of criteria tested	Criteria tested positive	Percent tested positive	Criteria occurring in this period	Criteria occurring in other periods	Percent overlap (columns 7/4*100)
Exploration	1889-1912	3	2	66.67%	2	0	0.00%
Involvement	1912-1984	9	8	88.89%	8	0	0.00%
Development	1984-1991	10	9	90.00%	6	3	33.33%
Consolidation	1991-1993	9	7	77.78%	5	2	28.57%
Stagnation	1993-	15	10	66.67%	8	2	20.00%
Decline		4	4	100.00	0	4	100.00
Rejuvenation		6	4	66.67%	0	4	100.00
Totals		56	44	78.57%	28	15	34.09%

Author		No. of criteria tested	Criteria tested positive		At least two years warning of "stagnation" stage	% valid leading indicators	
Haywood	Leading indicators	5	4	80.00%	3	75.00%	
Cooper	Threats	9	8	88.89%	6	75.00%	

however, have the same degree of significance and predicability and will differ between regions. Nevertheless their high success rate in the study region is of academic and commercial significance.

6. Conclusions and Implications

This study has been concerned with testing the applicability of Butler's TALC model in the Cairns region. The objectives of this study were:

1. to further test Butler's Tourism Area Life Cycle (TALC) theory, particularly in relation to its use as a conceptual framework for analysis, for forecasting purposes and as a strategic planning tool;
2. to expand the body of empirical knowledge on TALC theory in general, and in particular to address the dearth of TALC-related empirical evidence about Australian tourism regions;
3. to test the applicability of TALC theory to the Cairns Region and to determine timing of the stages in relation to the study region; and
4. to work towards a more universal and streamlined approach for the application of the TALC model by: testing selected threats to resort region survival (Cooper 1990:63); testing selected leading indicators of stagnation (Haywood 1986:161); and, addressing some of the criticisms and so-called "shortcomings" of Butler's (1980) theory (Haywood 1986; Getz 1992; Choy 1993; Williams 1993; Agarwal 1994).

The conclusions reached concerning each of the above aims will now be considered separately. Suggestions for future research in this field, including details of a proposed TALC computer model, will also be provided.

6.1 Further Test Butler's Model

6.1.1 Conceptual Framework for Analysis

As a conceptual framework for analysis, the TALC model proved a very useful tool. The history of tourism in the study region was traced from 1876 to 1998, and the evidence suggested or indicated a high degree of consistency between Butler's (1980) theory and the TALC in the Cairns region. Some inconsistencies

highlighted factors unique to the study region. The lack of compliance, for example, with the "stagnation" stage criterion that visitor numbers will exceed locals, emphasised the diversified nature of the economy (see Chapter Five, Section 5.5.5). Other criteria pointed to factors which, if addressed, can be used as an aid to rejuvenation in the region. One example is Butler's (1980:7) "consolidation" stage criteria that "there will be some old facilities which are regarded as second rate and far from desirable". Another is the "stagnation" stage criterion that there will be environmental problems. Both examples are problems which need attention for the long-term health of the region's tourism industry.

Where a criterion holds true, but not in the same stage that Butler (1980) suggested, there is potential for a leading or lagged indicator. In the study region, for example, mass tourism peaked at the beginning of the "consolidation" stage in 1991, whereas Butler suggested that the criterion would occur in the "stagnation" stage (see Figure 5-22). In this case, the criterion occurs prematurely and can, therefore, be interpreted as a leading indicator of possible "stagnation". The use of criteria in this way helps to monitor the health of the tourism industry for stakeholders.

As the cycle progresses, analysis of the relationship between the market and the resort area becomes possible (Cooper 1992:59). A changing tourist profile, for example, from Plog's (1972) mid-centric to psychocentric, requires a different type of infrastructure and accessibility. Spending patterns will also change. An in-depth market study, however, involving analysis of each individual market segment over time is better done separately to the initial TALC research for two reasons. First, TALC is a macro study involving the whole region and micro analysis should be avoided otherwise the process will become bogged down and extend the time it takes to produce results. Second, the results of the TALC study may indicate that there are more urgent areas requiring attention before resources are put into an in-depth market research program.

This research also facilitated identification of factors underlying tourism development in the region, including two major turning points (Cooper 1994:342). The first was the opening of the international airport in Cairns at the beginning of the "development" stage in 1984 which acted as a catalyst for large-scale tourism investment and rapid development. The second turning point was where growth started to slow down in January 1991, the point of inflection on the accommodation takings curve (the TALC curve). The change occurred during an extremely slack period for tourism in the region caused by the six-month domestic pilot's strike, a deep national recession and a not-so-deep global recession. The pilot's strike started in August 1989. The domestic recession began when the pilot's strike ended and eased off towards the end of 1991. The global recession started six months after the national recession but ended around the same time. There were two other major negative influences on the region's tourism industry at the time. The first was the cessation of direct flights to the USA by Continental Airlines in 1991 through lack of demand. The second was the scrapping of the giant mudflats development in the same year because of the local government opposition based on environmental grounds (see Chapter Five, Section 5.5.3). Other factors underlying tourism development in the region are discussed below in relation to forecasting.

6.1.2 Forecasting

The findings of this research indicate that the TALC model can be used for forecasting given three conditions. First, there has to be a knowledge of the structural forces driving tourism in the region (Cooper 1992:60 citing work on the product life cycle work by Onkvisit and Shaw 1986). The results of the TALC model, combined with Haywood's (1986:164-165) seven major economic and social forces, can be used to identify the specific underlying factors driving tourism. In the study region, these forces included improved access to the region provided by direct flights using the new airport which opened in 1984. Indirect flights through Townsville or Brisbane were possible before 1984, but the old airport was not suitable for large passenger jets used on long-haul routes such as to Japan and the USA.

Another factor driving tourism in the region was related to the environment. Tourist attractions in the area include the Great Barrier Reef, the rainforest, native animals and the panoramic views. The newspaper search identified the environment as being the most written-about topic of all the variables in the search (see Figure 5-21). There is no doubt that damage to the environment will have a negative effect on tourism but, on the other hand, excessive opposition to tourism developments will have the same effect.

Outside ownership and control, particularly the place where the bookings originated, was another factor which played a pivotal role in the study region's tourism industry. By 1998, a large and increasing proportion of bookings came from overseas agents (see Table 5-5 and Figure 5-20). At the same time, the region was losing fashionability and consequently there was an increasing incentive for travel agents to direct their clients to more fashionable resort areas (see Table 5-12). The high level of outside ownership and management may, to a degree, counteract these negative effects of outside agents where vertical integration, or vertical marketing, exists (see Figures 5-18 and 5-19). On the other hand, large scale vertical integration of tourism operations, such as existed in the Cairns region, may encourage organised mass tourism and discourage free in transit (FIT) tourism. Businesses not visited as part of the mass tour will, therefore, not benefit from the presence of the former. Consequently, an alternative to conventional marketing through travel agents needs to be found in order to reduce the level of risk associated with outside agents, management and ownership. Alternatives could include direct marketing through the internet and direct charter flights between the study region and specific markets organised from within the Cairns region. Some form of incentive or backing from local government, TTNQ and the Cairns Port Authority would encourage the latter.

The points discussed in the paragraph above are central to the findings of this thesis and so some emphasis is warranted. Other than legal issues of monopoly control, there is no suggestion here that outside ownership and control should, or could be reduced. Efforts should be made, however, to create a balance between local and outside control by using pro-active policies, such as those mentioned

above, to encourage FIT tourists (Plog's (1972) allocentrics and mid-centrics). The aim is to distribute the economic benefits of tourism more widely throughout the economy and not just to business visited as part of a package tour.

The second condition necessary for forecasting is the use of leading indicators as suggested by Haywood (1986:161) and threats as suggested by Cooper (1990:63) both of which are discussed in detail in Sections 6.4.1 and 6.4.2 below. Some of Cooper's threats can also be used as leading indicators. The third forecasting condition is that long runs of data are necessary particularly for the unit of measurement used for the TALC curve. Cooper (1992:60) states that commonly only island destinations have good data on arrivals and where the region relies on domestic tourism, arrivals data can be unreliable. Nevertheless, this research found a surprisingly large range of data formed a cubic curve when plotted (see also Section 6.4.3 below). In the absence of suitable long-run data, researchers can achieve the same end by designing one or more time-series questions using a graph format similar that used in this study's questionnaire. Bed spaces, for example, multiplied by occupancy rates over a twenty-year period would provide a suitable unit of measurement. Two or three alternative questions, however, should be designed for comparison and validation purposes.

6.1.3 As a Strategic Planning Tool

For TALC to be used as a tool in the strategic planning process it is necessary to set up TALC as a forecasting model using the three conditions discussed above. Strategic planning involves looking at the future outcomes of different scenarios and trying to identify one which is viable and consistent with the goals, or mission statement for the region (Johnson and Snepenger 1993:144; Cooper 1990:64). A way of using the TALC model for this purpose is to use sensitivity analysis, where one of the input variables is changed while holding all others constant and then looking at the likely effect on regional tourism. Input variables include Butler's criteria and other factors driving the tourism economy as discussed above. If the input variable, "access to the region", for example, was changed by the introduction of direct charter flights from the US, the outcome, the "level of tourism activity" in the region

would rise in direct proportion to the number of passengers. All other variables are assumed to remain constant.

6.2 To Expand the Body of Empirical Knowledge on TALC

Lack of empirical support for the destination life cycle concept is considered to be one of main objections to the use of the model for forecasting and strategic planning (Prosser 1997:309). Nevertheless, understanding the process of tourism region evolution and being able to predict change is a fundamental part of forecasting and planning. The cost of reacting to change increases as the need becomes more urgent (Haywood 1986:164).

This research has contributed to the body of empirical knowledge on TALC in a number of areas. First, the high correlation between Butler's (1980) model and the TALC in the Cairns region indicated that beyond doubt the model was relevant to the study area. Second, there is a dearth of TALC-related information on Australia, and North Queensland in particular, and this comprehensive study of an almost complete cycle makes a significant contribution to a relatively small data base. Third, resort regions often suffer from a shortage of data, a problem successfully addressed in this study by a unique method of obtaining long-run time-series data using a questionnaire. The method has the potential to extract data suitable to construct the life-cycle curve in the absence of available statistics. Meanwhile the choice of data suitable for the construction of the curve was found to be surprisingly wide. Fourth, a set of leading indicators and threats to resort regions were tested and proved to be very useful particularly for forecasting and strategic planning purposes. Fifth, an attempt was made to defuse the main criticisms of the model. Lastly, some viable suggestions were put forward for a computer model based on Butler's original theory and supplemented by the leading indicators and threats suggested by Haywood (1986:161) and Cooper (1990:63) respectively (see Section 6.4.4 below).

6.3 The Applicability of TALC to the Cairns Region.

The TALC stages for the Cairns region were determined according to Butler's (1980) criteria, some of which leave no room for subjectivity (see Figure 5-39). For example, the "consolidation" stage starts and the "development" stage ends at the point of inflection on the TALC curve (January 1991). Also, the "development" stage will always start near a turning point caused by a significant event which acts as a catalyst for rapid tourism growth. In the study region, the start of this stage followed the opening of the international airport. Butler's "stagnation" stage must commence before, and finish after, the peak of the TALC curve.

The study region entered the "stagnation" stage in 1993 and the TALC curve (see Figure 5.1) reached a peak in 1997 then fell slightly in 1998. Whilst one year of decline does not necessarily represent the start of a long-term trend, this is a critical period in the region's economic development. Without the implementation of specific "rejuvenation" strategies, the region is likely to enter the "decline" stage in the not-too-distant future. Some "decline" stage criteria are already present, but on the other hand so are some from the "rejuvenation" stage. A strategy which maximises the latter and minimises the former is needed if the region is to avoid the social and economic consequences associated with the "decline" stage. The primary commercial function of this model is to help make the strategic decisions necessary for "rejuvenation".

Butler (1980:9) stated that "rejuvenation" will not take place without a complete change of the attractions on which tourism in the region is based. In the study region it is not possible to completely change the Great Barrier Reef or the tropical rainforest or even the magnificent scenery, but it is possible to make a complete change in the target market in two important ways. First, the region and the country as a whole still seems to be marketed as a "hedonistic" destination, concentrating on sun, surf, sand and sex (Prideaux 1996:73). An example of the latter is an Australian TV commercial shown in the USA featuring a supposedly naked girl on a sandy beach reading a newspaper, the only thing between the camera

and her body. She is approached by a male who asks politely if he can borrow her newspaper (Australian Tourist Commission 1999). At the time of writing, TTNQ is still concentrating on the singles and couples without children market (TTNQ 2000:19). Destinations marketed in this way, including the Cairns region, tend to attract tourists, and tourism industry workers, looking for an active "night life". This kind of activity in turn attracts prostitution, drug use and criminal activity (Prideaux 1996:73). The region becomes not the sort of place for families and older people regardless of the type of attractions offered. A strategy which markets wholesome family values would be much more appropriate for the kind of attractions in the Cairns region.

The second major target market change has already been suggested. Promoters of the region could concentrate on the huge and comparatively wealthy north American family market. Packages offering affordable, direct, charter flights are essential if the region is to rejuvenate. Cairns is geographically the closest Australian holiday destination to the USA. Cheaper and quicker access to the study region from that market is therefore likely compared to the current nearest ports of entry, Sydney and Brisbane.

6.4 A More Streamlined Approach to TALC

6.4.1 Testing Selected Threats (Cooper 1990:63)

Cooper's (1990:63) threats were very pertinent to the region and would be valuable leading indicators or, if not appropriate as leading indicators, they could be used as threats to the long-term survival of tourism, as Cooper originally intended. An example of a threat which is not necessarily a leading indicator is the LGA amalgamation which occurred in the study region in 1996. The event could not be called a leading indicator of imminent "stagnation" or "decline", but it does constitute a negative influence on the tourism industry by diluting the bargaining power of tour operators (Cooper 1990:63). There are no longer two local governments which may compete to attract businesses by offering concessions that a single local government body does not have to do. Once recognised, however, the

negative effect of the amalgamation can be deliberately minimised by making allowances at executive level within the LGA. On the other hand, Cooper's threat concerning poor access to the region can be considered a leading indicator because if people cannot get to the area easily, a proportion of people will go somewhere with easier access.

6.4.2 Testing Selected Leading Indicators of Stagnation (Haywood 1986:161)

Five of Haywood's (1986:161) seven leading indicators of stagnation were tested and all proved particularly relevant to the study; the remaining two should be considered in any future TALC research. Combined with Butler's (1980) model and Cooper's (1986:63) threats, Haywood's suggestions would contribute greatly to the forecasting ability of the combined model. One of Haywood's (1986:161) indicators, for example, states that "a decline in elasticity of advertising coupled with increased price elasticity" is a leading indicator of stagnation. The Cairns region reached a peak in terms of advertising effectiveness in January 1991, which is also the point of inflection of the accommodation takings curve (see Figure 5-12 and 5-11). Had the effectiveness of money spend on promotion and advertising been monitored in terms of the TALC model, warning signals would have indicating problems ahead by 1992 at the latest. The same applies to three out of the remaining four of Haywood's leading indicators that were tested (see Table 5-16).

6.4.3 Criticisms and so-called "shortcomings" of Butler's (1980) Theory.

This section contains a discussion about the validity of the main criticisms and shortcomings of Butler's (1980) model (Haywood 1986; Strapp 1988; Williams 1993, Choy 1992, Cooper 1994; Agarwal 1994;1997). Some of the criticisms go to the heart of the theory and if valid would destroy the credibility of the model. One such criticism concerns the unit of measurement.

The unit of measurement has long been the subject of debate (Haywood 1986:159). Butler (1980) suggested that tourist numbers should be used to construct the life cycle curve. Subsequent authors have used arrivals (Weaver 1988; 1990;

1992; Cooper and Jackson 1989), number of establishments and number of rooms (France 1991) and overnight data (da Conceição Gonçalves, V. F. and P. M. R. Águas 1997). This research looked at a number of alternatives before deciding to use accommodation takings. One of the most important and unexpected findings of this research was that most of the data referred to above, when plotted, appeared to be cubic. Even the bar charts showing the number of respondent organisations to each question in the questionnaire appeared cubic in most of the figures in Chapter 5. In other words, because of their similarity, the data set used to construct the TALC curve did not really matter a great deal. The decision to use accommodation takings was based on two factors. First, it was the most complete data set available notwithstanding changes of definition and the absence of some categories such as caravan parks. Second, the data series concerns the economic effect of tourism on the region which is the main reason for tourism from the point of view of the host population. The use of this data assumes that individual tourist spending on accommodation is a reasonably consistent ratio of total spending. The choice concerning the unit of measurement, therefore, depends on a number of factors which will be different for each region and will be the result of an informed decision.

Haywood (1986:159) criticised the model because of the lack of definition of the unit of analysis, or geographical boundaries, of the tourism area. This research has uncovered nothing to suggest that the unit of analysis has to be the same for all areas. In some cases it could just be a city, such as Atlantic City, and in others cases it may be a county such as Lancaster County. In the case of the Isle of Man the unit of analysis was the whole island and for Malta it was the country. In this study the geographical boundaries were determined by the closest official boundary to the region where most of the tourism took place and for which there were some statistics. For this research, the Far North Queensland Statistical Division (FNQSD) was considered as an alternative to LGAs, but was found not suitable because it included the whole of the Cape York Peninsula. The Peninsula has other economic activities including beef cattle and a large bauxite mine at Weipa but very little tourism outside the study area. The unit of analysis depends entirely on the region,

although it must be consistent with the location of tourism activity and preferably there should be some statistics available.

Haywood (1986:256) also criticised the model because it assumed a homogeneous market. The argument was that the model ignored, for example, the possibility that the resort area can have several markets starting and finishing at different times within the TALC. The theory as suggested by Butler (1980), however, assumes that there is an aggregate market which supplies a number of tourists, but the theory does not differentiate between individual markets and markets segments. The TALC model is concerned with the life cycle of the resort area, not the life cycle of the markets or market. The latter is an independent issue and can be analysed separately if necessary. Likewise it does not appear from this research that the use of TALC implies there is any necessity to pursue a standardised marketing strategy at each stage (Haywood 1986:162; Cooper 1994:334).

A number of authors have stated that their difficulty in calibrating, or deciding the timing, of the stages, of the TALC model (Haywood 1986:157; Cooper 1994:344). The question has also been asked if all tourism regions must experience all stages. The answer to the latter question is a simple "no", as all regions are different and some commence in the "development" stage (Butler 1980:10; Haywood 1986:157; Cooper 1994:341). This thesis attempts to defuse these arguments by suggesting a method that will suit all situations and can be adapted for use by computer (see Section 6.3 above and Section 6.4.4 below). Furthermore, criteria which occur in a stage other than that suggested by Butler (1980) can be used as leading or lagged indicators.

Cooper (1994: 342) stated that there is a tendency to focus on a "single sector product", rather than a multi-sector approach such as holiday/retirement homes at Sauble Beach, Ontario. The TALC concept, however, is concerned with the aggregate of all tourism products in a tourism-based economy (Strapp 1988). Cooper also points out that there has been little attempt to use TALC in conjunction with other theories except for Lundgren (1982) who used core/periphery theory as well as

TALC to explain the growth of tourism (Cooper 1994:342). Debbage (1990) also used TALC in combination with another theory, combining Markusen's (1985) "profit Cycle" with TALC in relation to the oligopolistic control of the major suppliers of tourists to Paradise Island, Bahamas. This study also uses Butler's model in conjunction with the ideas of Haywood (1986:161) and Cooper (1990:63).

Haywood (1986), Getz (1992) and Choy (1993) argued that TALC theory is too vague and that there is, therefore, a danger of misinterpretation which could lead to inappropriate reactions. While there may be some truth in the claim that Butler's (1980) original model was vague, imprecise and left a lot of questions unanswered, the solutions to these questions have become clearer as the body of empirical evidence has grown with each TALC study. In the light of this evidence, researchers have a much better idea of what they are looking for and can be more precise in their use of the model.

6.4.4 A Computerised Version of Butler's (1980) Model is Possible

To streamline the use of any model, steps are necessary for the user and systems designer to follow. The steps include the collection, input and the manipulation of data according to a set of rules. To date, there have been various adaptations of Butler's model applicable to specific regions, each with its own set of rules, but nothing which can be applied to Butler's original model to make it sufficiently precise enough for computerisation. The so-called "vague" nature of Butler's model (see Section 6.4.3 above) is also a feature which makes it applicable to a much wider range of applications. Hence researchers revert back to Butler's model rather than build on the various adaptations (Prosser 1997:312). Any rules would, therefore, have to reflect the original model it its purest form.

The first step of the proposed model is data collection. Variables would include all Butler's criteria, most of Cooper's (1990:63) threats and Haywood's (1986:161) leading indicators. The latter two, however, are not incorporated into Butler's model. The three models are treated separately and the results of each

compared for verification of validity. Data collection for the three models should, therefore, be done at the same time, preferably employing the same highly successful technique for time series data as was used in this study's questionnaire. In order to provide background information and for validating questionnaire results, a list of significant events in the history of the region must be compiled by scanning newspapers, obtaining information from oral histories or both. Any available secondary data relevant to the TALC model should also be collected. Data collected must strictly reflect Butler's (1980), Haywood's (1986:161) and Cooper's (1990:63) criteria.

The second step is to input the questionnaire results and any other data into either specifically designed application software or a spreadsheet operated by a macro program. In the case of the latter, an input format similar to the one used in this research would be employed. Output would include a TALC curve with some form of curve identification such as the 5th degree polynomial used in this research. The curve could be cubic, or if the resort is still in the "development" stage it may be exponential. There is also the possibility that the curve could contain more than one TALC. The remainder of the output would be Butler's (1980) criteria, Haywood's (1986:161) leading indicators and Cooper's (1990:63) threats in graphical and tabular form. Each set of variables would be accompanied by whatever statistical measures are considered necessary, such as measures of dispersion and central tendency.

The third step is to examine the graphs and tables output in Step Two to see which criteria, leading indicators and threats are present. The researcher executing this step needs to be familiar with all relevant theory. The last step involves an optimisation program. The only data that is needed on each criteria is a "yes" or "no" indicating if the criterion is present in the study region, and an appropriate date. This data can be input straight from the program used in Step Two. Optimum compliance

can then be calculated using an iterative[1] process the object of which is to maximise the number of valid criteria in their correct stages according to Butler's (1980) theory. The results of the iterative process will then have to be adjusted to make sure there is compliance with specific requirements. At the point of inflection, for example, the "development" stage must end, and the "consolidation" stage start (see Section 6.3 above). The iterative process is not unusual in optimisation programs and has been used successfully in similar (commercial) applications by the author, particularly in relation to long-run profit maximisation and simulation. The process, however, is only viable by computer because of the number of calculations necessary. The program could be designed to output a diagram similar to Figure 5-39 giving the timing of the stages superimposed onto the TALC curve.

Criteria which are outside the stage suggested by Butler can be interpreted as either a leading or lagged indicator, depending on whether it is located before or after the correct stage. Leading indicators and threats derived from Cooper's (1990:63) and Haywood's (1986:161) work would be interpreted separately. If there is inconsistency between the former and the result's of Butler's model, the whole process needs to be checked for validity, particularly in regard to data input. Program design and implementation would not necessarily be straight forward. There may be a necessity to attach weightings, say on a scale of 1 to 10, to each criteria according to the degree of compliance with the theory. Nevertheless, it is possible to write a program which will maintain the integrity of Butler's original model.

6.5 *Implications of TALC generally*

The acceptance of the relevancy of the model to a region has a number of implications, not the least of which is that resorts have a life, and therefore can decline given certain circumstances. The resort life cycle concept contradicts the beliefs, hopes and wishes of local entrepreneurs and developers in the unlimited growth potential for tourism (Keys 1985:50). As the TALC matures, rapid growth

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[1] An iterative process is common, multi-purpose, computer programming technique.

gives way to a more stable tourism industry. Many construction workers, developers and other investors will be required to change occupations and trades from building and development to tourism or some other more appropriate occupation or exit the region. There are also related issues of family mobility such as the need for permanence of teenage children at high school and partners with careers. Moreover, there is the very significant issue of financial investment by local people and others in developments which may end up sending them bankrupt in the latter part of the cycle.

To summarise the above point, while the concept of a resort life cycle may be readily acceptable in an abstract form to people whose livelihood does not depend on tourism, it will not necessarily be so for those involved in tourism. Some tourism industry resistance to TALC may exist because of denial of the concept of economic decline and a fear of the unknown. There will, however, be individuals with foresight who recognise the value of the model. The implication for exponents and practitioners of TALC theory is that in order for the model to be useful to a region the concept needs to be accepted by key people, some of whom may be opposed to it initially.

6.6 Suggestions for Further Research

Suggestions put forward in relation to the collection of data and the computerisation of the model could be implemented using the information provided in existing research (see Section 6.4.4). The model would still be in Butler's (1980) original, generally accepted form, but with the addition of Haywood's (1986:161) leading indicators and Cooper's (1990:63) threats. The model would have to be maintainable on a daily basis by a non-expert in TALC, but the output would need to be interpreted and implemented by a TALC professional for maximum benefit to the client region.

Also, as in many other studies, this research did not reach the "post-stagnation" stage which remains under-researched. More data is needed on rejuvenation strategies and symptoms and causes of "decline". More research will

enable the formulation of a more complete set of leading indicators of "stagnation" and "decline". The latter is particularly true in the case of Australia and New Zealand, both of which are major holiday destinations.

Another TALC-related area about which there does not seem to be much research is the effect of unforseen occurrences such as war, flood, cyclones, and crippling strikes. From conversations with questionnaire respondents there is reason to believe that tourism in the Cairns region slows down for several weeks after even the smallest cyclone. Existing bookings seem to be re-routed to other resort areas when it is not necessary. In addition, the effect of the 1989-90 pilot's strike was no less than devastating to the area. Research into causes, effects and strategies for avoidance of effects would no doubt be of benefit to tourism regions.

6.7 Summary of the Research Contribution

This research has developed a method whereby Butler's (1980) model can be used in its original form without having to be changed to suit specific applications as has been the case in the past (Strapp 1988; Debbage 1990; Haywood 1986:158; Williams 1993; Agarwal 1994; Knowles and Curtis 1999; Priestly and Mundet 1998; Keller 1987). The advantage of being able to use the original theory without change is its versatility and adaptability to a wide range of resort regions. Inconsistencies between the ideal model and the real situation are used to highlight factors unique to the study region, such as the structural forces underlying tourism industry development. Using the latter, a forecasting method has been successfully tested using prematurely occurring criteria as leading indicators, reinforced and verified by those suggested by Haywood (1986:161) and "threats" suggested by Cooper (1990:63).

An unusual and successful time-series data collection technique has been developed and tested using a blank graph to capture respondents' perceptions. Despite its subjective nature, this data collection procedure proved to be very accurate when checked against other sources. In the absence of suitable statistics, the method can be used to obtain data for construction of the basic TALC curve. The

same technique can also be used to test for the existence of Butler's (1980) criteria, Haywood's (1986:161) leading indicators of "stagnation" and Cooper's (1990:63) threats.

The thesis addresses a number of criticisms and so-called "shortcomings" of Butler's (1980) theory (see Section 6.4.3). Suggested solutions include a practical calibration method derived from Butler's (1980) original theory that is suitable for computerisation. Further, the research found that the whole TALC analysis process could be computerised, thus making the commercial application of the model a more viable proposition. Criticism regarding the unit of measurement was found to be much less of a problem than previous researchers indicated, as was controversy surrounding the choice of the unit of analysis. In addition, the assumption of a homogeneous market was found to be not necessarily the case. In fact, any market structure can be assumed without affecting the operation of the model.

The thesis adds to the existing literature a comprehensive body of TALC information and data relating to Far North Queensland. This new information, combined with existing TALC knowledge, has the potential to be of great value to the Cairns region. Outputs of the model include a statement of where the study region is on the TALC model. In addition, there are "rejuvenation" suggestions, some of which are crucial and without which there is unlikely to be much, if any, "rejuvenation". There are, however, a number of hurdles to overcome, not the least of which is a lack of acceptance of the relevance of the research or its findings by one of the region's key decision makers, Mr. Ian Keen, head of TTNQ..

6.8 Concluding Observations

Butler's (1980) TALC model is an ideal (neither true nor false but empirically based) and the difference between it and the real situation in a region is the focus of the researcher's attention (Harrison 1995, quoting Weber, 1949). Any resort that is serious about the business of tourism should have an on-going and up-to-date model to monitor the health of the industry and assist in forecasting and strategic planning. TALC has the potential to be of immense value to tourism

regions, specially if it can be computerised and standardised as suggested in Section 6.4.4. In particular, the model can be used to avoid the negative impacts of tourism (Tooman 1997).

The model's utility is as a framework for primary analysis of a tourism region, the aim of which is to identify areas needing more in-depth analysis as part of an overall marketing effort. Used in this way, it would be unwise to release the findings of a TALC analysis to the general public if they could be interpreted as portraying a negative outlook for the tourism industry. The effect on tourism investment would be counter-productive to the aim of improving prospects for the industry.

The answer to Haywood's (1986) question, "can the tourist area life cycle be made operational?" is an emphatic "yes" and the way to go about it is briefly outlined in Section 6.4.4. A fitting end to this thesis is, therefore, a restatement of some profound words by Getz (1992:752) from Chapter Two to the effect that TALC has the:

> "potential to advance the theory and practice of tourism planning, particularly as a conceptual framework within which long-term changes can be forecast and strategies for land use, economic development and marketing can be harmonised".

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Appendix 1

Structural Forces Driving Tourist Area Evolution

Haywood proposed the following seven major economic and social forces which collectively determine the ultimate success of any tourist area:

1. Rivalry among existing tourist areas. This requires the use of advertising, the development of new attractions and promises of increased service and hospitality.
2. Developers and development of new tourist areas. This could effect the profitability and visitation rates of existing areas.
3. Substitutes for the tourism/travel experience. For example, videos, home swimming pools and the like. This will effect the tourism industry depending on the elasticity of demand for both.
4. Environmentalists and concerned publics who oppose tourism and tourism development. Haywood makes the point that these forces may encourage the aesthetic sensibilities of developers and visitors.
5. Transport companies, tour operators, travel intermediaries, accommodation suppliers and their bargaining power. Haywood states that some these companies are large with considerable bargaining power and they can influence the costs of travel to a particular destination and therefore encourage or discourage travel to an area. They can also squeeze the profitability of the industry.
6. Tourists, their needs, wants, perceptions, expectations and price sensitivity.
7. Governmental, political and regulatory bodies and forces with regard to taxation, education, immigration and customs, transport, marketing, culture, environment, development, financial assistance. Governments can assist the industry or strangle it (Haywood 1986:166).

Changes in the above forces will impact on the tourist area and, therefore, need to be taken into account along with the tourism area life cycle. Accordingly, Haywood concluded that the life cycle theory is not sufficient on its own and tourism planners need to look beyond this theory if they are "to get meaningful insights into how to manage a tourist area as it evolves" (Haywood 1986:167).

Appendix 2 - List of Variables

Glossary of Data Names

Core Data - (data for possible use in forming the "S" curve)

ROOMS	Number of rooms available
VISNITS	Visitor nights
VISNUM	Visitor Numbers
ACCOMTAK	Accommodation takings
BEDSPACE	Available bed spaces
ROOMOCRT	Room occupancy rate
BEDOCCRT	Bed occupancy rate

List of variables for Questionnaire

Questions relating to the present time - (non-times series)

1.0 BUSTYPQ Type of business

(1) Accommodation
(2) Attractions and activities
(3) Convention and incentive services
(4) Finance, legal and research services
(5) Restaurants and entertainment
(6) Retail
(7) Tourism associations and government
(8) Tourism support services
(9) Tours
(10)Transport

1.1 OWNNOWQ1 Company structure at this time (number 1):
OWNNOWQ2 Company structure at this time (number 2):
OWNNOWQ3 Company structure at this time (number 3):

(1) sole proprietor
(2) partnership
(2) privately owned company
(3) publicly listed company (stock market listed)
(4) federal government owned
(5) state government owned
(6) local government owned

1.2 OWNLOCQ Location of current owners (or the majority of current owners)

(1) Local
(2) Queensland, but not in the FNQ region.
(3) Interstate

(4) Overseas

1.3 YEARSTQ Year started business in the Cairns region?

1.4 NUMOWNQ1 Number of owners
NUMOWNQ2 Time series, to be re-coded at data entry time using the following key (it is not important to the model if there are more than 1 owners of the same type):
(1) Local
(2) Queensland, but not in the FNQ region.
(3) Interstate
(4) Overseas

2.1 ENVIRNQ Is the original attraction under threat, ie are there environmental concerns?
(1) Not at all
(2) A little
(3) Controllable threat
(4) Too much
(5) Irreversible threat

3.1 INFLUEQ Degree of political influence
(1) None at all
(2) Minimal
(3) Acceptable
(4) Too much
(5) Total control

3.2 AMALGMQ Affect of amalgamation of Mulgrave Shire and Cairns City on business.
(1) Highly negative
(2) Negative
(3) None
(4) Positive
(5) Highly positive

4.1 FINRESQ Financial restrictions and low budgets (present time only).

(1) Rapidly getting tighter
(2) Slowly getting tighter
(3) No change
(4) Slowly getting easier
(5) Rapidly getting easier

4.2 ADVTEFQ Is advertising expenditure tending to become more or less effective for every dollar spent? (1 = "more" or 2 = "less")?

4.3 STAFFQ Lack of professional, experienced staff? (1 = "readily available" or 2 = "shortage")

4.4 VISPNDQ Visitor expenditure:
(1) Much more
(2) More
(3) The same
(4) Less
(5) Much less

5.1 PORFACQ Do some older, deteriorating, tourist facilities exist? (1 = "yes" or 2 = "no")?

5.2 WETFACQ Does the region lack wet weather facilities and out-of-season activities (yes or no)?

5.3 ACCESSQ Access to the region from overseas.

(1) Excellent
(2) Good
(3) OK
(4) Not very good
(5) Poor

6.1 FASHONQ Is Cairns becoming more or less fashionable?

(1) Becoming much more fashionable
(2) Slowly becoming more fashionable
(3) Staying the same
(4) Slowly becoming less fashionable
(5) Becoming much less fashionable

7.1 COMPETQ1 Are new and accessible competing destinations appearing (1 = "yes" or 2 = "no")?

Time Series data

8.1 OWNERSQ Involvement/ownership (local ownership, some outside investment, more outside investment, majority outside investment, all outside investment. Graph type question).

(1) Local ownership
(2) Some outside ownership
(3) Majority outside ownership
(4) All outside ownership

8.2 MANAGEQ Involvement of locals in management (local management, some imported management, all imported management.).

(1) All management sourced locally
(2) Some management from outside the region
(3) Majority management from outside the region
(4) All management from outside the region

8.3 MINEESQ Minimum number of workers over the period (including owner/workers).
MAXEESQ Maximum number of workers over the period (including owner/workers)
NUMEESQ Number of employees

8.4 CONFIDQ Lack of confidence in tourism industry.

(1) Total confidence
(2) Very high
(3) High
(4) Neutral
(5) Low
(6) Very low
(7) No confidence

8.5 ATTVISQ Attitude of locals to visitors, graph type question.

(1) Happy to see visitors
(2) Apathy towards visitors
(3) Annoyance
(4) Antagonism

8.6 ADVERTQ Amount of tourism advertising and promotion expenditure (graph advertising and promotion as a percentage of total expenditure to get an idea of the effectiveness of each dollar used).

(1) 10%
: :
: :
(10) 100%

8.7 PROFCPQ Profit levels as a percentage of capital investment.

(1) 10%
: :
: :
(10) 100%

8.8 OCCUPYQ Capacity levels (occupancy rates, etc).

(1) 10%
: :
: :
(10) 100%

8.9 ORIGBKQ Where did bookings originate.

(1) Mostly locally
(2) Mostly from Australian metropolitan agents
(3) Mostly from overseas agents
(12) Local and interstate
(23) Interstate and overseas
(13) Local and overseas

8.10 FIRSTMQ Percentage of first time visitors.

(1) 10%
: :
: :
(10) 100%

8.11 TYPTURQ Type of tourist (eg Cohen's (1972), "Drifter", "Explorer", "Individual mass tourist" and "Organised mass tourist"). Graph type question which, for better respondent comprehension referred to as "Unorganised tourist", "Organised tourist", "Unorganised mass tourist" and "Organised mass tourist". This proved difficult to address during the pilot study and so the question was changed to identify the percentage of group travellers (compared to FIT) over the time period.

0% 100%

8.12 COMPETQ2 Degree of competition from operators, resorts or industries located in other regions either inside or outside Australia.

(1) None
(2) Low
(3) Medium/low
(4) Medium
(5) Medium/high
(6) High

8.13 PROFCSQ Profit margin per customer/client.

(1) Very high
(2) High
(3) Medium/high
(4) Medium
(5) Medium/low
(6) Low
(7) None
(8) Negative

List of variables for newspaper search (mainly Cairns Post).

ADVERTN Amount of tourism advertising and promotion expenditure (number of advertisements in local paper).

Attitude of locals to visitors (number of letters to editor):

ATVISN1A Locals happy to see visitors
ATVISN1B Locals apathetic towards visitors
ATVISN1C Locals showing annoyance towards visitors
ATVISN1D Locals showing antagonism towards visitors

Attitude of locals to visitors (number of articles):

ATVISN2A Locals happy to see visitors
ATVISN2B Locals apathetic towards visitors
ATVISN2C Locals showing annoyance towards visitors
ATVISN2D Locals showing antagonism towards visitors

CBDRBDN Articles about the transition from Central Business District (CBD) to Recreational Business District (RBD). (perhaps measuring the proportion of businesses to recreational establishments)

Level of confidence in tourism industry in Cairns region (number of letters to the editor)

CNFIDN1A Total confidence in tourism
CNFIDN1B Very high level of confidence in tourism
CNFIDN1C High level of confidence in tourism
CNFIDN1D Neutral level of confidence in tourism
CNFIDN1E Low level of confidence in tourism
CNFIDN1F Very low level of confidence in tourism
CNFIDN1G No confidence in tourism

Level of confidence in tourism industry in Cairns region (number of articles):

CNFIDN2A	Total confidence in tourism
CNFIDN2B	Very high level of confidence in tourism
CNFIDN2C	High level of confidence in tourism
CNFIDN2D	Neutral level of confidence in tourism
CNFIDN2E	Low level of confidence in tourism
CNFIDN2F	Very low level of confidence in tourism
CNFIDN2G	No confidence in tourism

Is the original attraction under threat, ie are there environmental concerns (number of letters to the editor).

ENVIRN1A	No threat to the environment caused by tourism
ENVIRN1B	A little threat to the environment caused by tourism
ENVIRN1C	Controllable threat to the environment caused by tourism
ENVIRN1D	Too much threat to the environment caused by tourism
ENVIRN1E	Irreversible threat to the environment caused by tourism

Is the original attraction under threat, ie are there environmental concerns (number of articles).

ENVIRN2A	No threat to the environment caused by tourism
ENVIRN2B	A little threat to the environment caused by tourism
ENVIRN2C	Controllable threat to the environment caused by tourism
ENVIRN2D	Too much threat to the environment caused by tourism
ENVIRN2E	Irreversible threat to the environment caused by tourism
EXTENDN	Efforts to extend the tourist season (Casino, Convention Centre)

Political interference on business decisions (other than those directly controlled by legislation).

INFLUENA	No political control over the decision making process
INFLUENB	Minimal control over the decision making process
INFLUENC	Acceptable political control over the decision making process
INFLUEND	Too much control over the decision making process
INFLUENE	Total political control over the decision making process
LGAEFFN	Demands for efficiency in local government and entrepreneurial activity (number of letters to the editor and articles)
PORFACN	Some facilities second rate or outdated (number of newspapers and letters to editor)
REDRCTN	Redirected foci of tourist attraction (number of letters to the editor and number of articles)

TRAFICN	Poor access and traffic problems, (number of letters to the editor and articles.)
URBRENN	Beautification/urban renewal (number of articles)
MAJPRGN	Major projects, starts completions, announcements etc

Attitude to tourism related development

DEVATTNA	Attitude is strongly in favour of tourism related development
DEVATTNB	Attitude is in favour of tourism related development
DEVATTNC	Attitude is apathetic towards tourism related development
DEVATTND	Attitude is against tourism related development
DEVATTNE	Attitude is strongly against tourism related development

Statistical data which may be available from sources such as Tourism Tropical North Queensland, the Bureau of Tourism Research and the Cairns City Council.

ADVERTF	Amount of tourism advertising and promotion expenditure (FNQPB budget)
APPEALF	Degree of appeal to overseas visitors (FNQPB, BTR)
COMPETF	Degree of competition from operators, resorts or industries located in other regions either inside or outside Australia (number of competitors).
DOMSHRF	Share of Domestic market (BTR, FNQPB)
FIRSTMF	Percentage of first time visitors
LENSTYF	Length of stay (BTR, FNQPB)
LONGHLF	Dependence on long holiday market, difficulty entering short holiday market, (FNQPB) (probably a "yes" or "no" is appropriate).
OCCUPYF	Capacity levels (occupancy rates).
ORIGBKF	Where did bookings originate.
PATERNF	Pattern of marketing emerges (FNQPB).
REDRCTF	Redirected foci of tourist attraction (FNQPB).
RESDATF	Shortage of research data (probably a "yes" or "no" is appropriate).
SEASONF	Pattern of seasonal visitation?(visitor nights) (1 = "yes", 2 = "no").
STRATPF	Evidence of Strategic Planning, or lack of? (1 = "yes", 2 = "no").
TURATF	Ratio of tourists to residents.
TURECOF	Proportion of the economy involved in tourism (FNQPB, BTR etc.).
TYPTURF	Type of tourist (eg mostly adventurous, mass tourist etc.
URBRENF	Beautification/urban renewal (City Council, number of projects).

VISPNDF	Growth of low spending tourists - visitor expenditure (BTR)

Other.

LEGGAM	Legalisation of gambling (ring casino).
PROPTNR	Property turnover rates (REIQ).
TRAFIC	Are there traffic problems (survey number 1).
FNQEB:	Far North Queensland Promotion Bureau.
BTR	Bureau of Tourism Research (Brisbane).
REIQ	Real Estate Institute of Queensland.

Appendix 3

Preamble to Questionnaire

The Purpose of This Study

This study, which has been undertaken with the approval and help of the regional tourism representative body, **Tourism Tropical North Queensland,** is part of a PhD program and is designed to identify the stage of maturity of the Cairns region as a tourism area. The diagram below shows an idealised version of a Tourism Area Life Cycle which is similar in many ways to the well-used Product Life Cycle model as used in marketing. Tourism Area Life Cycle theory states that a tourism region goes through a number of growth stages until it finally reaches the "Stagnation" stage, at which point action must be taken to rejuvenate the region otherwise economic decline sets in.

This questionnaire is going to a cross-section of organisations involved in tourism, to some degree, in the Cairns region and will take from half an hour to an hour to complete. Each of the questions below will help to determine the validity of the model and, depending on its applicability to the Cairns region, will help to identify at which stage of the Cycle the Cairns region is at present and where it has been. Possible future scenarios can then be suggested.

The results of the survey will be published and, it is hoped, will prove useful to private companies and statutory bodies for planning purposes. There are also implications for local, state and federal government policy.

All responses will remain confidential.

TESAG thanks you for your cooperation.

Appendix 4

Informed Consent Form for Questionnaire

This administrative form
has been removed

Appendix 5

Initial Verbal Telephone Approach

Initial Questionnaire Telephone Approach

Hello, could I speak to _____ please? _____ my name is Ted Berry from JCU and we are developing an economic model for the Cairns/Port Douglas region, in conjunction with Tourism Tropical North Queensland, based on the tourism life cycle model. This is similar to the product life cycle where a product is launched and sales increase and then at some stage sales will peak and start to decline unless some action such as a new model being brought out or new markets are found.

We were hoping that you would give us the benefit of you business experience by completing a questionnaire.

Appendix 6

Questionnaire

Department of Tropical Environment Studies and Geography (TESAG)
James Cook University
Cairns Campus

Regional Questionnaire

Involving

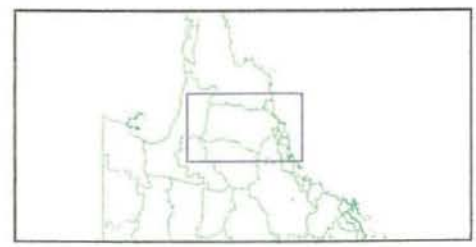
Business and other Organisations in the Local Government Areas

of

Cairns City, Douglas, Atherton, Mareeba, Eacham & Johnstone Shires



Contact:
Ted Berry
TESAG
JCU, Smithfield, Cairns
(07) 40 421081



The Purpose of This Study

This study, which has been undertaken with the approval and help of the regional tourism representative body, **Tourism Tropical North Queensland,** is part of a PhD program and is designed to identify the stage of maturity of the Cairns region as a tourism area. The diagram below shows an idealised version of a Tourism Area Life Cycle which is similar in many ways to the well-used Product Life Cycle model as used in marketing. Tourism Area Life Cycle theory states that a tourism region goes through a number of growth stages until it finally reaches the "Stagnation" stage, at which point action must be taken to rejuvenate the region otherwise economic decline sets in.

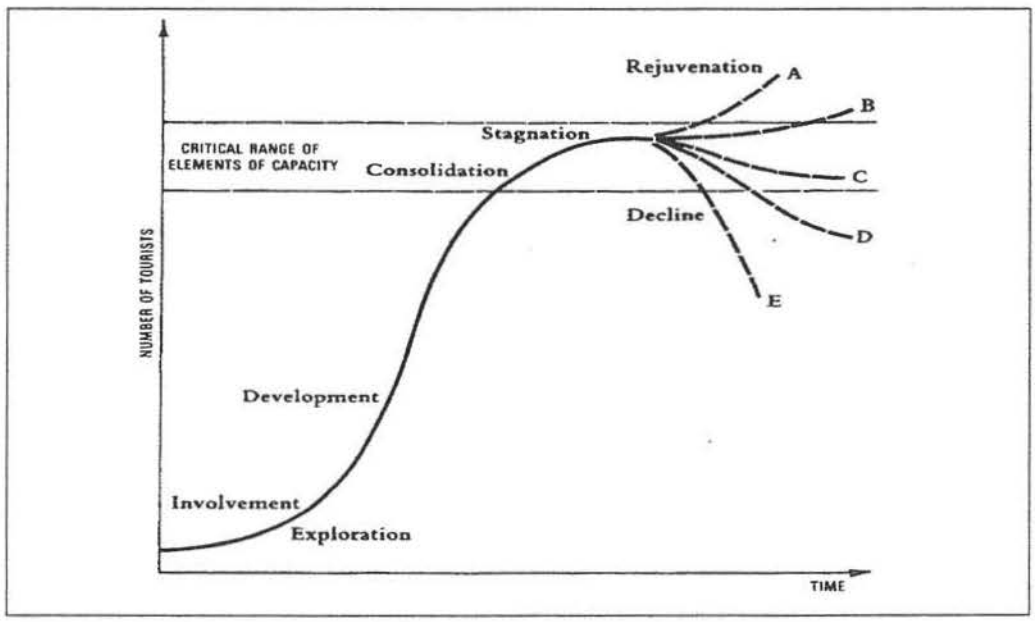
This questionnaire is going to a cross-section of organisations involved in tourism, to some degree, in the Cairns region and will take from half an hour to an hour to complete. Each of the questions below will help to determine the validity of the model and, depending on its applicability to the Cairns region, will help to identify at which stage of the Cycle the Cairns region is at present and where it has been. Possible future scenarios can then be suggested.

The results of the survey will be published and, it is hoped, will prove useful to private companies and statutory bodies for planning purposes. There are also implications for local, state and federal government policy.

All responses will remain confidential.

TESAG thanks you for your cooperation.

Hypothetical Evolution of a Tourist Area



Butler, R. W. 1980. "The Concept of a Tourism Area Cycle of Evolution: Implications for Management Resources ." *The Canadian Geographer* 24(1):5-16.

Section 1 - Business Ownership Profile

1.1 Please describe the nature of your organisation's main activity.

(1)	Accommodation	☐
(2)	Attractions and activities	☐
(3)	Convention and incentive services	☐
(4)	Finance, legal and research services	☐
(5)	Restaurants and entertainment	☐
(6)	Retail	☐
(7)	Tourism associations and government	☐
(8)	Tourism support services	☐
(9)	Tours	☐
(10)	Transport (include. car rentals etc.)	☐

1.2 Is your employer (or your business) currently? (Multiple boxes can be ticked.)

(1)	sole proprietor	☐
(2)	partnership	☐
(3)	privately owned company	☐
(4)	publicly listed company (stock market listed)	☐
(5)	federal government owned	☐
(6)	state government owned	☐
(7)	local government owned	☐

1.3 Where are the present owners of your company located, or the major share holders in the case of multiple owners?

(1)	the study region as shown on the front cover	☐
(2)	elsewhere in Queensland	☐
(3)	interstate	☐
(4)	overseas	☐

1.4 What year did your business commence operations in the Cairns region (regardless of who owned it?

19.....

1.5 If your organisation has had previous owners, how many owners has it had and what years did it change hands?

	City or, if overseas, country of residence of majority shareholder(s) selling the business	Year sold
(1) (most recent)	.....	19.....
(2)	.....	19.....
(3)	.....	19.....
(4)	.....	19.....
More	.....	

Section 2 - Scenic attributes (circle the appropriate number)

2.1 This question relates to the natural beauty and scenic attributes of the region, bearing in mind that this is one of the main reasons why tourists come here.

In your opinion, is the original physical attraction of the region threatened in any way?

1	2	3	4	5
not at all	a little	controllable threat	too much	irreversible threat

Section 3 - Political Influence

3.1 Do you think the region has been affected because of "once-off" decisions by politicians, federal, state or local (eg. Cairns Central)

1	2	3	4	5
not at all	minimal affect	acceptable affect	too much	total control

Comment?.....

3.2. What is the effect, if any, on the region, of the amalgamation of Mulgrave Shire and Cairns City on your business?

1	2	3	4	5
highly negative	negative	none	positive	highly positive

Comment?.....

Section 4 - Business/Financial

4.1 This question refers to your company's operating and capital budgets.

In your firm, at present, is budgeting getting tighter?

1	2	3	4	5
rapidly getting tighter	slowly getting tighter	no change	slowly getting easier	rapidly getting easier

4.2 Is your advertising expenditure tending to become more, or less, effective for every dollar spent?

more ☐ same ☐ less ☐

4.3 In relation to your business, would you say experienced staff are readily available on the labour market, or is there is a shortage?

readily available ☐ about right ☐ shortage ☐

4.4 In your opinion, are visitors tending to spend more or less per day compared to the past 5 years?

1	2	3	4	5
much more	more	the same	less	much less

Section 5 - Facilities

5.1 This section refers to tourist facilities, including both public facilities provided by all levels of government, and privately owned hotels, motels, resorts and transport facilities etc.

In your opinion, are there, in the Cairns region, tourist facilities which you consider are becoming worn out through lack of maintenance and/or out-dated?

Yes ☐ No ☐

What are they? (1) .....

(2) .....

(3) .....

(4) .....

5.2 Does the Cairns region lack wet-weather facilities and out-of-season (October to late April) activities?

Yes ☐ No ☐

If "yes", please list them? .....

.....

.....

5.3 Referring to major markets such as the USA, Europe and parts of Asia, do you think airline access (services) to this region are:

1	2	3	4	5
excellent	good	OK	not very good	poor

Section 6 - Image of the region

6.1 In your opinion, at the present time, is Cairns becoming more or less fashionable, (meaning "in vogue", or a desirable place to visit), for tourists, compared to the last five years?

1	2	3	4	5
becoming much more fashionable	slowly becoming more fashionable	staying the same	slowly becoming less fashionable	becoming much less fashionable

Section 7 - Competition

7.1 Are new and accessible competing destinations appearing outside the region?

Yes ☐ No ☐

If "yes" what are they? (1) .....

(2) .....

(3) .....

(4) .....

(5) .....

Section 8

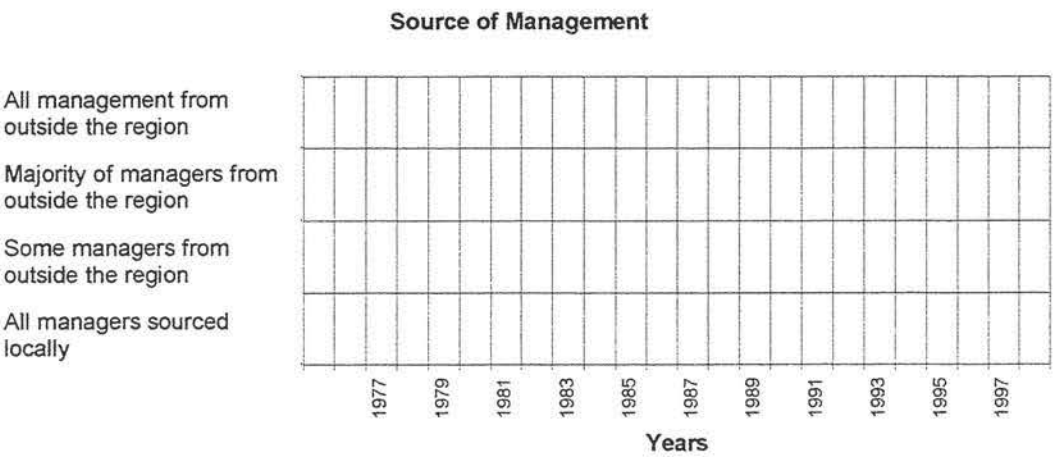
This section asks you to draw a line on each graph for each year on the horizontal axis, essentially reflecting your personal opinion (or "gut feeling"). Even if you were not in the region as far back as 1976, or your company did not exist, you may have a good "feel" for what the situation was through conversations with colleagues or through company records. If you really have no idea of the situation in some years, discontinue the line through those years. By aggregating a large number of subjective responses from informed people such as yourself, we hope to get a reasonably accurate picture of how things were.

It is strongly suggested that you use a pencil, so that, if you are not happy with the result, you can rub it out and do it again.

8.1 For your business, which of the following headings best describes the company's ownership over the period 1976 - 1998? (The term "outside investment" refers to ownership outside the study area as described on the cover page.)



8.2 Please indicate as best you can, the sources of management in your organisation over the time period in question. (As in question 8.1, the term "outside" refers to management from outside the study area as described on the cover page.)



8.3 (a) What is the **minimum** number of staff (employees and owners) your company has had at any one time between 1976 (or since commencing operations in the region if that date is after 1976) and 1998?

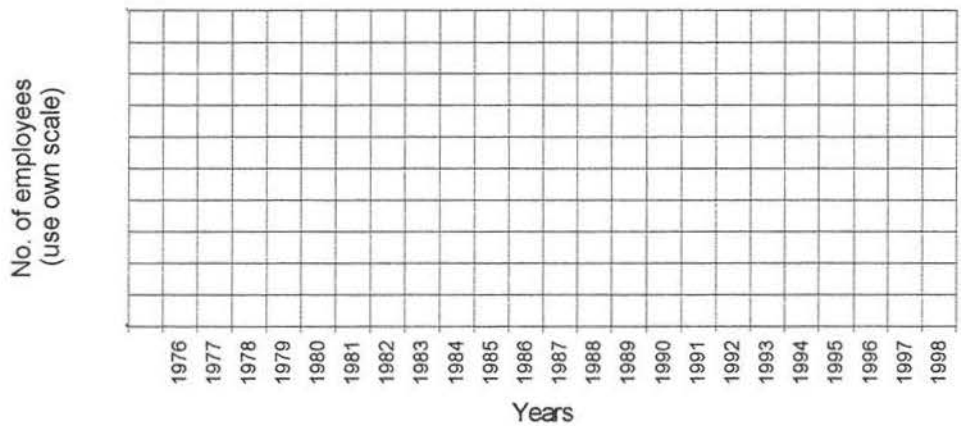
.....

(b) What is the **maximum** number of staff (employees and owners) your company has had at any one time between 1976 (or since commencing operations in the region if that date is after 1976) and 1998?

.....

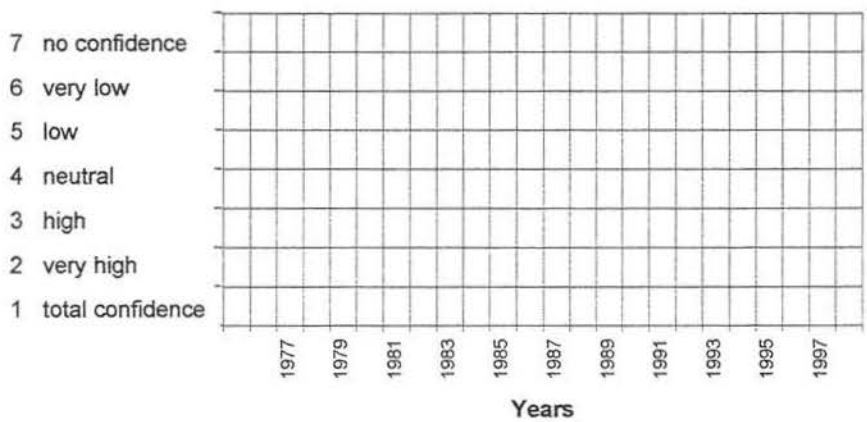
(c) Please indicate, as closely as possible, the size of your workforce over the study period, using the answer to (a) above as the lowest value on the vertical axis and the answer to (b) as the highest value on the same axis.

Number of Employees



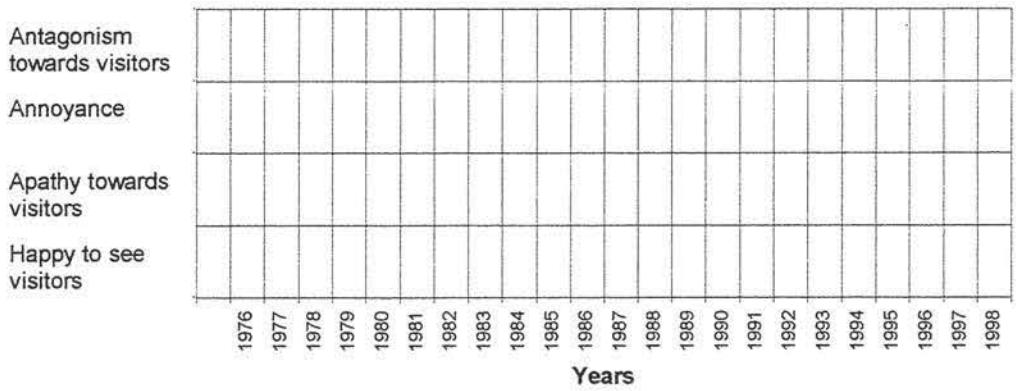
8.4 In your opinion, what is, and was, the level of confidence in the business community in the Cairns region over the time period in question?

Level of Confidence in the Tourism Industry over Time



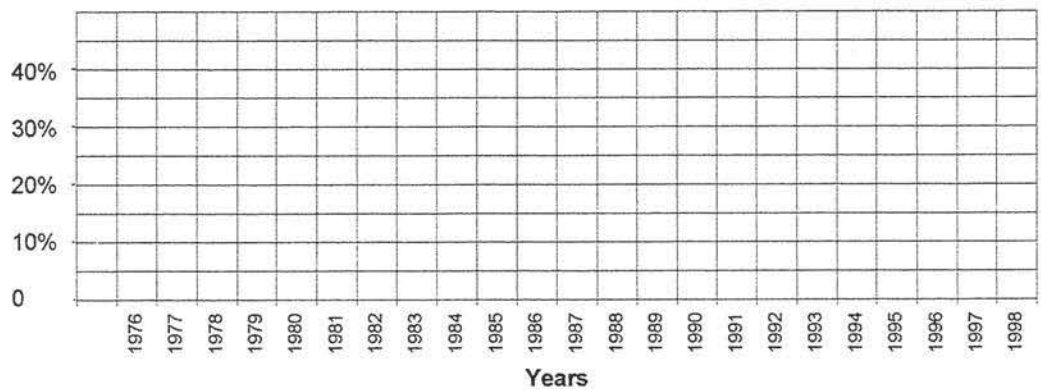
8.5 Using the headings below, how would you describe the attitude towards tourists by the general public, over the period 1976 -1998?

Attitude Towards Tourists

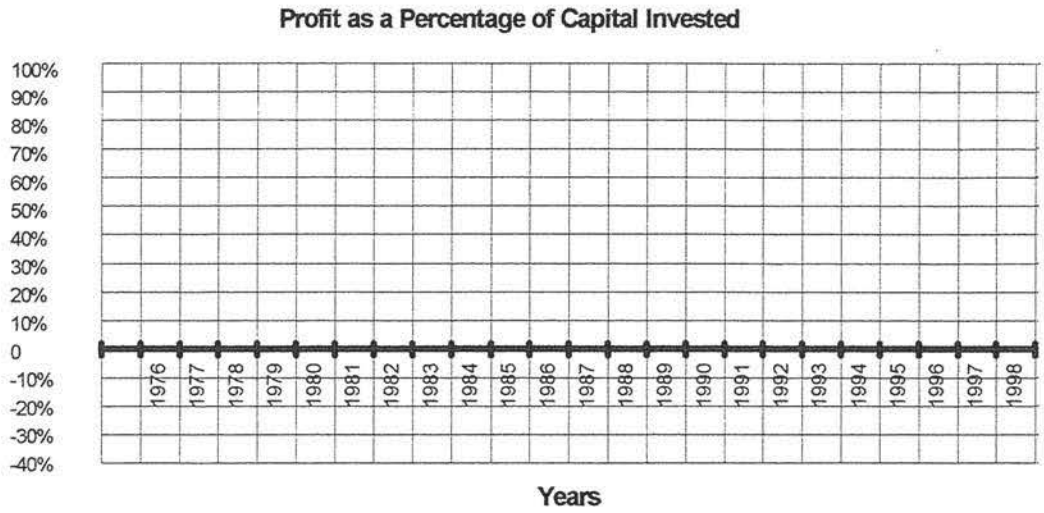


8.6. Please complete the graph below for the period 1976 - 1998.

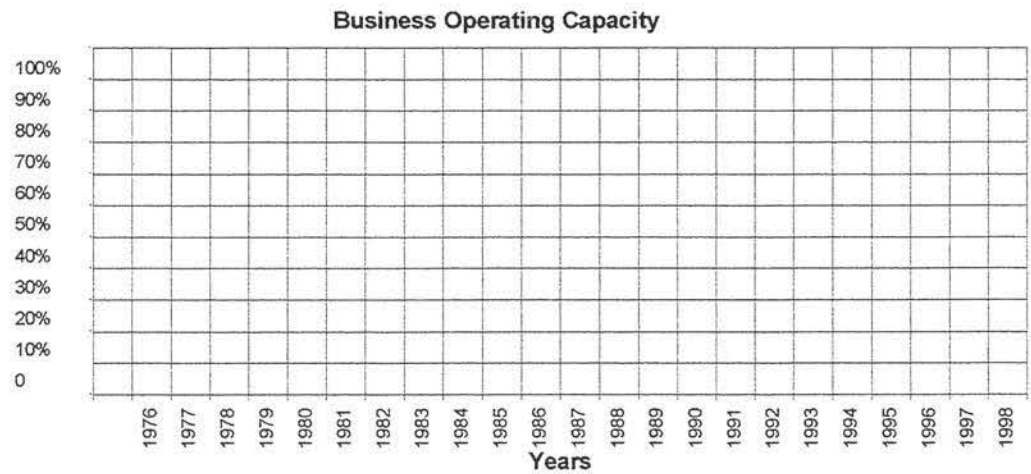
Advertising and Promotion as a percentage of Total Expenditure



8.7 This question relates to your business profits.

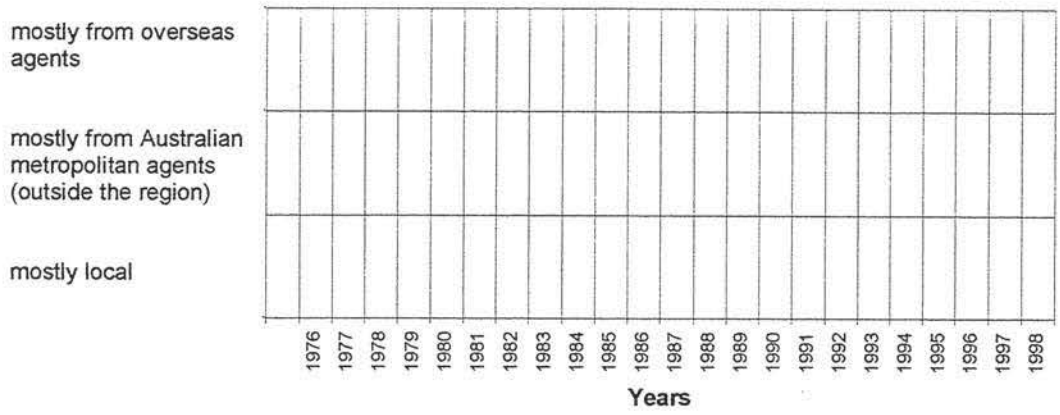


8.8 Please indicate your operating level as a percentage of capacity over the period. (For example, occupancy rates for accommodation providers, utilisation of rental capacity for vehicle hire companies, etc.)



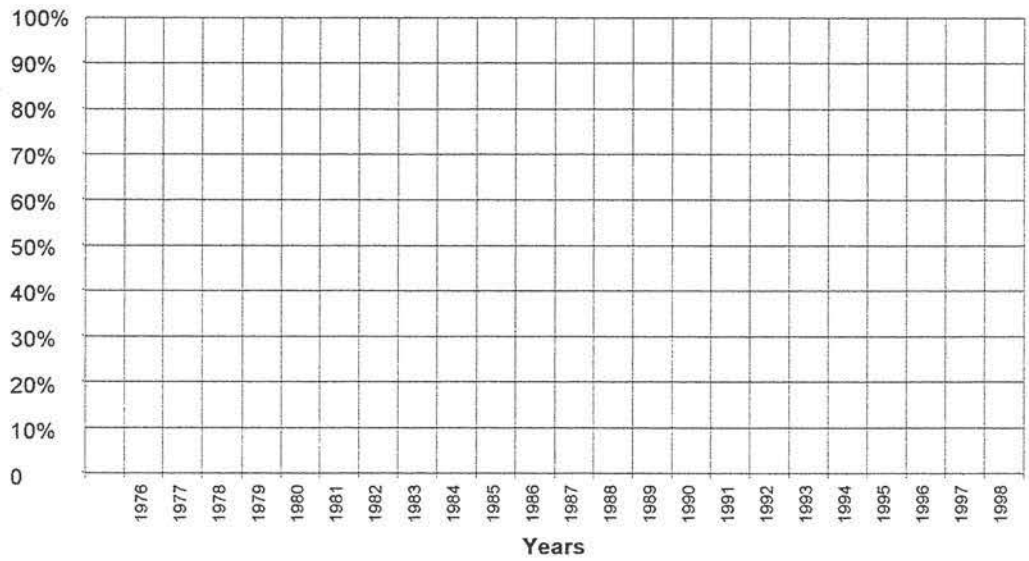
8.9 If your business handles pre-booked clients, where did the bookings originate? Place a tick or cross in the appropriate boxes. If bookings coming from a mixture of overseas and interstate, please mark both boxes.

Origin of Bookings



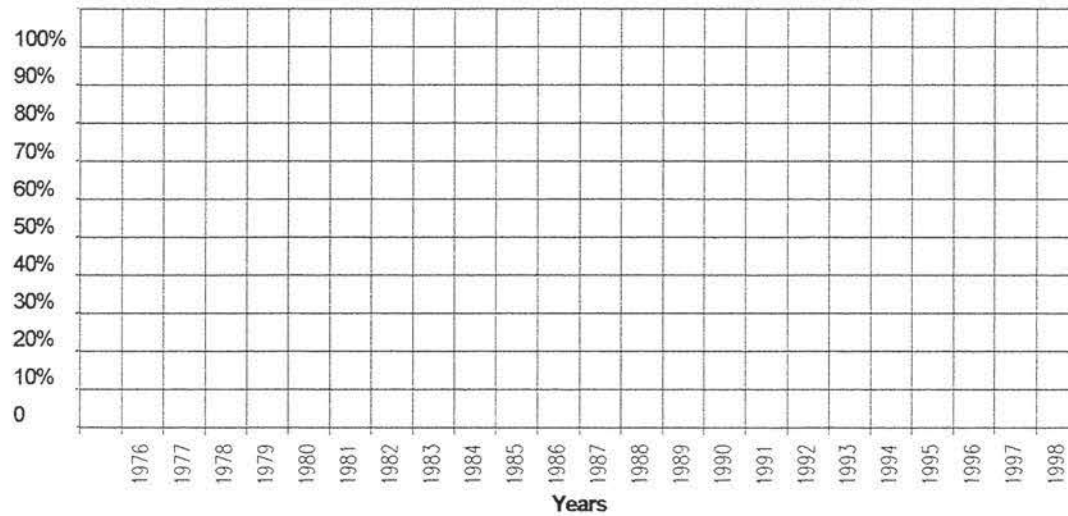
8.10 If your business serves visitors, what is the percentage of first-time visitors to the region (not first-time clients of your business), over the relevant time period, handled by your business?

Percentage of First-time Visitors



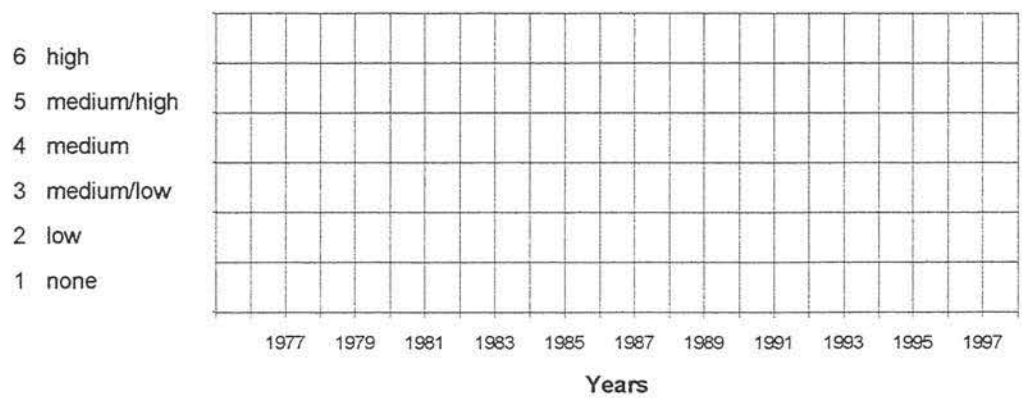
8.11 If relevant to your professional experience, what has been the percentage of group travellers over the time period 1976-1998?

Percentage of group travellers



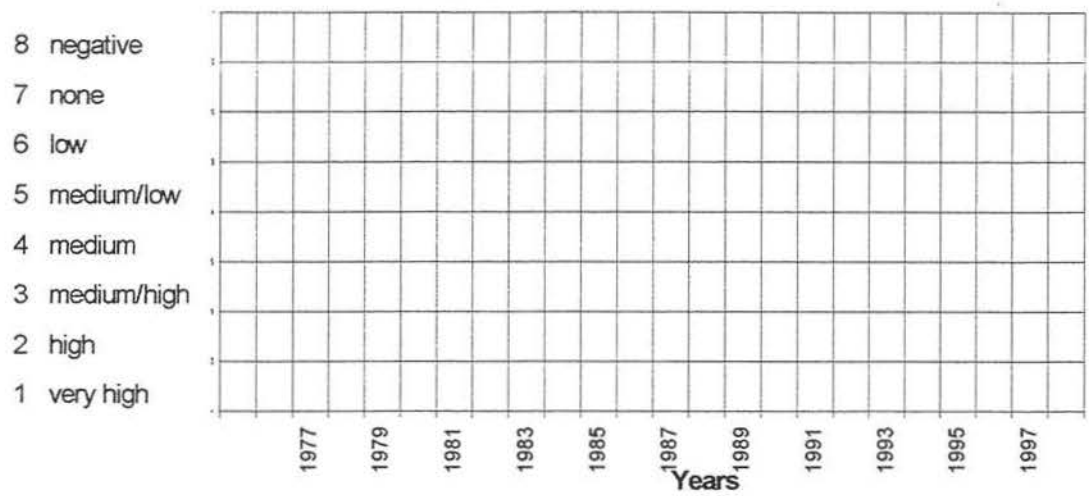
8.12 This question refers to competition from **other** regions, either within or outside Australia.

Degree of Competition



8.13 This question relates to average profit margins earned by your business from each client.

Profit margin per customer/client



Thank you for participating.

Appendix 7

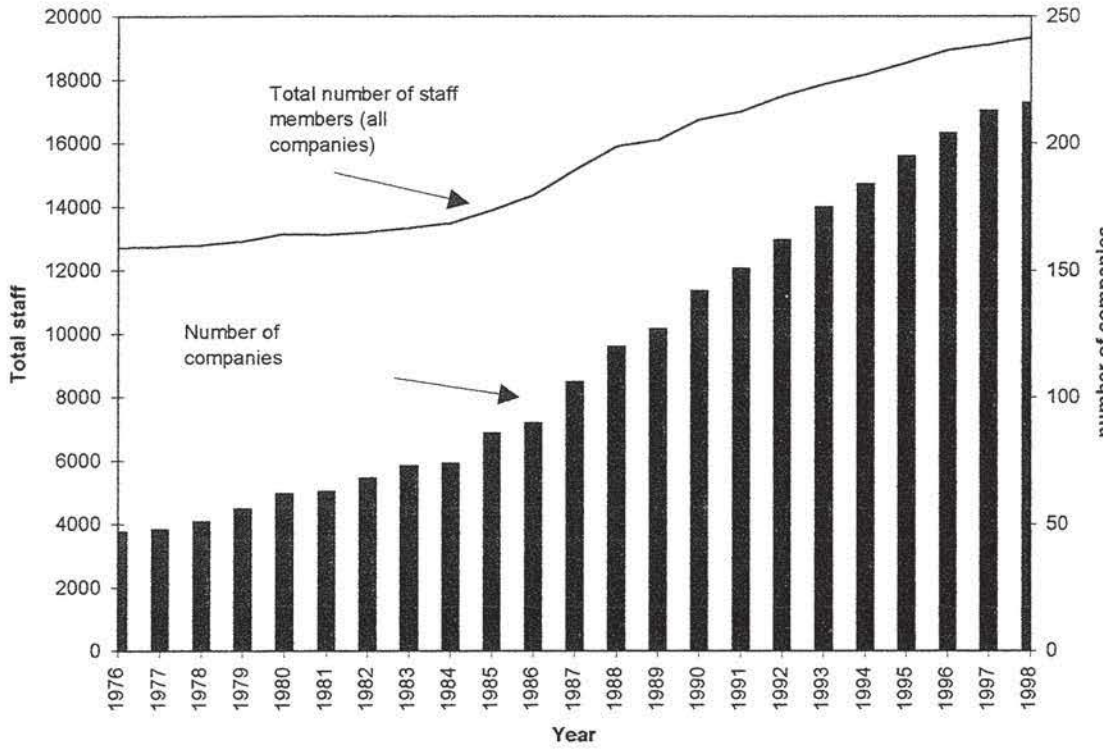
Background Information

This appendix is concerned with those parts of the questionnaire designed to extract background information, such as respondents' industry, which s necessary to ensure that a representative sample has been obtained. Other information, for example, the company structure and number of personnel, may not be directly related to Butler's (1980) theory, but does provide a useful insight into regional growth and respondents' profile.

Question 1.2 of the questionnaire asked respondents for details regarding the company structure. Responses, showed that by far the majority (54%) were privately owned companies with over 30% being either sole proprietors or partnerships (15.6% and 17.4% respectively). There were no Federal or State-owned companies and only 2 local government-owned. Publicly listed companies were only 11%.

Number of personnel and number of companies

Question 8.3 asks respondents what staff numbers were, including working owners, for the study period, or that part of the study period relevant to that business. Although the question is not of a private or personal nature, 15 out of 218 respondents failed to answer. Even so, there were enough responses to get a good idea of the personnel profile of responding companies. The most common response (mode) for the year 1998 was two. However, the mean average was 38 staff members. As would be expected, the distribution is heavily biased towards small companies, with the first 20% of companies having four or less staff members. The corresponding figure for the first 50% of companies was twelve or less staff members and for 90% it was 110 or less staff members. It can be assumed that a similar profile is common throughout the study period (1976 to 1998). Figure A1 is a time series plot for the whole of the study period of the number of respondent companies and the total number of staff members in those companies. However, because of the length of time involved and the subjective method of questioning, these figures can at best be regarded as a guide.

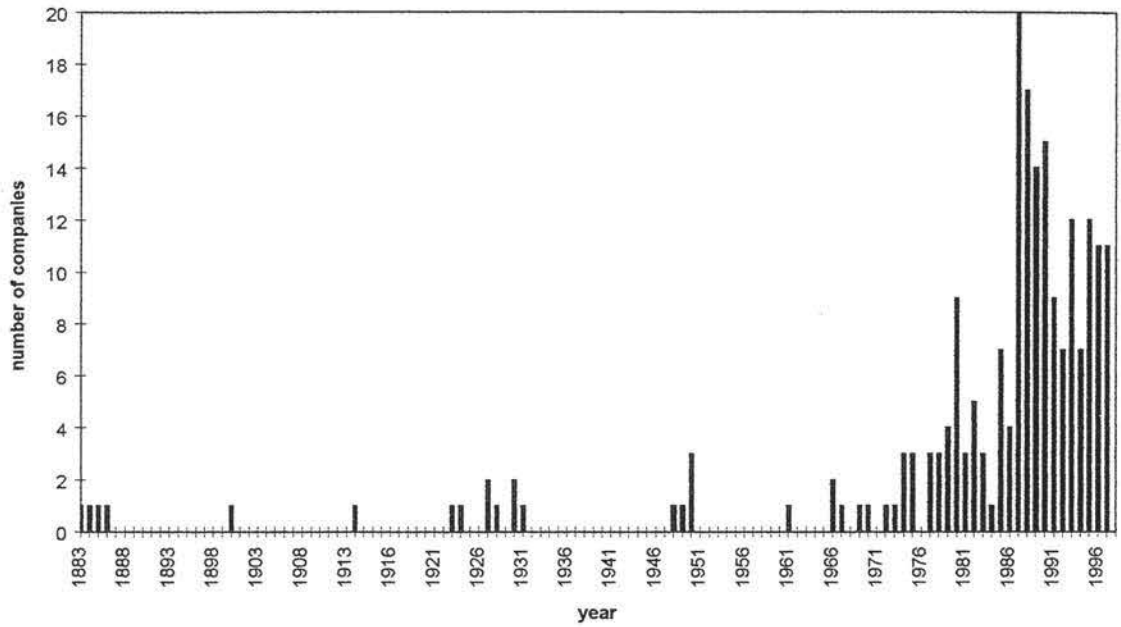


Source: Ted Berry, 1999, Cairns region Business Questionnaire

Figure A1: Results of Question 8.3, Number of Companies and Staff Members

Year commenced operations in the Cairns area

Figure A2 gives an indication of the age of respondent businesses in the study region. Apart from some companies dating back to the 1880s, the rate of company formation grew until about 1988 and after that time the rate has slowly tapered off. Although some individual years go against the trend, generally speaking this appears to be the case. The period around 1988 and 1989 appears to be the peak in terms of company formations, a phenomenon which would be expected to reflect the peak in accommodation spending growth rates.



Source: Ted Berry, 1999, Cairns region Business Questionnaire

Figure A2: Results of Question 1.4, Year of Commencement of Operations in the Cairns Region by Year

Appendix 8

Newspaper Search Tally Sheet

Date	Tourism	Attitude to	Attitude	RBD	Level of	Level of	Environmt	Environmt	Efforts to	Political	Demands	Some 2nd	Redirect	Traffic	Beautificatn	Major
	Ads	visitors	to visitors	to	confidence	confidence	under	under	extend	interference	for > LGA	rate	foci of	problems	or urban	projects
		(let. to ed)	(articles)	CBD	in tourism	in tourism	threat??	threat??	season	(let. to ed.	efficiency	facilities	tourism ind	(letters	renewal	starts,
		1 to 4	1 to 4		(let. to ed.)	(articles)	(let. to ed.)	(articles)	(let. to ed.	& articles)	(let. to ed.	(let. to ed.	(let. to ed.	and	(let. to ed.	announct
					1 to 7	1 to 7	1 to 5	1 to 5	& articles)	1 to 5	& articles)	& articles)	& articles)	articles)	& articles)	(articles)
Tot																
		ATVISN1		RBD	CBDN	CNFIDN2		ENVIRN2		INFLUEN		PORFACN		TRAFICN		MAJPRGN
	ADVERTN		ATVISN2		CNFIDN1		ENVIRN1		EXTENDN		LGAEFFN		REDRCTN		URBRENN	