

**FACING THE FUTURE:
THE FUNCTION OF PLANNING IN THE CAYMAN ISLANDS**

By

Carson K. Ebanks

BES (Hons.), The University of Waterloo, 1988

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

IN

THE FACULTY OF GRADUATE STUDIES

(The School of Community and Regional Planning)

We accept this thesis as conforming

to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

August 1994

© Carson K. Ebanks, 1994

In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the head of my department or by his or her representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

(Signature)

School
Department of Community and Regional Planning

The University of British Columbia
Vancouver, Canada

Date August 10, 94

ABSTRACT

The Cayman Islands, since 1935 have, in one form or another, had planning laws on its legislative roster. Over time there have been modifications to these planning initiatives. During the course of modification varying degrees of conflict have occurred. Usually it has been expressed as political dissatisfaction. Despite this there has been an implicit recognition that planning is a necessary and therefore enduring activity.

The degree and kind of planning that is both culturally acceptable and contextually appropriate has yet to be fully articulated. Impediments to this articulation are multifaceted and include:

legislated procedures for public debate on the planning function, the cultural context where land ownership (and therefore use) is perceived as a basic right, previous attempts at rational comprehensive planning that were both substantively and procedurally inappropriate, a general confusion between development control and land use planning, an historical confusion between capital works programmes and development planning.

As a result, a national vision of what the islands should aspire to in a spatial or land use context has failed to emerge. Additionally, an appropriate method of planning as a process remains largely undeveloped. Incrementalism has come to be accepted as the preferred form of planning. Its flexibility is its most admirable quality, but one which also prevents it from articulating a long term strategy. Incrementalism and a subjective method of proposing planning initiatives have led to instances where either the results of the plans are at odds with their intentions, or the initiatives have failed to be accepted.

Public participation in the planning process is a means through which consensus on an appropriate spatial form can be expressed. In keeping with an incremental approach electoral districts should, through political means, determine the most appropriate methods of public input. A growing awareness of planning and expanded functions of the planning department, an increasing sophistication of the island society and an increased awareness of ecological processes in business circles offer reasons for optimism on the future of planning in the Cayman Islands context. A collaborative planning approach is best suited to determine an appropriate planning function, through correct timing, clear problem identification, and an articulation of the community's collective aspirations.

TABLE OF CONTENTS

Page

ABSTRACT	ii
TABLE OF CONTENTS	iii
LIST OF FIGURES	v
LIST OF TABLES	vi
ACKNOWLEDGEMENTS	vii
CHAPTER 1: INTRODUCTION	1
1.0 Introduction	1
1.1 Purpose of the Thesis	1
1.2 Context	2
1.3 Methodology	6
1.4 Organization/Structure of the Thesis	8
CHAPTER 2: A NORMATIVE PLANNING FRAMEWORK	11
2.0 Introduction	11
2.1 Public Participation	12
2.1.1 Public Participation Defined	12
2.1.2 Conditions under which participation can occur	14
2.1.3 Models of public participation	14
2.2 Theoretical and Pragmatic Considerations in Planning For Islands	18
2.3 Normative Criteria For Land use Planning	21
CHAPTER 3: AN HISTORICAL OVERVIEW OF PLANNING AND DEVELOPMENT INITIATIVES FROM 1935 TO 1975	25
3.1 Introduction	25
3.2 The Regional Planning Law (Law 11 of 1934)	27
3.3 The 1947 Development Plan	33
3.4 The Land Development (Interim Control) Law 1969	35
3.5 The Land Development (Interim Control) Regulations 1970	39
3.6 The Development and Planning Law, 1971 and Regulations, 1972 ..	41
3.7 The Proposed Development Plan, 1975	45
3.7.1 Description	45
CHAPTER 4: PLANNING INITIATIVES 1977 TO 1989	60
4.1 Physical Planning	60
4.2 Road Planning	64
4.3 Hurricane Preparedness Planning	68

TABLE OF CONTENTS, Continued

	<u>Page</u>
CHAPTER 5: THE ADEQUACY OF PHYSICAL PLANNING	74
5.1 The Institutional Ability to Identify Problems	74
5.2 The Protective Function of the Institutions	76
5.3 A Plurality of Views	77
5.4 Mechanisms for Conflict Resolution	79
5.5 Cultural Acceptability And Contextual Appropriateness	81
5.6 Implementation And Monitoring	83
CHAPTER 6: CONCLUSIONS, RECOMMENDATIONS AND IMPLICATIONS	85
6.1 Creating A Vision - Planning As Process	86
6.2 Creating a Vision - Planning As Products	88
6.3 Conclusions	91
6.4 Implications	92
BIBLIOGRAPHY	97

LIST OF FIGURES

	<u>Page</u>
Figure 1	Models of Citizen Participation (Sandercocks Typologies on Arnstein's Ladder of Citizen Participation) 17
Figure 2	Public Opposition to the 1975 Development Plan 56
Figure 3	Public Acceptance of the 1977 Development Plan 61
Figure 4	Hurricane Evacuation Zones and Shelters, Grand Cayman 70

LIST OF TABLES

	<u>Page</u>
Table 1 Characteristics of Shelters	72

ACKNOWLEDGEMENTS

Many people have, through various means, helped to make this work possible. I wish to express my gratitude to them and offer my sincere apologies to anyone inadvertently overlooked. To Linda, Kay, Joy, Jonathan J., Judy, Caroline and Denis for logistical support. To the staff of the Planning Dept. for effort and discussions. To the Cayman Islands Government for opportunity and financial support. To the staff and faculty of the School of Community and Regional Planning for intellectual stimulation and friendship. To Donald for discussions and solitude. To my mother, Ruby for continuous encouragement. And finally to my wife Sue and children Jonathan, Leah, Erin and Jessica, for unwavering support, unbelievable patience and, love. I am deeply grateful.

CHAPTER 1: INTRODUCTION

1.0 Introduction

1.1 Purpose of the Thesis

The purpose of this thesis is to define, in conceptual and pragmatic terms, the most appropriate and acceptable processes and organizations for planning for a group of small islands that are largely economically dependent on international/offshore finance and tourism. In this regard this thesis attempts to respond to the following questions:

- a) What are the most contextually appropriate and culturally acceptable organizations and processes through which physical planning goals can be accommodated (i.e. articulated, debated, decided upon, implemented, monitored and revised iteratively)?
- b) Can a set of criteria be identified which should be used in developing these goals?
- c) Given (b), are there physical goals which decision makers should seek to achieve for the Islands?

In order to determine the above it is necessary to evaluate the existing planning institutions and initiatives in light of the question "Have they (the existing institutions and initiatives) evolved sufficiently in nature, and scope and in a timely manner, to satisfactorily address the planning concerns perceived and experienced by the rapidly evolving island society? To this end evaluative criteria are outlined in Chapter 2. In this thesis, institutions are defined as legitimate agencies and organizations primarily, but not necessarily governmental in origin whose mandate (in whole or part) is to influence planning procedurally or substantively. Such agencies include the Central Planning Authority, the Development Control Board, the National Trust of the Cayman Islands, the Chamber of Commerce, and the National Planning Committee. Initiatives are defined as actions that have attempted to inject meaningful change in the manner in which planning is perceived

or practiced. As is the case with the institutions, initiatives are likely to be primarily governmental in origin, i.e., have been brought about through policy or legislative processes. However, the impetus for change may or may not have originated from the government administration. Indeed, one aspect of this study is an attempt to determine how changes in the planning function have occurred and against normative criteria, to evaluate the appropriateness and acceptability of the manner in which change has taken place (as well as the changes themselves).

1.2 Context

The Cayman Islands are a British Dependent Territory located in the northwest Caribbean. These Islands are Grand Cayman, Cayman Brac and Little Cayman. In total they encompass 102 square miles (263 square km.) and in 1989 supported an estimated population of 26,500.

Unlike many other Caribbean Islands, the Caymans are not endowed with deep, fertile soils, abundant fresh water, spectacular mountain views, nor exotic tropical rain forests. On the contrary, they have been described as "flat, scrubby, and thoroughly Americanized above water..." (Equinox Travels, 1987, p.24). This descriptive characterization does not do justice to the sheer variety, the integrity of physical land forms, or their intricate aesthetic qualities. However, the publication does go on to say that the islands have been blessed with underwater natural wonders that rank with the best in the Caribbean. In addition the primary hotel zone is described as "... nearly six miles of unbroken, uncrowded sand, the colour and texture of fine baker's sugar (which) form(s) a sweeping crescent that embraces some of the calmest clearest waters in the Caribbean" (ibid, p.34).

Poetic licence aside, it is these natural resources, (including those not acknowledged in this particular publication), a stable political system, aggressive marketing, and the provision of high quality services and facilities that have enabled the Caymans to realize and sustain an enviable economic reality. For example per capita gross domestic product (G.D.P.) estimated at US\$2851.00 in 1970 had soared to an estimated US\$18,200.00 by 1988 (C.I Government, 1988, p.8; Chamber of Commerce, 1989, p.34). Notwithstanding the fact that G.D.P. is a notoriously inappropriate indicator of economic well being within a society, one must acknowledge that to have made such gains in 18 years suggests a healthy economy. Historic data suggest that demographic change in the Cayman Islands is directly related to the level of economic opportunity. This may be indicated here by resident population and tourist arrivals statistics. Both of these sets of figures have risen rapidly over the years as well; in 1960 the resident population being 8,511 with a 1963 tourist arrivals figure of 3,440. By 1989 and 1988 these numbers had jumped to 26,500 residents and 219,000 tourists. Against this backdrop of escalating numbers recent local publications, (both of the government and some elements in the private sector) have echoed wide-spread misgivings and uncertainties about the consequences of continuous rapid growth. A recent government document stated for instance, that:

In this regard, and amid increasing expression of concern at the pace and scale of development, Government was pre-occupied with the preparation of a revised Development Plan and new regulations as the centre piece of economic stability (C.I. government, 1988a, p.25).

Similar concerns are to be found in planning and historical literature for the islands both in the 1970s and 1980s. W.M. Hamilton, the first Director of Planning stated in 1970 "We don't want to swamp the Islands with people and destroy their character, the key to maintaining good development is controlled growth" (quoted in Williams, 1970, p.90).

Despite a long standing recognition by technical experts of the need for a rigorous physical planning function it seems that limited planning action has taken place. The 1988 annual report puts it succinctly "While public debate continued as to the desirability, practicality, and wisdom of imposing restraint on development, the economy continued to set its own pace, keeping the construction industry at full stretch" (Cayman Islands Government, 1988, p.37; emphasis added).

Although the Cayman Islands had accepted the need for planning in a legal sense (in the form of a regional planning law) since 1935, planning as an organized government activity generated little controversy, perhaps because it received minimal attention until 1969. The government of the day seemingly were concerned with a surge of economic activity such as the islands had not previously experienced. Interim regulations proposed at that time had the effect of stimulating a protest march, emergency meetings of the Legislative Assembly, armed policemen being posted at the George Town town hall, and even the arrival of a British Navy ship in George Town harbour (Hannerz, 1974, p.165). Despite these tensions, there were no violent incidents, the protest ended peacefully, and the regulations were modified, then withdrawn in 1970, despite having been preceded by the Land Development (Interim Control) Law in 1969 (Hannerz, 1974, p.166).

These were replaced by the Development and Planning Law (1971) and accompanying regulations in 1972. These initiatives called for the preparation of a Development Plan, and after extensive and prolonged preparation the proposed development plan of 1975 was presented publicly. It proved to be too controversial in nature and process and prompted two public protest marches, one in 1975 and another in 1976, following a number of highly charged public meetings. In accordance with the

provisions of the law, an intensive objection and representation period, and appeals process ensued and the plan was withdrawn.

New Development and Planning Regulations were approved in 1977 in conjunction with a vastly modified development Plan, this being deemed "the first development plan for the Cayman Islands." During 1978 the Development and Planning Law (Revised) replaced the 1971 Law. Except for primarily minor amendments, this Law, the attendant Regulations and the Development Plan (1977) are currently applicable.

Administratively, the planning function, comprehensively defined, is split between a number of government agencies. The Ministry of Community Development, Sports, Youth Affairs and Culture is responsible for community development, low cost housing, sports and playing fields, sewage and water. The Portfolio of Finance and Development is empowered to undertake national development planning, and is also responsible for compilation and production of statistics. Immigration falls under the jurisdiction of the Portfolio of Internal and External Affairs. Construction, dredging, fisheries, forestry, game and bird sanctuaries, parks and gardens, environment and natural resources, town and country planning (the heart of physical planning) and tourism are administered under the Ministry of Tourism, Environment and Planning. While lands, agriculture, public utilities, and roads are the responsibility of the Ministry of Agriculture, Communication and Works. Clearly the planning function, which is by nature extensive and multi-faceted, is relatively fragmented within the administration. In this context, inter-governmental relations regarding the coordination of the various planning activities likely increases the complexity of and constraints on both sectoral and land use planning. Because of its historically high propensity for generating political controversy and divisiveness (via perceived land use

conflicts) regarding the development and control of land use, physical planning is likely to be further constrained in its application, evolution and effectiveness.

It is within this context, and in light of expressed uncertainties concerning the value of "uncontrolled growth/development" that this thesis is written. It is hoped that this work will prove helpful in understanding present and future planning concerns by providing both an historical analysis of, and a normative yet pragmatic prescription for the development of Planning initiatives for the Cayman Islands.

1.3 Methodology

This thesis seeks to determine - in both theoretical and pragmatic terms - the most appropriate tools and processes through which an acceptable and effective planning function can best be accommodated in the Cayman Islands.

Planning has existed as a legitimate government sanctioned activity for fifty-nine years. Given that planning laws, regulations, studies, planning institutions and other associated agencies and laws have been revised and progressively become more prolific and extensive throughout the years, it appears that Caymanians have accepted in principle, that there is a role for planning. Administrative mechanisms have also been progressively expanded and reorganized to provide for its legal application.

Thus it can be argued that planning has been, is, and will continue to be viewed by the Caymanian society as a necessary, and therefore enduring, activity. The primary theoretical consideration of this thesis however, is that the degree and kind of planning which is both culturally acceptable and contextually appropriate has yet to be fully articulated. It is being suggested, therefore, that as a direct result, the emergence of a

national vision of what the Cayman Islands should aspire towards in a spatial or land use context has not yet emerged.

To determine why and to what extent these failures have occurred and persisted, the various Planning initiatives and institutions are analysed within the framework of six basic normative criteria, namely:

- 1) The institutional organizations should have the ability to clearly identify problems.
- 2) Planning institutions that protect the islands against negative externalities and promote a healthy society should exist.
- 3) A planning process which generates useful information and respects a plurality of views should exist.
- 4) Mechanisms and organizations that provide for conflict resolution regarding physical planning actions in light of social, political, environmental and economic objectives should exist.
- 5) A planning process that is both culturally and otherwise contextually appropriate should exist.
- 6) Effective implementation, including sequencing and monitoring, should exist.

Notwithstanding the above, it is realized that the process and products of planning have historically been political in nature. Therefore a prerequisite of the planning function is that it must, to be effective, be politically acceptable. For this reason the administrative application of the planning process or sequence deserves (and will be given) detailed consideration. In light of concerns for ensuring consideration of a plurality of views for cultural acceptability and, contextual propriety, fairly detailed consideration of process becomes indispensable.

In pragmatic terms, since the principal initiatives or instruments to implement land use planning (i.e. process and practice) are the Development and Planning Law (R), the

Development and Planning Regulations (1977) and the Development Plan 1977, analyses of these documents are prominent in this study. Additionally, the function of the Central Planning Authority (CPA), the appointed statutory body responsible for applying these instruments, is also analysed.

The day to day administration of the Laws, Regulations, and the Development Plan are carried out by the Planning Dept. whose primary purpose is to enable the CPA to effectively fulfill its statutory obligations. Therefore, the activities of this Land Use Planning office are also reviewed. Data and information sources include Cayman Islands Government Publications, local journals and newspapers, literature on planning theory, on tourism planning, on planning for islands and the planning initiatives of other tourist destinations such as Bermuda and Hawaii.

The broad multi-disciplinary thrust of the thesis represents a pragmatic approach to reconciling the complexities of simultaneously addressing land use policy making, land use planning, and development control under the rubric of physical (spatial) planning in a small island setting.

1.4 Organization/Structure of the Thesis

This thesis is divided into six chapters with each chapter further subdivided into sections. The organization of the thesis represents a logical sequence of discussion that begins with:

- 1) Introduction.
- 2) A Normative Planning Framework.
- 3) An Historical Overview of Development and Planning Initiatives 1935 to 1975.

- 4) Planning Initiatives 1977 to 1989
- 5) The Adequacy of the Current Planning Function.
- 6) Conclusions, Recommendations and Implications.

Chapter 1 introduces the thesis and outlines its purpose, the context in which the analyses take place, the methodology of study including suggested normative criteria for planning action to respect and, the basic structure and organization of the paper.

In Chapter 2, a Normative Framework is developed through which planning initiatives can be analysed. Theoretical and pragmatic normative considerations of public participation in planning are examined as are theoretical and pragmatic aspects of planning for small islands.

An historical overview of development and planning initiatives is presented in chapter 3 from 1935 to 1975. It was also necessary to reexamine early historical legal frameworks to properly understand the context in which these initiatives developed. 1969 to 1976 are the pivotal years in Land Use planning history when contentious public debate occurred, regarding the process of modernizing the planning function. Each initiative is described in terms of notable events that occurred, the forces shaping the society, the institutions involved and the planning gain either realized or attempted.

Subsequently, in Chapter 4, examples of Sectoral Planning are described. The sector examined in detail is Physical Planning (Development Control and Land Use Planning). Emergency Preparedness Planning and Road Planning are also profiled, but extensive critical analysis was not feasible within the confines of this thesis.

In keeping with the main thrust of this thesis, an elaboration of the discussion in Chapter 4 that has concentrated on determining the adequacy of the current land use

initiatives and functions, is undertaken in Chapter 5. Criteria developed in Chapter 2 have been augmented by supplementary inquiries. Previous evaluative work is also discussed.

Relative to the findings of Chapter 5 and in light of the theoretical/philosophical and pragmatic considerations of Chapter 2, conclusions are drawn in chapter 6. Alternatives are offered regarding the articulation of desired futures, avoiding the pitfalls of inadequacies in the planning function and development of a consensual national vision of both an appropriate planning function and a physical/spatial setting. This includes recommendations for re-conceptualization of the planning function and initiatives in both conceptual/theoretical and pragmatic terms. The thesis concludes with a discussion on the implications of implementing such changes.

CHAPTER 2: A NORMATIVE PLANNING FRAMEWORK

2.0 Introduction

A normative theory, or framework of planning is, at its most basic level, a statement of values and goals. It seeks to prescribe how things OUGHT to be and to identify what methods of planning society should devise to realize a desired state. To be pragmatic, a normative framework for planning must address implementation strategies and programmes and recognize that each state, or stage of development is transitory (i.e., "a condition of becoming") (Bolan 1983, p.4). This being the case, the immediate questions that arise are:

- Who ought to/should plan?
- Who decides who ought to/should plan?, and
- How should/ought the process of deciding the above be planned and implemented by whom and to satisfy what goals?

These basic questions suggest the need for a critical analysis of methods and processes of planning desirable goals or futures and the routes or courses of action through which they will be pursued. Such goals are at the root of a normative planning framework and are aimed at addressing the juncture between the appropriateness, the effectiveness, the efficiency, and the acceptability of planning both as a process and product. To lay the groundwork for an analysis in the Cayman Islands' context it is necessary to address the issues of public participation, and theoretical and pragmatic considerations in planning for the Islands. The development of normative criteria for land use (physical) planning can then be put forward.

Public participation must be addressed because it can provide for a multiplicity, or plurality, of views to emerge and to become articulated in a way that is culturally

appropriate. During the course of this study it may be determined that, procedurally, the mechanisms for public participation extant in the Cayman Islands have become dated. Indeed, these mechanisms may be identified as both a cause (i.e. a contributory factor) for disputes and, a legal method through which conflict within the planning process may be resolved.

The theoretical and pragmatic aspects of planning for Islands must be considered as it would not suffice merely to superimpose or propose planning strategies normally encountered in mainland areas. This is because islands demonstrate characteristics that are peculiar to them such as insularity, or a scarcity of resources, or reduced diversity to name a few.

Tourism in the Cayman Islands is what the locals agree on as "a pillar of the economy." This suggests that without such a pillar the economy would collapse, or at least become uncomfortably imbalanced. Because of tourism's importance, any proposed planning initiative, which ignores its would have no chance of success. Thus, substantial consideration of tourism is essential. Analyses of the above issues it is argued can demonstrate what the necessary normative criteria are to guide the planning function.

2.1 Public Participation

2.1.1 Public Participation Defined

Public participation has been defined as

... the involvement in the planning process of all the individuals, groups, interests, organizations and communities who might be affected by its outcome (Alexander, 1986, p.105.)

The Skeffington Report (1969, p.1) echoes similar sentiments on what participation is and who "the public" is while stressing that it is ... the act of sharing in the formulation of policies and proposals ... participation involves action and discourse by the public throughout the plan making process. (emphasis added)

Skeffington et al (1969, p.1) contend that two limitations should be made:

one is that responsibility for preparing a plan is, and must remain, that of the local Planning Authority. Another is that the completion of plans - the setting into statutory form of proposals and decisions - is a task demanding the highest standards of professional skill and must be undertaken by the professional staff of the local Planning Authority.

An equally broad based definition which also acknowledges the existence of statutory organizational divisions of responsibility is:

Participation in planning is a systematic process of mutual education and co-operation that provides an opportunity for those affected, their representatives, and technical specialists to work together to create a plan. (Connor, 1985, pp.1-3.)

It has also been described as "a decision forming partnership, an exercise in collaboration" (Fagence, 1977, p.4). These definitions do not suggest whether or not the partnership is one of equality, between participants, nor whether it is designed to reach only those who actively participate in community/civic affairs. Neither do they suggest whether participation should take the form of rigidly mandated forums or informal contacts. It must however, to be effective, be able to resolve conflict given the inherently political nature of plan making. The political volatility of planning initiatives that are characteristic of the Cayman Islands (which will be elaborated on in Chapters 3 and 4) indicate that further development of mechanisms for conflict resolution are appropriate.

Therefore, for the Cayman Islands, a normative and pragmatic definition of public participation it is reasoned can be stated as: "An exercise in collaborative effort, education,

technical analyses and conflict resolution undertaken by representatives, technical specialists, interested groups and communities to create and implement plans, and planning strategies." The above definition address: (1) the concept of knowledge as a transitory state/process, (2) underscores the need for the development of consensus to be sought as both process and product, evident in planning initiatives, and (3) recognizes a multiplicity of actors in the process and their distinct roles.

2.1.2 Conditions under which participation can occur

Issues 1-3 above assume that there are certain conditions existing in society under which public participation in physical planning can occur. The first of these is that the concept of a plurality of views is embraced in socio-political relations. Government, in this regard, can be viewed either as a balancer of power or as a neutral referee of sorts, regulating the competition of interests vying for a voice in the process of planning. Additionally, government also may be seen to be benefitting from the product of planning.

Secondly, public participation to some degree is assumed to be mandated in legislation to endeavour to allow for fair and equitable treatment to all of those seeking to participate. Thirdly, there is assumed to be adequate financial and organizational resources available for the administering of public participation as an integral part of the planning function. Another assumption, is that there is the political will to accommodate public participation. The fifth assumption is that there is an availability of technical expertise that is cognizant of various models and processes of public participation in order to advise the public on reasons for and against the use of them.

2.1.3 Models of public participation

Sandercock (in Sarkissian and Perlgut, 1986. pp.10-12) outlines five possible models of participation for consideration. Four of these are discussed namely, participation as:

market research, decision making, the dissolution of organized opposition and social therapy.

Participation as market research gives overriding recognition to the power and responsibility of the civil/administrative bureaucracy (Sandercock, 1986, p.10). Bureaucratic efficiency is the rationale for this approach, wherein members of the public are viewed as clients offering advice and suggestions on planning details but not on policy (Sandercock, 1986, p.10).

Direct participation or participation as decision making is based on a view of the public as rational policy makers. (Sandercock, 1986, p.10) states that underlying this view "are certain fundamental conceptions about men and societies - the reasonableness of men and the natural harmony of their interests, an optimistic view of human nature that rejects the conservative proposition that people always act out of self interest." Sexist language aside, this is one of the more progressive views of public participation, especially since as Sandercock (1986, p.10) notes, it provides for "desirable practical consequences and ... intrinsic worth in the development of human personality."

Another model of public participation is to view it as a means of dissolving opposition. With a desirable proposal and, depending on the nature of the opposition, this in itself should not be viewed negatively. Insofar that it thwarts attempts at meaningful change and/or is designed to present planning decisions as 'technical', rather than both technical and political, issues, its desirability is questionable. From a teleological perspective, it may be welcomed if it achieves the end of consensus. But consensus through this approach will likely be fragile and short lived.

Finally, participation can be perceived as social therapy wherein the prime purpose is to carry out public projects in a relationship akin to welfare programmes (Sandercock,

1986 p.11). The Skeffington Report (1969, pp.34-36) outlines a number of means through which public participation in various types of surveys ranging from estimating tree planting needs to determining urban design guidelines could occur. Sandercock (1986, p.11) notes that this type of involvement is "on the boundary of participation as decision making." It is also noted that such an approach is "pragmatically experimental and adaptable ... to find smoother ways of adapting people to change."

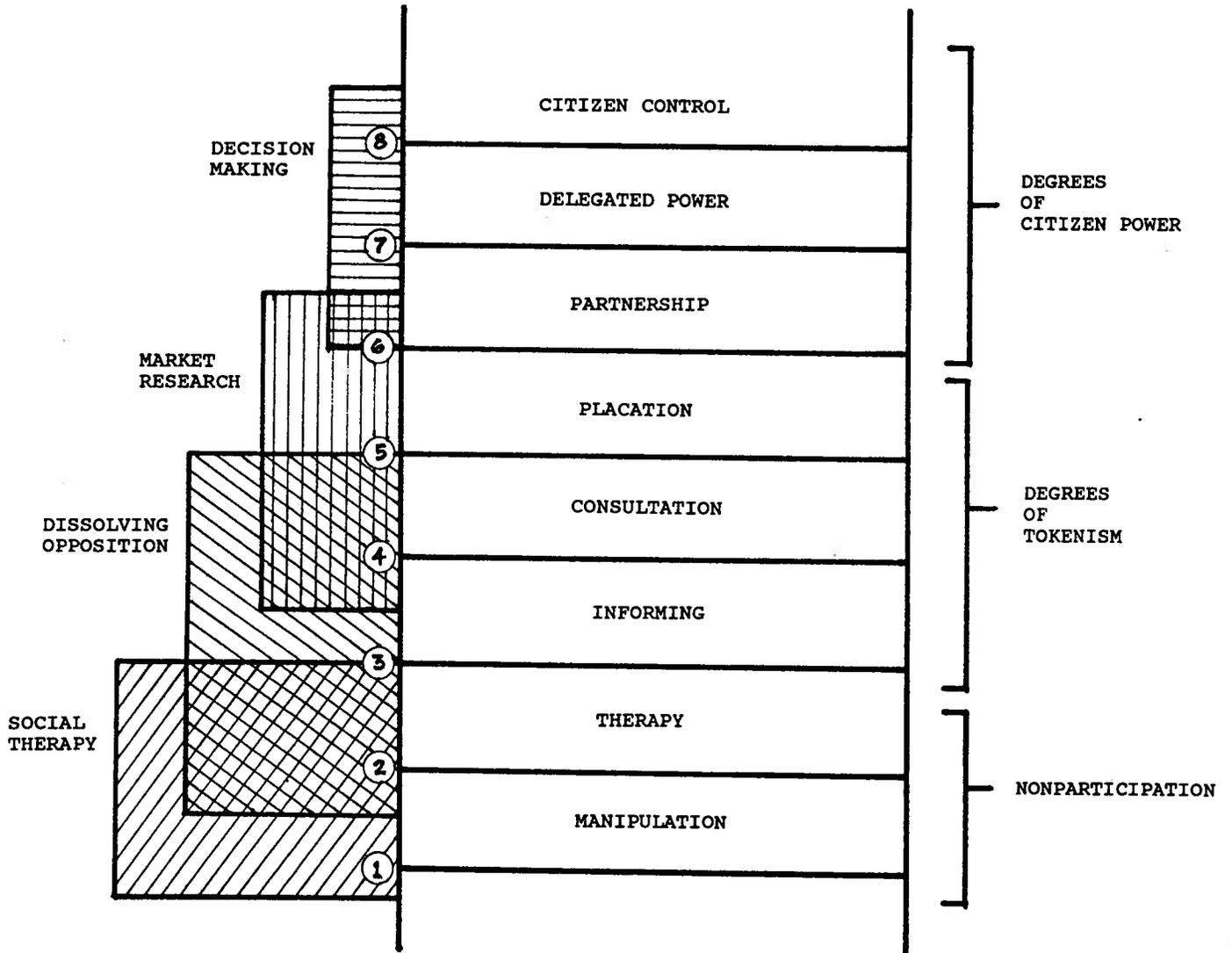
Figure 1 depicts Sandercock's models of participation, superimposed on Arnstein's well known ladder of Citizen Participation. Where they are placed on the ladder is intuitively determined. Also, the broadening at the lower end of the ladder is intuitively determined to reflect the relative numbers in society (akin to a population pyramid) that are likely to be engaged in the various types or methods of participation. The main point however, is to indicate that in a real-life setting these models will likely overlap.

From the preceding discussion one can see that these models do not negate each other in a functional sense. In a given situation all may operate simultaneously to satisfy the participation needs and abilities of various groups within a community.

For example, public participation in a tree planting programme may simultaneously satisfy the a) market research needs; (e.g. what kinds of trees, where, and why - are desired by a community), b) decision making needs (e.g. additional programmes and or policies where further participation is desirable), c) dissolution of opposition (e.g. - from a group opposed to land clearance), d) social therapy (e.g. planting, pruning etc. "to beautify the community").

From a pragmatically just perspective there can be no one model or type of participation that will be acceptable to a community at all times, or on all issues. Therefore, it must be recognized that the extent of participation to be catered for must be on a

Figure 1 Models of Citizen Participation (Sandercocks Typologies on Arnstein's Ladder of Citizen Participation)



Source: Arnstein S.R. 1969 - with modifications

continuum such as described above in Figure 1. This has the ability to resolve conflict and cater to various publics. The normative definition previously given in section 2. 1.1 incorporates these considerations. Specific ways of undertaking participation are discussed in Chapter 6.

2.2 Theoretical and Pragmatic Considerations in Planning For Islands

In planning for islands, one faces a number of problems both shared by and alien to mainland locations. These include rapid urbanization, a scarcity of resources, difficulty in obtaining adequate capital or data, insularity, (isolation), identity, to name but a few. It is perhaps more useful in this discussion if they are categorized by labelling them technical/institutional, bio-physical, and socio-economic constraints on the development of land use planning. In a small island setting technical/institutional constraints can manifest themselves in:

- a) A lack or shortage of technically trained and competent personnel.
- b) A lack of acceptable standards that specify for e.g. how much, how big, etc.
- c) Difficulty in accessing data sources.
- d) The inability to generate and/or retain information.

Bio-physical constraints manifest themselves as:

- a) A scarcity of natural resources.
- b) Limited land area.
- c) An extremely fragile environment.
- d) A lack of diversity (species, habitat).

Socio-economic constraints manifest themselves as:

- a) Scarcity of capital.
- b) Underdeveloped institutions for conflict resolution.
- c) Susceptibility to external forces.
- d) A high potential for conflict of interest inherent when a multiplicity of roles for individuals exist.

Although most people would agree on the necessity for planning for islands there seems to be no general consensus on how to proceed (Coccosis 1987, p.86). McElroy *et al* (1987, p.94) identified a number of structural constraints to planning for islands and noted that they were exacerbated by what was termed a "pervasive web of inertia and policy caution." These included: "particularism i.e. intense face to face personalism and kinship that reduce objective decision-making, inhibit confronting serious issues and reinforce the status quo." Further, the combination of strong partisan politics and, restricted job opportunity among civil servant planners and technicians fosters insecurity and caution on the one hand and high turnover and weak institutional memory on the other (Sigham, 1967 in McElroy *et al*, 1987, p.95). Dinell, in a compelling discussion entitled "Hawaii: Planning for Paradise" has identified what is perhaps the planning issue for Island planning in general:

that is ... securing agreement on what constitutes the major planning dilemmas for the state. One person's dream is another person's nightmare. What the developer perceives as a gift, the environmentalist views as one more nail in the coffin. What the entrepreneur views as necessary progress, the native rights advocate perceives as a continuation of the rape of the land (1987, p.153).

In other words, what is needed is a consensus on what planning ought to accomplish. To rationally arrive at this decision, however, a community will need to become aware of the opportunities and constraints that will result from a given action. For example, beachfront visitor accommodations will bring employment and expanded economic opportunity, but will also result in pressures on infrastructure and will limit recreational opportunities for residents. The clearing and filling of mangrove swamps will create new waterfront properties for future projects but will also result in the loss of ecological productivity, the disruption of food webs and, the alteration of micro-climates including rainfall patterns. All components or subsystems of an island contribute to its environmental

quality and are interrelated. Therefore, development of economic and social systems should not be considered in isolation of environmental management. For example, it has been pointed out that Tourism depends on environmental quality more than any other economic activity (Coccosis, 1987, p.86).

Nevertheless, land use planners may frequently consider hotel schemes, etc. in light of existing zoning while ignoring environmental impact. On the other hand, they often are distanced from policy input and legislative initiatives (McElroy *et al* p.94). Thus, they are placed in a quandary. Such quandaries intensify confusion and are reflective of the constraints previously identified. These internal planning deficiencies are further compounded when false dichotomies such as "what will it be - environment or development?" are bandied about in elite circles and come to be generally accepted as fact. The most glaring planning deficiency however, has been identified as **"the failure to develop an appropriate analytical framework for understanding island structure and the broad process of change, and for predicting accurately the effects of policy"** (McElroy *et al* 1987, p.95, emphasis added).

Inherent in the definition of most problems are the seeds of their solution. If deficiencies and constraints in planning processes and functions are clearly and accurately identified this can form the basis of their resolution. For example, in the island context, a lack of awareness of ecosystems functions and, the impacts of land use decisions can begin to be addressed through ecological studies, environmental audits or resource cataloguing and land use capability studies. Additionally, appropriate space standards for various components of the built and natural environments can be developed through land use capability studies, comparison between existing conditions and internationally accepted standards, user needs surveys and, public discourse.

Furthermore, in the small island context, open discourse is relatively easy to, in conjunction with an extensive network of forums for conflict resolution, be developed. These can take many forms, both formal and informal. Examples abound and include but are not limited to; town meetings, working (or focus) groups, drop in centres, public fact finding excursions, and workshops. The above assumes that there will be shared values between individuals and groups in the Island Community and that from these, norms and therefore, a normative theory of planning, can be formed.

2.3 Normative Criteria For Land use Planning

We can learn from our differences what some parts of the world look like from some viewpoints, and where and under what circumstances the world does not look like that; we can stop overgeneralizing and start piecing together the actual differences and particulars and variations of our diverse planet. We can sort out whether any of our observations have no demonstrable connection to the world at all, have been entirely self- created and are in urgent need of correction. We can map the capacity of the human mind for delusion or perpetuation of outmoded beliefs. And above all, by examining more carefully the revelation of ourselves in our models, we can learn more about why people, including ourselves, do what they do, value what they value, fail where they fail, will what they will (Meadows, Donella H., 1982)

As will be seen in Chapter 3 resistance to planning initiatives in the Cayman Islands has been largely expressed as action to prevent perceived threats to a (quality and) way of life from being entrenched in legislation or government policy. Planning tends to be concerned with development and change over time, and the literature on planning theory is replete with concerns for "the public interest" and the community." Such concerns are expressed "in a world of intensely conflicting interests and great inequalities of status and resources ..." (Forester 1989, p.3). No attempt has been made here to systematically evaluate these interests or to determine which are "right" or "good" in the Cayman Islands

context. Such analysis would, of necessity delve deeply into the worlds of religion, moral philosophy and, behavioral psychology which is beyond the scope of this thesis.

Neither has there been a rationalistic attempt at finding the commonalties of these interests and deductively arriving at a set of shared beliefs and values, that would result in a consensus as to the desirability of the normative planning approach being proposed. Rather, based on a largely pragmatic world view as an observer, student and practitioner of planning, six normative criteria are put forward within which the current planning function can be evaluated:

1. The institutional organizations should have the ability to clearly identify problems.
2. Planning institutions that protect the islands against negative externalities and promote a healthy society should exist.
3. A planning process which generates useful information and respects a plurality of views should exist.
4. Mechanisms and organizations that provide for conflict resolution in the discourse on physical planning action should exist.
5. A planning process that is both culturally acceptable and otherwise contextually appropriate should exist.
6. Methods for the effective implementation of planning decisions that include sequencing and monitoring should exist.

The clear identification of problems implies that the problems may be able to be solved. Problems once clearly identified, may be given finite dimensions. Negative externalities must be protected against as they may result in the concept popularized by Garret Hardin "the tragedy of the commons" with which we are familiar. In the Cayman context, the tragedy of the commons and externalities may be experienced in increased environmental degradation as a result of excessive mangrove swamp removal for constructing projects. The cost of operating an hotel or a golf course constructed on the

former swamp land will not reflect the loss of habitat or water quality that results. Such costs then can be viewed as externalities.

Definitions of problems in a pluralist environment are multiple. Different interest groups have different senses and valuations of the problems at hand (Forester, 1989, p.57). Using the example above on environmental degradation, we can see that dive operators may view the problem as a reduced quality of a recreational and economic resource, the golf course operator may see no problem at all and may see increased economic and recreational opportunities, the ornithologist may view the problem as a threat to the existence of a rare or endangered bird. These diverse views will generate conflict regarding both problem identification and the appropriate physical planning action necessary to address problems.

While formal planning tools, such as the Planning Law or Regulations, will specify a process and a timing of that process through which a land use proposal must be put, they are unlikely to specify the discretion that a planner will have on the amount and type of information that is given, to whom or what role the planner should play. It is also unlikely that the less tangible aspects of the above i.e. the type of information, the role of the planner etc. can be clearly stipulated in law to account for the vast variety of potential conflicts. Therefore, other mechanisms and organizations will be necessary through which conflict can be resolved. If they are to be effective they must be culturally and contextually appropriate. Mechanisms and organizations which by their nature are inappropriate, for example political party based neighbourhood groups, or negotiations within which very little differentiation between facts and fears occurs, will not suffice.

Additionally, the mere resolution of conflict will not ensure that appropriate planning action occurs. Obviously legal mechanisms are required to implement plans. The quality

and effectiveness of these plans, however, must be assessed if the plans are to be considered meaningful. Therefore, implementation and monitoring strategies should be legally accommodated in the exercise of the planning function.

CHAPTER 3: AN HISTORICAL OVERVIEW OF PLANNING AND DEVELOPMENT INITIATIVES FROM 1935 TO 1975

3.1 Introduction

The first Legislative body for the Cayman Islands was created by the Jamaican Legislature on December 5, 1831 and, on December 10, 1831 representatives were elected (Hirst, pp.214-220 in Davies, 1989, pp.29-30). The Legislature consisted of the Justices of the Peace (8) and of Vestrymen (21), the latter of whom were elected officials that served for a 2 year term. It was not until 1863, however, that the Imperial Parliament, by way of an Act for the Government of the Cayman Islands, conferred power to the Jamaican Legislature to make laws for the Cayman Islands (Davies, 1989, pp.30-31). Any laws prior to that time enacted by the Cayman Islands "legislature" and the Jamaican legislature had been "without any express authority" (Davies, 1989, p.31).

Therefore, retroactive legislation was deemed necessary to ratify and validate the laws previously passed by the (Cayman Islands) Legislative Assembly. The effect of the 1863 Cayman Islands Act was that the Cayman Islands formally became a dependency of Jamaica (Davies, 1989, p.32). Under the 1863 Act the Jamaican legislature could confer, to the Justices and Vestrymen, the power to make laws for local (Cayman Islands) purposes.

The local administration had, until 1898 been the responsibility of a commissioned Chief Magistrate or Custos, who was the Jamaican Governor's representative. The Cayman Islands Commissioner's Law of 1898 empowered the Governor of Jamaica to appoint (after selection by the Secretary of State for the Colonies) a Commissioner for the Cayman Islands (Davies, 1989, p.60). Such Commissioner was legally empowered to exercise extensive Executive, Judicial and, Legislative powers, presiding both as Judge of the Grand court (in

all cases except capital felony) and over the Legislative Assembly of Justices and Vestry (Davies, 1989, p.34).

This appointment, as Davies (1989, p.60) points out, was novel in that the post was for the first time filled by recruitment from outside the Islands. It also became a full time salaried position. Throughout the tenures of future Commissioners (and later Administrators), it would become obvious that the administrative - and legislative - advances as well as the level of public expenditure on infrastructural development depended largely on the vigor, vision and commitment of the Commissioner (Administrator).

One example is during the tenure of the first commissioner Frederick Shedden Sanguinetti (1898-1906). Williams (1970, p.65) notes that "the pace of change quickened. George Town (the capital) became a port of registry, there was now eight schools and a Government Savings Bank." Additionally, a road that still bears one of his names (Shedden Road) and links George Town to the North Sound was constructed. Another example is that of George Stephenson Shirt Hirst Commissioner from 1907 to 1911. During this period the following main roads were constructed: Elgin Avenue (named for Lord Elgin the Secretary of State for the Colonies), Mary Street, the road from West Bay to the North Sound and, Crewe Road (between George Town and Bodden Town) were constructed, (Williams, 1970, p.68). Additionally, new streets, court houses and, schools were being constructed in Bodden Town, East End and West Bay.

Perhaps the most impressive example, however, was that of Allen Wolsey Cardinall, Commissioner from 1934 to 1940 (later to be knighted for notable Public Services). Commissioner Cardinall, successfully guided the completion of; two wireless transmitting stations, roads that linked Bodden Town to East End, and Frank Sound to North Side, as well as Town Halls (that were to be used as educational and community centers) in West Bay,

Bodden Town, East End and North Side and the Library and Post Office in George Town (Williams, 1970, pp.77-78). This was all the more impressive as his tenure began during the height of the depression.

Despite Williams (1970, p.67) assertion that, " ... the Vestrymen provided one law maker for every 206 inhabitants, perhaps the nearest affinity to the democratic ideal of a Greek City State the twentieth century has ever seen, and then came up for re-election every 2nd August," the reality was that the main administrative and judicial power was inequitably vested in the Commissioner who also presided over the Legislative Assembly of Justices and Vestry. It was under this backdrop and legislative arrangement, that the first Planning Law was enacted in the Cayman Islands.

3.2 The Regional Planning Law (Law 11 of 1934)

The first planning legislation to be enacted was the Regional Planning Law (Law 11 of 1934) assented to by Governor Denham on September 16, 1935. As with future planning legislation, this statute was based on British Law, and thus embraced the British model of planning. Organizationally, it was modified to integrate with the local legislative and administrative structures then extant.

The membership of the Regional Planning Board, that was established thereunder, was relatively broad based and was comprised of eight members. They were the Commissioner (later to be called Administrator), the Government Medical Officer, the Inspector of Police, two Justices of the Peace and three Vestrymen appointed by the Commissioner. It is important to note that the separation of powers, i.e. legislative, judicial and administrative touted by Montesquieu do not appear to have been given much consideration at the time of enactment of the Regional Planning Law. Indeed this ideal of

separation of powers was not to legally commence until 1956-1957 with the appointment of a Stipendiary Magistrate and not to be fulfilled until 1967 with the appointment of an Attorney General (Davies, 1989, p.34).

The purpose of the 1935 Law was stated as "... to control and to secure the proper development of certain areas in the interest of the public health, the amenity of the neighborhood and the general welfare of the community." Under this law, the Regional Planning Board (RPB) could recommend that a Regional Planning Area be declared. Such declaration was the responsibility of the Commissioner, acting with the advice of the Justices and Vestry. As with the Town and Country Planning Act 1932 of the United Kingdom, the Regional Planning Law could apply to both built up and unbuilt lands. In reference to the United Kingdom Act this was described by Heap (1987, p.9) as its "... most remarkable feature ...".

Previously only unbuilt lands actually being, or likely to be, developed were within the scope of the Town Planning Act. Heap (1987, p.9) also notes that this was a sweeping extension of the town planning powers of local Authorities. Unlike the United Kingdom, however, there was no tiered Government system in the Cayman Islands. Thus, the highest ranking proponent of the planning proposal (the Commissioner) to establish a regional planning area (RPA) was also the President of the Assembly that would declare it and legally cause it to come into being. The Regional Planning Board would then cause a regional planning scheme (again drawing heavily from the United Kingdom nomenclature) to be framed for the RPA. Even though the Governor of Jamaica was required to consent to the framing of laws for the Cayman Islands, he was not required to consent to the framing of the planning scheme. The scheme was required to be approved by the Commissioner and

Justices and Vestry, but the Regional Planning Board, with the approval of the Commissioner and the Justices and Vestry could vary or revoke the scheme.

Under the scheme, and in accordance with the 1935 law, discretionary powers would be given to the Regional Planning Board which included:

- (1) (S.6) power to make arrangements with owners and occupiers of land regarding development proposals.
- (2) provision and procedure for appealing against decisions of the Regional Planning Board.
- (3) to determine subject to arbitration, the limits of plots or estates including power to adjust them and to effect property exchanges, either voluntarily or compulsorily with or without payment by way of equality of exchange.
- (4) power to demolish etc. buildings or structures.
- (5) the imposition of restrictions with regard to the user of lands and to building lines, space about buildings, the height character and user of buildings etc.

In all, these powers were extensive and numbered 14 in total. Number 7 was particularly interesting since it enabled a fine not exceeding ten pounds to be levied on an offender, convicted by any two Justices of the Peace for contravention of any provision of the scheme, and a further fine of one pound per day for each day of the continuing offence. Recall that the Regional Planning Board's membership included two Justices of the Peace! Therefore, it was possible for the same two Justices (members of the Regional Planning Board) to contribute to the declaration of a scheme, contribute to the determination of whether or not it was being complied with, and subsequently convict and levy a substantial fine on an offender.

The fine was relatively high as the annual revenue of the Islands was still, according to Williams (1970, p.77), under 10,000 pounds. Number 13 of these powers (S.6, ss.13) enabled the delimitation of zones which could either prohibit buildings or specify uses of

buildings. Despite this power, zoning was not to be established until the Land Development (Interim Control) (No. 2) Regulations 1970 were enacted under Section 18 of the Land Development (Interim Control) Law, 1969.

Section 13 of the Regional Planning Law conferred upon the Regional Planning Board the power, subject to the approval of the Governor of Jamaica, to make substantial regulations to realize the aims of the planning scheme. This is noteworthy in that the making of regulations would in the future generate great controversy and, thereafter, would lead to a requirement that planning regulations would have to be approved by the entire Legislative Assembly. With its 13 sections, the Regional Planning Law focused on the provisions of various aspects of planning for areas, but neglected that aspect of planning known as development control. Rather than being prescriptive by specifying actions and time frames within which they should occur, the Section 6 powers conferred upon the Regional Planning Board were enabling and discretionary. Their application was contingent upon the declaration of a Regional Planning Area and, even in this event, it was not mandatory to apply all of the provisions. However at least one would have to be exercised to cause a scheme to come into being.

Nevertheless (or perhaps because of this), the Regional Planning Law remained basically intact until it was replaced by the Land Development (interim Control) Law, 1969. Even though the Regional Planning Law was relatively comprehensive, and introduced "novel" concepts such as planning schemes, densities, zoning, building heights, their use and character and, setbacks from property lines, it appears to have enjoyed little, if any use at all as a planning tool.

When the Cayman Islands constitution orders of 1959 and 1962 were enacted because of the dissolution of the West Indies Federation and the independence of Jamaica,

profound changes occurred in the Caymanian legislative and administrative structures. A three year cycle was established for elections to be held and the Legislative Assembly would be constituted of 12 elected members, 2-3 official members, 2-3 nominated members, and an Administrator (Colonial Reports). Thereafter, the Cayman Islands functioned as a British Colony, independent of Jamaica (Davies, 1989, p.38). Powers that were formerly exercised by the Governor of Jamaica, were conferred on the Administrator (Davies, 1989, p.38). Because the 1962 constitution order was not laid before Parliament, a 1965 order was issued to revoke the 1962 order and be applied retroactively from 1962 (Davies, 1989, p.38).

On July 1st 1965, amendments were made to the Regional Planning Law to, among other changes, alter the composition of the Regional Planning Board [The Regional Planning (Amendment) Law 1965]. These amendments included a definition of "an area" as "the whole or any geographical part thereof of any Island forming part of the Cayman Islands" (Regional Planning Law, S.2). Under Section 3(d), the reference to "Government Medical Officer" was altered to read "Health Officer," the Inspector of Police to "Chief" and, rather than two Justices of the Peace one Justice of the Peace for each (electoral) district.

Rather than retaining members of the Legislative Assembly as RPB members, Section 3 (e) was amended to establish for the first time a RPB for the lesser islands (now Sister Islands) consisting of the District Commissioner, two Justices of the Peace and, the Medical Officer. This was the forerunner of a separate Development Control Board that would emerge in later years. Such initiatives would further consolidate the general confusion in the island communities that equated "planning" and "development control."

Additionally, during the period that the constitution orders were made, vesting the power of the Governor of Jamaica in the Administrator, a curious change occurred in Section 12 of the 1935 law.

Any question or matter which under this law or under any scheme is to be referred to arbitration shall be referred to the arbitration of a single arbitrator to be agreed upon between the Board and the person aggrieved or, in default of such agreement to be nominated by the Administrator.

The Administrator thus was able to simultaneously carry out the above while he was:

- a) A member of the Regional Planning Board that would recommend a planning scheme.
- b) Presiding over the Executive Council that would declare an area to be subject to a scheme, and
- c) able to approve or modify the scheme.

Despite the multiplicity of potentially conflicting roles, and wide spread powers able to be exercised by the Administrator, there appears to have been no conflict of interest that required the Administrator to disqualify himself from performing any of the roles. More surprisingly, the consolidation of these roles appears not to have generated any controversy, or socio-political conflict. Ironically, this would occur later on as the Island Administration expanded the planning function and diluted the concentration of administrative, legislative and, judicial powers.

In summary, while the Regional Planning Law was relatively comprehensive and allowed for relatively extensive land use planning to occur, very little was achieved in this regard. The multiplicity of roles filled by a few individuals created the opportunity for serious conflict of interest to occur. This appears not to have happened either. Substantial capital works projects were completed despite a scarcity of resources such as capital.

Capital works projects were evidently seen as more urgently needed than land use planning, rather than one aspect of an integrated development strategy that embraced both land use planning and capital works projects simultaneously. Nevertheless, while the Regional Planning Law was in effect a Development Plan was drafted in 1946. A discussion on the form, content and implication of the plan follows.

3.3 The 1947 Development Plan

In order to address what was described as the need to ensure that "development may proceed on a planned basis" (section 11, Dev. Plan 1947) the Commissioner sought advice and assistance from Jamaica for "a draft sketch plan of development and welfare." Subsequently, a multi-disciplinary team from Jamaica visited the Cayman Islands in May of 1945 to "investigate conditions and to consult with the Commissioner concerning the preparation of such plan." The team consisted of the Secretary of Social Welfare Services, an Inspector of Schools, the Architect of the Public Works Department and a Secretariat Officer (Section 11, Development Plan 1947). They drafted the plan in 1946.

The objects of the Plan were stated as "to meet the urgent need for improvement of the social and economic conditions of the people of the Cayman Islands" (Section 12, Development Plan 1947). The stated method was "a programme of works which it is considered can be undertaken in the next ten years" (Section 13, Development Plan 1947). Eight broad sectors were addressed namely: Agriculture, Education, Medical and Public Health, Social Welfare, Forestry, Fisheries, Communications and Miscellaneous. The latter included capital works such as construction of civic buildings, improvement of a ships basin, construction of a sea wall, and the employment of a superintendent of works to supervise the works envisaged.

Additionally, the salaries for accounting and store keeping staff were also provided for. The Plan's major thrust was the costing and provision for capital works projects and, the recurrent expenditure necessary for their maintenance and operation. Training needs were also estimated and, costs for their completion projected. Throughout the plan the terms "scheme" and "schemes" were referenced liberally. This terminology, however, did not coincide with the definition of "scheme" referred to in the Regional Planning Law as was previously elaborated on. Rather, these "schemes," viewed as development and welfare schemes, amount to what is termed today "capital improvement programmes" with the addition of a training component.

The Plan did not, by its own admission, "provide for proper topographical and cadastral surveys" (Section 15) thereby ignoring the link between its ten year capital works and training programmes and, the broader land use provisions of the regional planning schemes provided for in the Regional Planning Law. It is very unfortunate that a bifurcation of these development strategies occurred during these nascent stages of both capital works programming and land use planning. This would prove to be a decisive factor in setting the stage, for the manner in which both of these activities would be perceived in the future. Capital works programming was to advance in concert, and become integrated with the Government budgeting process. Its easily visible benefits, in the form of completed works would be perceived as a more legitimate form of "development planning," than that of "regional," "town," "land use," "physical," or community planning. Rather than an equal advance the role of land use planning was subordinated to, and somewhat usurped by, capital works programming.

The adoption of the title " Development Plan" for these capital works programmes, that sometimes included training and staffing needs in their budgets, would constrain the

progress of a more broad based and longer term land use planning function. What is likely to have unwittingly contributed to this impediment is that these plans actively touted the efficacy of, and societal gains that could be realized through, long term planning. Ironically, with the exception of the 1947 plan that indicated a ten year time frame, the programmes outlined in these plans were to be of three to five years duration.

This is not to suggest that such programmes were without value. On the contrary, without them many of the building projects and infrastructural improvements that contributed to the Islands development could not have been realized. Nevertheless, while capital works programmes grew by leaps and bounds, land use planning was left submerged in a quiet backwater. Rather than being used to anticipate and guide change, land use planning would become dormant only to re-emerge and create a storm of intense political conflict. Ironically, it would come to be viewed as reactionary in nature and anti-development. Meanwhile the 1947 plan, in its first draft form, was accepted by the Justices and Vestry. Implementation, it was noted, would depend on the financial position of the Islands for each budget year.

3.4 The Land Development (Interim Control) Law 1969

The Regional Planning Law (with minor amendments) was still in effect when Commissioner A.M. Gerrard arrived to take office in 1952. Gerrard was often at odds with the Executive Council and Legislative Assembly on various issues. One of the more important of which was the need for additional taxes to fund the modernization of Government itself and Government capital spending (Williams, 1970, p.81). Another obvious area of contention was his insistence on the need for Development Planning. Hannerz (1974, p.63) notes that

There would be a need for development planning, Gerrard argued, and everybody would not be able to do as he pleased with his property. To handle this planning, also, the Administration would need to be strengthened with new specialized personnel.

Despite these utterances, no changes were made to the Regional Planning Law during his tenure from 1952-1956. However, a number of capital projects proposed in the 1947 "plan" were completed during this period including; the twenty eight bed George Town Hospital, and the nurses quarters. Various other projects not mentioned in the 1947 plan, including airfields in Grand Cayman and Cayman Brac, and an adequate supply of electricity in George Town and West Bay were completed (Williams 1970, p.81).

With the increasing complexity of life and the influx of foreign nationals, discord in the political arena emerged in the 1960's (see for example D. Martins biography of O.L. Panton). One area of debate, rife with conflict, was the Government Administration's desire to take steps to regulate land use and "development." Hannerz (1974, p.115) has stated that this was "the greatest irritation among influential Caymanians." For planning as an organized and acceptable government activity, the expression of such irritation could not have had worse timing.

The local weekly newspaper, The Caymanian and the Hansard (the official record of the Legislative Assembly meetings) are replete with the details of a number of largely politically contentious issues that arose in the Islands at that time. They are also graphically detailed from a social anthropological perspective by Hannerz (1974) in his work Caymanian Politics - Structure and Style in a Changing Island Society. These apparently unrelated incidents had a common thread; they were all in opposition to the Government Administration of the day. They ranged from dissatisfaction with the way the electoral registers were compiled, to the importation of prefabricated buildings, and included the

boycotting of a session of the Assembly, a protest march against proposed regulations for Development Control and a law for the registration and ownership of land, and a statistics law. Hannerz (1974, p.113) notes that at this time various social changes were also occurring which included economic expansion, the perception of racial and class conflict, and as previously mentioned an influx of foreign nationals. The latter were generally viewed with resentment and suspicion, especially if they were "experts" in a particular field.

Chronologically, the second incident among these conflicts was the aborted election in November of 1968. Ostensibly this arose as a result of how the electoral registers were prepared. The first, and more important from a Planning perspective, was the rejection by the entire elected Legislative Assembly, save one member, of an interim Land Development Control Law in the March session of 1968. Because this meeting was held in Cayman Brac, it is suggested that this conflict had a profound and lasting effect on how planning come to be perceived in the Brac in the future.

Despite this, by February of 1969, during the first Budget meeting of the sixth session of the Legislative Assembly (p.7) the Administrator, Mr. A.C.E. Long indicated that legal and administrative arrangements to effectively deal with land development issues and land registration would require early attention. On April 17th 1969, the Land Development (Interim Control) Law came into operation having been passed on the 25th of March 1969. The stated objects of the Law were: "... to produce ordered and sensible development of the Islands and not allow indiscriminate buildings and development which may be against the public interest."

It was also noted, that the 1935 Law was antiquated and permitted uncontrolled buildings and development. The focus of this new interimistic legislation clearly was development control, rather than planning per se. It included definitions of development,

building, and building operations. Another novel aspect of the Law was the established of two Development Control Boards. Whereas the 1935 Law vested the powers of Regional Planning primarily in Legislative Assembly members, this law specifically excluded members of Executive Council from membership to the Development Control Board. Section 3 subsection (3) reads as follows: "no member of Executive Council shall be eligible for appointment to the Authority." The Executive Council was instead set up as an appeals body, through which refusals of the Authority could be heard.

The powers to amend the plans for development for which permission was granted were also vested in the Authority. This being contingent on receipt of a request from those who submitted the plans. Permission to effect development would lapse within a one year time frame, if in the opinion of the Authority, no development was substantially commenced. A schedule of exempted works was also included, as was the form of application required to be submitted to the Authority.

Registers of all development applications were to be kept by two Executive Secretaries, one for each board. This law also covered the erection or placement of advertisements, subdivision of land and, changes of use to buildings or land. An apparently (initially) innocuous (that was to later prove highly controversial) provision was Section 18, that empowered the Executive Council with the discretion to make Regulations. Despite the passage of this law, with little objection or fanfare, the introduction of the Regulations proved to be disastrous and can be offered up as an example of how not to introduce planning legislation.

The Administrator in his address during the Legislative Assembly meeting (minutes of a special meeting 25th March 1969, p. 26) stated:

I am sorry that this law did come quickly. It came quickly because I was horrified at the time that you haven't got an adequate law. You must have something. If you have a fire and you haven't got a poker you have to use a stick until you can get a poker. The point Honorable Members, is it not better than what you have got, very much better. It enables you to accept the driver's seat which is where the Government should be in these matters. We do not wish to be controlled by commercial enterprises, big developers or other people interested in developing the Island. Naturally, and quite correctly, they do it largely for the purpose of the money they get out of it, this is the capitalist system. Our duty, Honorable Members is not to make money, our duty is to be responsible and protect the 10,000 people who live in these Islands who will not be aware in detail of what is happening, who rely on us here to see that they are not exploited and that their land is not used wrongly, and that we do not turn what looks like a beautiful swan into an ugly duckling . . . this law was originally drafted by a man with many, many years experience throughout the world . . . It is of great importance and you have a responsibility - a deep one - as awareness for the need for planning grows in this Island and to see in future years what you did to create what they are looking at. Think of it in this way, I assure you all that there is no time to waste. You have to take a little bit on trust. I am telling you that there is no time to waste.

This expressed deep seated appreciation for planning, and recognition of the urgency to effect planning action, was sufficient to convince legislators to see the bill through the Legislative Assembly. During the last part of the December 1969 session of the Legislative Assembly, however, three of its members representing the district of George Town (the capital) boycotted the meeting (Hannerz, 1974, p.126). The contentious issue of the day was the cost of hiring new expatriate civil servants. Singularly identified among these were an Economist and a Town Planning Officer. This was a harbinger of the reception that future initiatives to expand the planning function would face.

3.5 The Land Development (Interim Control) Regulations 1970

The apparently innocuous Section 18 of the 1969 law was exercised in March of 1970 with the creation of the Land Development (Interim Control) Regulations (The Regulations). Upon publication they created a crisis. A protest march was planned and it

got underway on April 20th 1970, attracting about 500 people (The Caymanian, April 23rd, 1970). Subsequently, district meetings were held by opponents of the Regulations and attended by the Administrator. During the march, the protest marchers hand delivered a petition to the Administrator that requested him to

... call the present legislature into emergency session and repeal immediately the Statistics Law 1969, and Regulations and Zoning of 1970, (sic) and the Land Interim Development Law 1969 (sic) and, renounce all Government claims to so-called swamp lands. After the above is done dissolve the present House of Assembly and call for new election within two months (The Caymanian, April 23rd, 1970).

The Administrator was requested to assent to this within seven days. A further petition was presented to the Administrator for Her Majesty the Queen that beseeched Her Majesty in part:

[Due] to the recent actions of the Legislative Assembly in passing very detrimental laws, ... intervene on our behalf and have our present Legislative Assembly dissolved ... and that our Administrator, Mr. Long be recalled and a new person appointed in his stead (ibid).

No signatures were attached thereto.

An emergency session of the Legislative Assembly was called on May 1, 1970. In the meantime, a Royal Navy ship had arrived on 27th April at the invitation of the Administrator (Hannerz, 1974, p.149). Armed guards were posted inside the Town Hall where the meeting was being held, and a large crowd both within and outside of the building had gathered. The outcome of the meeting was that, despite amendments being made on April 22, 1970, the Regulations were to be repealed. It was resolved that all elected members of the Legislative Assembly would be appointed to a committee to reexamine the regulations and to make recommendations for a new planning law and regulations (Hannerz 1974, p.165). The person appointed to head the committee was none other than the Member who had opposed the appointment of a town planning officer. By

the 5th of May 1970, the interim regulations had been suspended, despite the fact that a new Department of Planning had been set up. In the face of widespread public opposition, the interim regulations had lasted a mere 44 days.

The provisions of the Regulations though fairly comprehensive were not onerous. In fact, the Development and Planning Regulations (1972) that were to follow would be more demanding in terms of submission requirements. Parking requirements did not change from 1970 to 1972. Buildings heights were limited to 45 ft., and provision was made for zones. Permission was required for the removal of beach sand; and for occupancy of buildings, with special consideration being granted to Caymanians who traditionally built houses in a piece meal fashion, depending on the supply of materials and capital. Setbacks for buildings were specified, as were the requirements for subdivisions, including a discretionary requirement for lands for public purposes. Site coverages for various types or categories of buildings were addressed and these were to be in accordance with a draft plan that had been "currently adopted for guidance of the board during the Interim Control Period."

This was the first genuine attempt at the establishment of zoning. For the first time also, a commercial centre was designated, as was an area in the capital, denoted by grid references on the waterfront, where no new buildings were to be permitted. This apparently was done in an effort to protect the open character of the waterfront, although it was not explicitly stated.

3.6 The Development and Planning Law, 1971 and Regulations, 1972

The Development and Planning Law 1971, (The Law) came into operation on January 17, 1972 having been passed on December 20, 1971. Regulations followed in March of

1972. Substantial gain was now being made regarding integration of the land use planning function with the development control function. Both were afforded legal status. The law was indeed comprehensive for the period as was promised by the Legislative Assembly. It was divided into six parts and two schedules.

Part I dealt with central administration. Thereunder, a nine member Central Planning Authority was established, as was a four member Development Control Board for the Lesser Islands. Staff, including a Director of Planning and other officers as appeared necessary, were also provided for, to ensure that the Authority could properly carry out its statutory function. Such function was described as "consistency and continuity in the framing and execution of a comprehensive policy approved by Executive Council with respect to the use and development of land, in accordance with the development plan for the Islands prepared in accordance with the provisions of Part II or otherwise in operation by reason thereof" (The Development and Planning Law, 1971).

Part II consisting of some 6 pages, including: detailed time frames for action, the provisions that could be made within a plan, conditions to be fulfilled for acquisition of property, procedures to amend the plan, specification of which entities were to be consulted during plan preparation, time frames for notices, methods and time frames of the plan, a time frame within which objections could be made, and an appeals tribunal to hear appeals against decisions of the Authority. Planning's new era appeared to be dawning, but there were inherent problems with the level and method of consultation required of the Authority by the Law and the time frames for public display of the Plan. These flaws would be accentuated when a plan was produced and proposed for adoption in 1975.

Part III contained a full 13 sections over 15 pages and dealt with the control of development of land. It specified a definition of development that was taken from the

United Kingdom Town and County Planning Act (see for e.g. Heap 1987, p.115) and modified, to exclude certain activities, operations and types of structures. The Authority could also delegate certain of its functions to the Board. When the delegated functions resulted in refusal (by the Board) of planning permission for an application, the Authority would act as an appeals tribunal established under Part VI of the Law.

Provision was also made for revocation and modification orders where the Authority required. The enforcement of planning control also figured prominently, and for the first time the concept of enforcement notices was introduced. Appeals processes were also spelt out, in the event that an enforcement notice was issued. Such appeals would be resolved in court. A time frame of four years was given within which unauthorized development could be enforced against.

The Authority was also granted the power to make tree preservation orders, subject to Regulations being made that would specify the form and process of the order. For the maintenance of waste land, due to the deposit of waste etc. the Authority was empowered to serve a notice requiring abatement of the injury. Decisions of the Authority could also render the Authority liable to pay compensation.

Under Part V the Authority was empowered to acquire and dispose of land for planning purposes, the land being required to have first been identified in a development plan. Part VI specified the powers of entry by anyone authorized by the Authority relating to the preparation of a development plan, or the determination of an application or other function. A method or format for the service of notices required under the law was also specified.

Regulations could be made, by the Governor in Council, for certain activities among which was the production of a building code. However, such regulations had to be first

approved in draft form by the Legislative Assembly. The political folly of having Executive Council alone enact regulations was obviously still prominent on the list of things not to do.

The law was also specific in that it was legally binding on the Crown. The second schedule of the law dealt with matters for which provision could be made in development plans viz:

- roads (preservation of land, closure, construction, dimensions etc.)
- buildings (size, height, bulk, setbacks, site coverage, parking, objects that could be affixed to them, their use or prohibition, etc.) design, number, classes.
- community planning (zoning and use, density, layout, spacing etc. of subdivisions, determining the provision of community facilities e.g. schools, churches, recreation grounds;
- amenities (lands for public or private open space, burial grounds etc. for communal parks, bird sanctuaries, the protection of marine life; the preservation of buildings, reefs, archaeological architectural historic artistic sites and objects, preservation of trees woodlands etc.
- public services (facilitating the provision of water supply, sewerage etc.) - transport and communication facilitating the provision of air and sea ports, the extension of telegraphic, telephonic etc. communication systems and, the reservation of lands for the above.
- miscellaneous (subdivision control, e.g. lot size, roads, services, and effecting land exchanges etc.

Clearly, from a legal perspective, the planning and development control functions had merged and the ground work had been laid through which both could be vigorously pursued. But, one crucial aspect of planning that appears to have been ignored or overlooked at this juncture was that of public participation. This oversight would have dire consequences when an attempt would be made to comply with the requirements of the law to complete a development plan. The Development and Planning Regulations would assist the Authority in addressing the day to day aspect of development control through the

application process, with the administrative support of the planning department. The task at hand therefore was the production of a development plan.

3.7 The Proposed Development Plan, 1975

During the 1970's the United Nations were actively assisting Caribbean Countries with their Planning and Development needs and, by 1972, had seconded an Associate expert (planning) to the Cayman Islands (Ebanks, K., 1993).

Additionally, six young Caymanians had been trained in physical planning and technical infrastructure under the United Nations training programme headquartered in St. Lucia, W.I. Participation in the United Nations Development Programme Physical Planning Project, or UNDP as it was known, indicated that the Cayman Islands administration appreciated the need for land use planning. Previously, neither an acceptable and appropriate process of planning, nor consensus on the content and form of a plan however, had been articulated. This was to prove to be a very complex and taxing task. It would also prove to be a highly contentious activity and would continue to compound divisiveness in the political area.

3.7.1 Description

The 1975 Development Plan consisted of three parts, namely: a survey and report - i.e. the existing situation with objectives and policies; the plan - a map indicating proposed land use zones and a number of roadways along with, the planning statement - basically detailing regulations that were required to implement the plan. A synopsis of its structure and content follows.

The overriding theme of the plan was controlled growth over a fifteen year period. At the end of Chapter One, that addressed the background to the plan this theme was

symbolically stated in a manner designed to attract the attention and gain the support of a diverse group of people; "with the turtle as the symbol of the Islands, the slogan for its future development might rightly be taken from the Mariculture Turtle Farm (Road Sign), Slow - Turtle Crossing Ahead - or in more elegant phraseology - Festina Lente - hasten slowly" (Development Plan 1975, p.6).

The plan was divided into sixteen chapters. Chapters one through ten formed the survey and report. This survey and report, rather surprisingly, began with the first chapter entitled "Objectives." Upon examination, however, one will note that only one primary objective was put forward, that of a programme of moderate growth. Accompanying the decision were arguments against rapid growth and the benefits of moderate growth. Many more subsidiary aims were articulated, and these included: a balance in population ratios between Caymanians and non Caymanians of 3:2; the spatial decentralization of growth outside of the George Town/West Bay area, the availability of good housing, education and health care to all, academic and vocational training, benefits to the infirm and aged, historic and environmental preservation and a harmonious working of the planning authority and the developer to maintain and enhance the resources of the Islands. Such "motherhood and apple pie" statements despite their good intentions, did not suffice to assuage the fears of the Island community that the process of plan making and its content were severely flawed.

Chapter Two, entitled "Background," provided a physical geographical and historical synopsis of the Cayman Islands including geology, relief, climate, discovery, settlement patterns, migration and a mention of administrative structure.

Chapter Three, entitled "Population and Manpower," chronicled population growth from 1891 to 1973 noting that early population growth (1891-1960) ranged between 1.1 to 1.4%, in the period between 1960-1970 it increased to 2.8%, and from 1971-1973 a very

high increase of 7.3% growth annually was experienced. Also addressed within this chapter are age, sex and racial distributions of population, household size, labour force and manpower requirements. The chapter is replete with population projections, both in graphic and written form and a map indicating preferred population distributions in 5 year increments to 1990 in each of the electoral districts of Grand Cayman. It would be beneficial, it noted, to assume population growth for the plan period to range between 20,000 and 30,000 with the lower end figure being deemed desirable.

Chapter Four, entitled simply "Economy," consisted of sections on the declining role of Caymanian seamen as economic contributors to overall development, the role of shipping which was also in decline and, substantially more extensive sections on tourism, offshore banking and finance, agriculture and manufacturing which were considered growth industries. Projections indicated that the rate of growth would decline between 1976-1980 to 7% (annual average) and to 5% between 1980-1990. Constraints to growth were noted as a shortage of manpower, inadequate infrastructure, potential restrictions on offshore banking, uncertain world economic trends and the controlling of population growth.

Controlled growth, it was assumed, was desirable to the island community and that through this strategy the Caymans would develop in a beneficial manner. The efficacy of controlled growth however would prove to be elusive.

Chapter Five, entitled "Land Use and Subdivisions," featured detailed soil maps and a classification system within which the quality of soils and their suitability for various types of development were presented. As with other chapters of the plan, planning was juxtaposed against laissez-faire development. Normative pronouncements were made on the desirability of planned vs sprawled communities, the need to retain undeveloped open spaces and the undesirability of uneven development between districts. Attempts were

made to rationalize the amount of property needed for residential development by utilizing; density, area of property already subdivided, household size and projected population. It was emphasized that three times the acreage required for housing over the plan period (1975-1990) was already subdivided and laid out. Implicit in this statement was that further subdivision should at least be discouraged, if not prohibited.

Problem areas of subdivision development were also outlined and these included the cost of providing infrastructure to partially built out subdivisions, the ecological impact of clearing land, the issue of speculative construction by non Caymanians, and the costs of maintenance and completion of roads in subdivisions.

Procedural guidelines were suggested through which government, in concert with private utility companies would determine standards to be adhered to, maintenance of services would be addressed at the initial stage and the phasing of development would occur. A number of development control initiatives were also suggested including both subdivision and building codes.

In Chapter Six, which was entitled "Infrastructure," a number of pronouncements were made. One of the most short sighted of which would have to be the removal of road corridors such as the east - west spinal road and more importantly, the West Bay motorway. These had been previously identified in the interim plan of 1972. In the 1975 plan it was assumed that the proposed population policy would be adopted in its entirety and from this all other projections followed. These roads therefore, were dismissed as unnecessary and too costly. (Development Plan 1975, p.42).

The Plan also envisaged a tremendous monitoring of road users, which would require speeds, weights, numbers and sizes of vehicles to be regulated, relative to the capacity of the road. Substantial consideration was given to car parking and pick up points similar to

what we now know as park and ride facilities. Road surfacing and surface drainage received much more consideration than did the provision of future road corridors.

Detailed consideration was given to the revamping of the airport, including the relocation of terminal buildings and the extension of the runway out into the North Sound. A ports plan had been completed during the preparation of the 1975 development plan, and the 1975 plan repeated the proposals that the port plan had put forward. One consideration that figured prominently was the need to ensure that traffic volumes did not adversely affect the functioning of the downtown area, as the main port is centrally located in downtown George Town.

Calls for more co-ordination between private utility suppliers and government were made, especially regarding the supply of electricity. The demands for water supply and sewerage were also prominent factors. However, the projections, again based on full acceptance of the population growth policy, were to prove extremely inadequate. As an example, the plan projected water consumption at 1.25 million gallons per day in 1990, while today (1994) estimated consumption is well above 2.2 million gallons per day. (R. McTaggart, personal conversation, 1994). The plan also noted that water mains are cheaper than sewerage systems to install, and implied that the provision of water should take precedence.

Water ferries were suggested as a means of improving public transportation, but these have not come into being. This is likely due in large part to:

- a) the costs associated with the initial set up;
- b) the relatively small numbers of potential customers; and,
- c) the intense competition from the dive operations of the tourist industry, for those able to own and operate boats.

Chapter Seven, "Tourism," was surprisingly less prescriptive than other chapters of the plan. However, substantial consideration was given to an analysis of the tourist industry. Growth charts, tourist facility mapping and tables of tourist arrivals by national origin for selected years were included. Bed occupancy rates and length of stay were analyzed and projections made for their increase and decrease respectively during the plan period. General statements were made regarding the need to protect natural resources such as beaches, coral reefs and mangrove areas. Many of these areas and their flora and fauna were viewed as tourist attractions. In short, the chapter on tourism did not appear to recognize the important role that tourism would come to play in the Caymanian economy. Neither did it appear to formulate prescriptive actions necessary to secure the natural resource protection which was alluded to.

Chapter Eight, which was the chapter on "Community Facilities," included discussions on a broad range of topics such as educational facilities, hospitals and medical services, solid waste disposal, social and welfare services, news media, recreation and leisure activities, parks and conservation areas, parks and public gardens and recreation areas. No detailed analyses were offered. Broad, generalized statements constituted the major body of this chapter and apart from the educational and hospital facilities no prescriptive proposals or space standards emerged. The need to conserve natural areas appeared liberally throughout this chapter. Some locations were named for specific uses but spatial extents were not proposed, neither were phasing programmes, acquisition of property, funding etc. In short, chapter 8 appeared to suffer from over-generalization.

Chapter Nine concentrated on "Housing" and presented some of the more in-depth analyses of the summary. A brief synopsis of the architectural forms and material changes which had occurred over time was included. Previous projections for land use activities

were re-iterated again using the projected 21,700 population figure at the end of the plan period.

In compounding the myth of land as being productive only if it is used for human activity, land unsuitable for housing, agriculture, etc. was labelled unproductive. The emergence of apartment buildings, primarily for overseas resident workers, skilled, unskilled and professional was noted. Future housing demands in each of the electoral districts were projected. These projections, it was noted, were tentative and subject to change depending on the amount of development allowed. New standards for density allowances were proposed and the concept of low (3 houses per acre) medium, and high (eight units per acre) density residential zones was introduced. The housing demand projections previously mentioned in the discussion on the subdivision of land and their build out rates were reiterated. The concept of infill development that had previously been discussed in chapter five of the plan appeared once again. The need for initiatives to provide low income housing (insensitively called poor houses) was stated. The roles that government and the private sector were to play were not developed upon. It was noted however, that self help house building was a significant feature of Caymanian housing.

The cost of housing finance was described as being out of reach of a majority of Caymanians, with only one third able to assume a mortgage of \$30,000.00 at 12% after a 15 year period for a 1,000 sq. ft. house. With this recognition, 12 housing objectives were proposed to bridge the gap between housing demand and housing supply. Some of these however appeared contradictory. For example construction of single family housing was "preferred", yet lower construction costs were to be encouraged. Again, many of these objectives were vague. This section of chapter 9 like much of the report of survey was

prefaced with the disclaimer that insufficient research had been carried out to determine a detailed (housing) programme.

Chapter Ten, entitled "Ecology and Environment," discussed both the natural and built environments. Beginning with coral reefs and the effects of dredging, it described the ecological role of mangrove swamps and the need for swampland management. It also pointed out the need for conservation and protection of beach ridges. Much of this chapter was replete with brief descriptions of subsystems of the island ecosystem, the effect of planning on settlement patterns, the virtues of traditional methods of constructing the built environment, the impact both negative and positive of tourism, the benefits of properly scaled development, the importance of beaches, mangroves, ironshore, beach ridges, vegetation, road layouts and the effects of architecture on the scale and function of the built environment.

It suggested a partnership between the department of planning and the private architectural offices, to give careful consideration to the character of development with a view to realizing a "Cayman Image" similar to that developed in Bermuda and the Dutch Antilles. One tentative suggestion also put forward was for the creation of a National Trust. The concluding remarks were that research was underway to provide more definitive pronouncements on ways to positively contribute to long range development.

Chapter Eleven, entitled "Present Structure of Development," described in 12 pages the existing spatial layout of areas and an overview of the state of infrastructural services. The electoral district of West Bay was considered to be a quasi-dormitory town for George Town as were the other districts. George Town was exerting urban primacy and this was anticipated to continue. Warnings were issued regarding the inadequacy of roads, water, and sewer lines in George Town and the West Bay area. The importance of the latter as the

main tourist resort area was noted. The need for careful planning and monitoring of this prime tourist area figured prominently in this chapter. Specific concerns were: the reservation of sites for hotel development, public access to the beach, the folly of ribbon development, the need to maintain the architectural/aesthetic quality of the area, the proliferation of shopping centres, the need for conservation areas, the control of dredging, the growth of traffic volumes, the elimination of the motorway and the provision of corridors for cycling and walking.

George Town's spatial layout and services were again considered in a broad, generalized manner. The need for a tourist information centre and a foreshore walkway were deemed desirable, but no in depth analyses were offered to determine appropriate space standards, or the adequacy of services. Similarly, the other three electoral districts of Bodden Town, North Side and East End were all superficially analyzed. Specific recognition was given to the need for a "rapid communication road" between these outer districts and the capital, yet no effort was made to retain or replace the east-west arterial that had previously been proposed by the interim development plan of 1972. A loop road was proposed in Bodden Town and an east-west road linked to Frank Sound road from Colliers with a north-south link to East End were the only other road proposals.

Chapter Twelve, entitled "Future Patterns Of Development," set out 7 primary goals and 6 secondary goals of the plan. The importance of the tourism industry to the economy was underscored, while the need for limiting the number of tourists was advocated. The need for what was termed "concentrated decentralisation" was put forward to prevent sprawl and ensure that high amenity development occurred.

Laissez-faire development was again denounced and thirteen negative characterizations of it stated. Two of these which are evident today are: the choking of

main roads through increased traffic and, ribbon development with its higher costs of services and infrastructure.

Chapters Thirteen and Fourteen dealt with "Cayman Brac" and "Little Cayman." These two islands have not experienced the development pressures of Grand Cayman. As a result the need for planning has not been seen to be as acute as that of Grand Cayman. Thus, the development of planning initiatives and institutions have not been pursued to the degree that they have in Grand Cayman. Nevertheless, calls were made for an integrative development strategy for the lesser (now sister) islands. Additionally, it was noted that detailed area plans had yet to be produced for all of the electoral districts, Cayman Brac and Little Cayman included.

A population projection produced for Little Cayman was surprisingly much more on target than that for Grand Cayman. Little Cayman was seen as a conservation and "highly selective" tourist area, yet the notion of locating a break bulk oil terminal storage facility was not ruled out. Ironically, this was being considered for the western end of the island where recently, most of the tourist development is taking place. These chapters again concluded with the almost apologetic disclaimer that broad outlines were all that were possible within the context of the report, and again they urged further study.

Chapter Fifteen entitled "Planning Statement," consisted of a number of zoning proposals that were to be read in conjunction with the zoning map. Accompanying the zoning proposals were specifications on site coverage, density setbacks, lot sizes, minimum lot frontages, and carparking requirements. It is surprising that many of these stipulations were articulated given the stated intent of the housing section to reduce building costs.

In most zones, there was a maximum site coverage for houses but in medium density residential zones there was a minimum site coverage as well. Additionally, there appeared

to be a confusing number of requirements regarding setbacks, maximum and minimum site coverages, the requirements for provision and the sizes of storage units, within and between zones. The Authority was given broad discretionary powers and these were to prove to be culturally unacceptable to the Island community.

Chapter Sixteen consisted of all of the appendices which included rainfall, temperatures population and demographic data in the Cayman Islands and other Caribbean countries, work force composition, preferred population distributions and work force compositions, soil types, acreages of soils, import tonnages of goods arriving by sea, water supply by building type, tourist arrivals by air and national origin, an analysis of tourist facilities giving lists and numbers of Caymanians and non-Caymanians employed, a listing of tourist support services such as restaurants, car rental agencies, etc.

From the above description one will note that the proposed 1975 development plan was extremely ambitious in the amount and variety of subject matter that it covered. The data collection and tabulation exercise was quite impressive given the fact that automation was not highly developed at that stage. In fact, it was not until 1979 that government purchased its first computer.

What then was the result of the proposed plan? Like previous planning initiatives this proposal resulted in unanticipated protests. Two marches occurred, one on December 22th 1975 and, another on February 27th 1976 (The Nor'wester, April 1976, p.13). Slogans such as "Death Warrant," "Destruction Plan," "United Nations leftists," "Communitic Plan" etc. were prominent in the media and on the placards at the marches (see figure 2).

Content analysis of the local publications from April of 1975 (when the public input began) reveal a number of areas of contention that were recurrent. These are discussed in order of importance below.

Figure 2 Public Opposition to the 1975 Development Plan



Source: Various issues of The Nor'wester magazine published in the Cayman Islands during 1975-1976.

The Process

The plan, even though prepared under the auspices of the Central Planning Authority (CPA) was based on the work of the United Nations advisory team. In 1969, the United Nations had prepared a draft plan which was approved by the CPA on January 25th 1972. This plan was known as the Interim Development Plan. A further Draft Plan was produced in March of 1973. Early in 1974 a United Kingdom development adviser was appointed to review the social and economic aspects of the plan. A United Nations team arrived in December of 1974 and the proposed 1975 Development Plan was drafted. It was amended in consultation with the CPA. Subsequently, the plan was approved by Executive Council and then the 190 page document of texts and illustrations, with high gloss multi-coloured maps, was printed.

The planning law extant at the time (the 1971 Law) mandated that the public was to be notified of the Proposed Plan and that copies were to be made available for public review. A statutory one month period was laid down in the law, during which objections and representations could be made. Despite this minimalist public input requirement, several steps were taken to solicit public input.

For example an eight page newspaper supplement was published on April 3rd 1975. Exhibitions were undertaken which included photographs and other illustrative material, a question and answer column was opened in the local newspaper and, a number of public meetings held, as were discussions with civic groups. A local magazine, "The Nor'wester", devoted practically all of its May 1975 issue to the Plan.

Nevertheless, these actions culminated in the marches in December 1975 and February 1976. Clearly, the public input aspect of the plan was flawed. Rather than being developed systematically throughout the process, with the communities, the plan was prepared by technical experts and then put out for public input. By the time it reached the public, it was set in a polished, professional format, that suggested little room for amendment.

A time frame of one month for review by the general public was far too short. Why should we only have one month to review a document that took the experts years to complete? was the indignant question of the day. The adversarial approach for public input, entrenched in law, was not recognized to be a constraining factor. Public presentations and press releases were thought to compensate for the short time frame embodied in law.

Despite the fact that the plan was replete with disclaimers on the need for further study in order to arrive at more detailed programmes, it stated "the 1972 plan was an interim measure pending preparation of the definitive plan which is now presented"

(Proposed Development Plan, 1975, p.115). This assertion, and the finished format previously noted, had the effect of convincing the community that the plan was cut and dried, official assurances to the contrary.

The Content

Some blame for its failure must also lie with the content and structure of the plan. The sheer volume of its pages and the myriad of issues covered, could easily be construed as an extreme case of information overload, even in a much more sophisticated metropolitan setting. The number of maps, charts, tables etc. were in many instances superfluous, since very little analysis of their implications was explicit in the plan. Additionally, and perhaps most damaging was the thrust which the plan took. Explicit in its approach was the philosophy of moderate growth, conservation and, general restraint. When the plan was being formulated, the island economy was buoyant.

However, by the time it was produced, the economic picture had been altered drastically world wide. For a small group of islands with a fragile economy, primarily dependent on tourism and offshore banking and finance the gist of the plan, though noble, was inappropriate at that time. Moreover, it was predicated on the premise that the entire community would laud and embrace a controlled population growth policy. All of its projections, based on controlled population growth; with the exception of the population growth for Little Cayman, would prove to be inadequate. At the time more importantly, the controlled growth scenario was culturally unacceptable.

Moreover, what did not appear to have been given sufficient consideration was the fact that 1976 was an election year. Planning in the Cayman Islands, as noted previously, has historically been a politically contentious issue. In 1976, the proponents of the plan

were defeated at the polls. The newly elected government were then obliged to take up the gauntlet of planning.

CHAPTER 4: PLANNING INITIATIVES 1977 TO 1989

4.1 Physical Planning

Physical Planning in the Cayman Islands is primarily the responsibility of the Central Planning Authority (CPA) and the Development Control Board (DCB). The Administrative arm of the CPA is the Planning Department. In undertaking this responsibility the CPA is bound by section five of the Development and Planning Law (Revised). This law was previously known as the Development and Planning Law (1971) and was revised and consolidated in 1978. Additionally, the Development and Planning Regulations (with amendments) 1977 are the current Regulations, having replaced the 1972 Regulations in July of 1977. These legislative measures and the Development Plan 1977, form the statutory and policy umbrella under which the CPA and DCB operate.

Unlike its forerunner, the 1975 plan, the 1977 Development Plan is a thin, easily read publication. From chapter three one will recall the dissension that was rife during the debates on the 1975 plan. Content analysis of the island periodicals and newspapers for the period 1975 to 1978 reveal that dissent on planning issues peaked in 1976 and dropped off sharply in 1977.

A number of dynamics explain this phenomenon. First, elections had just been concluded late in 1976. The losing team¹ was the proponent of the 1975 Plan. They did

¹Since there are no political parties *per se*, teams are formed. These are grouping of potential candidates from each electoral district that hold similar views on various aspects of economic, physical and social issues. There is no extreme right or left wing, and in political terms most politicians would have to be considered centrists, with perhaps a bias slightly to the right of centre

not retain any seats in the legislative assembly and therefore were unable to raise any opposition from that quarter.

In addition, the newly elected government (in 1976) formed district committees, to review the proposals of the 1975 plan that had by this time been subjected to revision and a rigorous appeals process. Subsequently, the new proposals were put before a Select Committee of the Whole (of the legislature). By July 28th of 1977, the islands had a new Development Plan and new Planning Regulations. Headlines in island publications heralded the decision (See Figure 3).

Figure 3 Public Acceptance of the 1977 Development Plan



Source: July and August issues of The Nor'wester, 1977.

For the past sixteen years the physical development that has occurred has been guided by the 1977 plan, the Law and, Regulations. For the sister Islands, guidelines were deemed acceptable and desirable, therefore only the Law is applicable to them.

The major changes to the plan were:

- a) Removal of a proposed canal at Red Bay.

- b) Increased Residential Zoning and the mapping of three district residential zones based on density.
- c) Reduction of the public open space/zone, and the provision of dispersed public open spaces around the coast.
- d) Reduction of the protected mangrove zone, a name change to storm belt and reduction of the storm belt from 1,000 to 500 ft.
- e) Reduction of the Agriculture Forest Reserve Zone, a name change to Agriculture/Residential and an increase in density to one (1) house per acre up from one house per five (5) acres.
- f) The expansion of commercial areas and the dispersal of commercial zones in outlying districts.
- g) An expansion in industrial zoning and two categories of industrial zones.
- h) Deletion of the term heritage coast and replacement by the name scenic coastline with relocation of some scenic coastline areas.
- i) Expansion of the hotel/tourism zone and a name change from hotel.
- j) The provision of public access points along the coast from the road to the sea.
- k) The provision of substantially more road corridors.

Flexibility was the theme of the 1977 plan and this was juxtaposed against "discretion." The latter it was stated (The Nor'wester, September 1977) had been misused by the CPA. In contrast to the 1975 plan, the 1977 plan did not expound on the need for planning. Neither did it attempt to justify the merits of a conservation ethic. Instead, it presented a matter of fact "business as usual" approach that specifically identified characteristics of Caymanian culture (namely: self reliance, sea-faring, free enterprise and land ownership interests) and denounced any planning effort that would frustrate this way of life, as being doomed to failure. The 1977 plan introduced a concept of flexible zoning, wherein proposed primary land uses were identified and other proposed uses permitted,

provided that they demonstrated that they did not adversely affect the primary use of the zone.

There was neither an attempt at determining a population growth policy nor any internal distribution of population. Fresh water supplies, it was noted, would require improvement and, in this regard, a report was forthcoming from consulting engineers. Similar statements were made for the provision of sewerage. A series of appendices were included that listed density, site coverage, lot size, parking and building height requirements. These were also stipulated in Regulations. Additionally, road, water and, sewerage requirements were stipulated that were duplicated in the Regulations.

The pro-growth stance of the 1977 plan is undeniable. For example, some of the policies listed under the heading strategy are:

- a) to accommodate the present and future population of the Island to the best advantage having regard to the quality of life and the economic well being and prosperity of the people and to their individual requirements.
- b) to maintain and encourage the further development of the tourist industry and of the banking industry.
- c) to encourage the development of manufacturing industry, service industry and food production with the object of making the Island more self sufficient.

However, the conservation of fresh water supplies and the preservation of natural resources were also noted as policies. The flexible land use concept of the plan has proven to be a popular and enduring approach to physical planning. Its adequacy will be given further consideration in chapter 5.

4.2 Road Planning

This section examines the general road planning initiatives that were undertaken between 1977 and 1989 on Grand Cayman. These initiatives are examined from a land use planning perspective. Such examination does not purport to be a detailed analysis of transportation planning needs. Rather, it is intended to describe the methods by which road corridors are created and roads provided.

Early road construction efforts as described in chapter three were undertaken as ad-hoc capital works projects on an (intuitively determined) as needed basis. Thus it can be said that the current road system has evolved without the benefit of systematic traffic analyses.

Section 6 of the development and planning law stipulates that proposed roads can be defined in a development plan. Pursuant to section 6 (4) and the Second Schedule, the reservation of land for roads or rights of way, closing or diversion of roads or rights of way, construction of new roads and alteration of existing roads, the line, width, level construction etc. of roads can be provided for in a Development Plan. The Authority, however, pursuant to Regulation 6 (2) shall not designate land as subject to acquisition if it appears to the Authority to be unlikely that the acquisition will take place within 5 years of the date of operation of the plan.

Further, under Regulation 6 (3), if the Authority has not acquired land subject to acquisition within one year of the date of operation of the plan, a land owner (or someone owning an interest) may serve the Authority with a notice requiring acquisition. A failure of the Authority to comply within 6 months (or a longer negotiated time) renders the property not subject to acquisition. Therefore, long term planning for road corridors beyond a five year time frame is severely constrained.

The road provisions of the 1972 interim plan had been removed in the 1975 plan due to its controlled growth philosophy and population control policy. Specifically, proposals for the road then known as the West Bay motorway and the east-west arterial ceased to exist. In the 1977 plan these road provisions were not reinstated. Instead, alternative proposals that anticipated - and attempted to encourage - the eastern expansion of development were put forward, as was an extension to the Mount Pleasant road in West Bay.

The north east coast road, now known as the Queens Highway, and the Mount Pleasant road extension were completed. A relatively extensive series of agricultural feeder roads were also completed. Over time, junction improvements at the more congested areas have been undertaken, as well as the realignment of dangerous curves and road shoulder improvements. Extensive road surfacing and repairs have also been mainstays of the roads programme. The upgrading and continuation of roads has taken place incrementally throughout the districts.

New road corridors and road construction takes place in two ways. First, under the roads law, Executive Council is the Highway Authority. Certain of its functions may be delegated to the Public Works Department. It is Executive Council, however, that decided (and decides) when and where roads were (will be) constructed. Once the general location of the road has been decided, Public Works Department is instructed to complete the road design. The proposal is then put forward to the Planning Authority which considers the recommendation of the Planning Department and either grants or refuses planning permission for the road. The Lands and Survey Department is then instructed to complete a boundary plan and once this is done, and negotiations concluded for land acquisition, the road is gazzetted and subsequently constructed by Public Works Department. The decision

to locate a road corridor is, broadly speaking, based on subjective assessments. Additionally, area residents and technical personnel may be consulted. There is no evidence to suggest, however, that the decision to locate a road corridor results from systematic or standardized rationalizations such as levels of service, trip generation, average daily traffic, peak hour flows, etc. Neither was there evidence to suggest that the road corridor proposals formed part of a larger road network plan. Further, the linkage between projected future development and projected future traffic volumes does not appear to be given sufficient consideration.

The second way that roads are constructed is when private interests wish to construct a subdivision or a project for which road access and provision is necessary. Plans, either prepared in advance or after consultation with the Planning Department, are submitted to the Planning Department for evaluation. Public Works is requested to comment on the proposal and after receipt of such comments a recommendation is made to the CPA. The CPA can either grant planning permission or refuse it. The granting of planning permission is usually subject to conditions, one (in the case of roads) of which is that the developer shall liaise with the Public Works Department prior to and during road construction, to ensure that the road is adequately constructed. Over time, the standards to determine adequacy have evolved into a relatively comprehensive written format, specifying widths, curb heights, horizontal alignments and other geometric requirements.

Once the roads have been certified by the Public Works Department to have been constructed to the requisite standard, the Planning Department signs a final approval plan which allows the developer to, through the Lands and Survey Department, register the development and the roads. Once sufficient building construction has occurred to derive access from the road, the Public Works Department is then requested to organize gazetting

of the road as a public road. Once a road has been gazetted, the Public Works Department is obliged to maintain the road. The original developer is not obligated to incur any further road costs.

In an attempt to improve the traffic circulation and road planning function, a master ground transportation study was commissioned and was completed in 1988. An international firm of Consulting Engineers Architects and Planners - Wilbur Smith and Associates - undertook the study and worked with a local steering committee of senior civil servants representing the Planning, Public Works, Lands and Survey, and Legal Departments along with the Financial Secretary's office, the Portfolio responsible for Roads Planning and the Royal Cayman Islands Police Force. Substantial technical analyses, such as trip production, benefit/cost analysis and reviews of the existing legal and organizational arrangements for road planning occurred. Comprehensive recommendations for road standards, road corridors, policy changes and legislative amendments, and funding were also produced.

Despite a technically sound report and presentation, the Master Ground Transportation Plan failed to be accepted as government policy. This failure has primarily been attributed to the excessive costs that were projected to be incurred over time. Additional contributory factors have been suggested as: excessive widths for roads and junctions, restriction of access to affected land owners and onerous design specifications. The Master Ground Transportation Plan also attempted to establish a "longer term" (i.e. a ten (10) year) horizon for road projects.

In many instances, because of the relatively high level of urbanization, much of the road junction and corridor proposals entailed considerable encroachment on, or removal of existing development. This would have necessitated either the relocation or modification

of affected businesses and homes. It can be argued therefore, that the cultural characteristics stated in the 1977 plan played a significant role in the rejection of the Master Ground Transportation Plan.

4.3 Hurricane Preparedness Planning

Hurricanes are a source of great destruction in the Caribbean. The Hurricane season occurs officially from 1st June through 30th November, but hurricanes have occurred outside this period (Cayman Island Hurricane Preparedness plan, 1990, p.1). In 1989, just prior to the occurrence of Hurricane Gilbert, a Hurricane Preparedness Plan for the Cayman Islands was produced.

This plan has and continues to be subject to revision annually. It is a forty seven page document with another sixteen pages of maps. Within its ten chapters and six appendices, a variety of topics are covered. These include the Hurricane emergency organization (although no organization chart is provided), hurricane warnings, internal communications, duties of the police, search, rescue and initial clearance, action to be taken by the 1st of June each year and, a series of actions after phases 1, 2, 3 and 4. The phases relate to notification that is received on the location, speed etc. of the hurricane and, an estimation of when it is likely to strike, or when the threat has passed.

The aims of the Hurricane Preparedness Plan are stated as being to ensure that:

- a. All practical precautions are taken in advance to minimize, prevent and protect against the risk of injury to people and the loss of or damage to property during a hurricane.
- b. A pre-determined plan exists for providing assistance and relief after a hurricane.
- c. Damage assessment and recovery measures are in place to deal with a post-hurricane disaster situation. (Cayman Island Preparedness Plan, p.2)

The plan also describes the various categories of storms and their effects. These are noted below and are taken verbatim from the plan.

Category 1:

Winds of 74 to 95 miles per hour. Damage primarily to shrubbery, trees and foliage. No real damage to other structures. Some to poorly constructed street signs. Storm surge 5 to 7 feet above normal. Some flooding of low-lying coastal roads, minor pier damage, beaches inundated, some small craft in exposed anchorages torn from moorings.

Category 2:

Winds of 96 to 110 miles per hour. Considerable damage to shrubbery and tree foliage, some trees blown down. Some damage to building roofs, windows and doors. No major damage to inland buildings. Considerable damage to piers, marinas, beaches and small craft in unprotected anchorages. Storm surge 8 to 10 feet above normal.

Category 3:

Winds of 110 to 130 miles per hour. Foliage torn from trees; large trees blown down. Damage to roofs, windows and doors of buildings, and some structural damage to small buildings. Storm surge 11 to 12 feet above normal. Serious flooding along coasts, with larger structures battered, and smaller structures destroyed, by waves, floating debris and inundation.

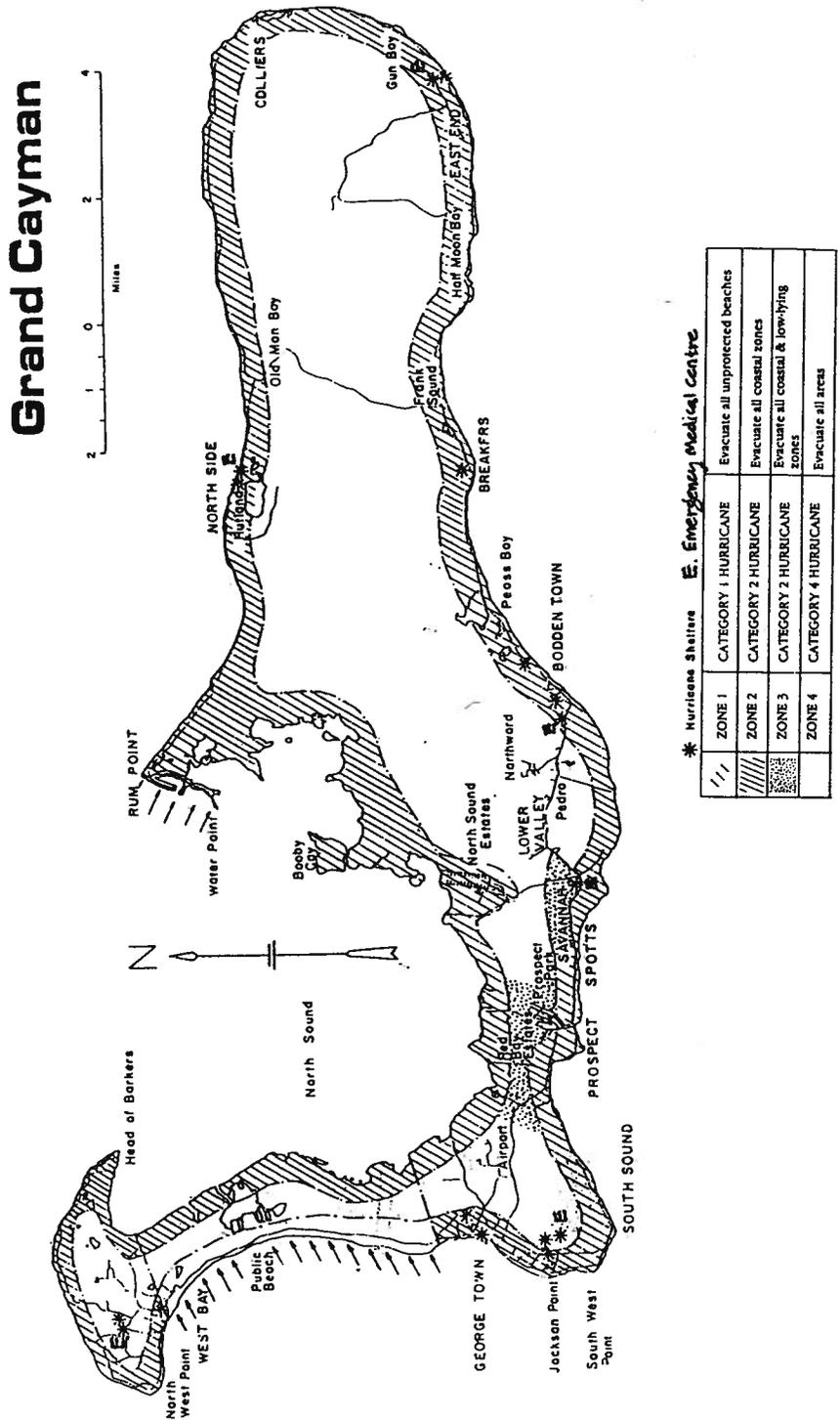
Category 4:

Winds of 131 to 155 miles per hour. Shrubs, trees and all signs blown down. Extensive damage to roofs, windows and doors. Complete failure of roofs on many small residences. Storm surge 13 to 18 feet above normal. Major damage to lower floors of structures near coasts due to flooding, inundation of beaches, waves and floating debris.

Category 5:

Winds greater than 155 miles per hour. Shrubs and large trees and all signs blown down, with considerable damage to windows and doors. Some complete building failures, with small buildings overturned or blown away. Storm surge greater than 18 feet above normal. Major damage to lower floors of all structures less than 15 feet above sea level within 500 yards of shore. (Cayman Island Hurricane Preparedness Plan, 1990, pp.1-2)

Figure 4 Hurricane Evacuation Zones and Shelters, Grand Cayman



It is also noted that:

These categories are not to be confused with Evacuation Zones which are shown on the Maps. A category 3, 4 or 5 hurricane recommends evacuation of Zones 1, 2 and 3 on all three Islands." (Cayman Islands, Hurricane Preparedness Plan, 1990, p.2)

The following is a descriptive analysis from a spatial or land use perspective. The only critique of the organizational structure is as it relates to land use/spatial planning.

From Figure 4, which is a composite map combining the maps for public shelters, for evacuation zones, and for emergency medical centres, one may note the following:

- a) There are 17 Hurricane Shelters on Grand Cayman.
- b) Six of the shelters are also Emergency Medical Centres.
- c) There are three evacuation zones.
- d) 12 of the shelters are located within evacuation zones.

Additionally, evacuation zone 1 contains the major tourist resort area, where some of the highest density apartment development is located. The major hotels are also located within this zone. In fact all of the lands designated as hotels/tourism zone, with the exception of some property at; the Safe Haven complex, the Cayman Islands Yacht Club and the Britannia complex, are located within evacuation zones 1 and 2.

Within these evacuation zones, one will also find four of the six emergency medical centres. Indeed, Grand Cayman's only hospital is less than one half of a mile from the sea and within evacuation zone 2. Building setback requirements for waterfront property in these evacuation zones range from 20ft. on canal front lots to between 100 to 190 feet in hotels/tourism zones. Table 1 indicates the characteristic of the hurricane shelters.

From Table 1, one can see that five shelters (both shelters in North Side, the Bodden Town Town Hall, the Wesleyan Academy and United Church Hall in West Bay) meet the

Table 1 Characteristics of Shelters

NAME OF SHELTER	DISTANCE FROM SEA	EVACUATION ZONE	HEIGHT ABOVE MSL	AGE OF BUILDING (YES)*	REMARKS
GEORGE TOWN					
JOHN GRAY ASSEM. HALL	2200 ft	NO	8 ft	10±	
JOHN GRAY PLAY CONN. HALL	2500 ft	NO	8 ft	14±	EMERGENCY MEDICAL CENTRE
G. HICKS MULTI-PURPOSE HALL	2700 ft	NO	13 ft	14±	
G.T. PRIMARY HALL	2000 ft	YES	4 ft	34±	
WEST BAY					
WESLEYAN CHRISTIAN ACAD.	500 ft	YES	8 ft	14±	
UNITED CHURCH HALL	500 ft	YES	7.5 ft	14±	
WEST BAY TOWN HALL	1600 ft	NO	8 ft	55	EMERGENCY MEDICAL CENTRE
WEST BAY SCHOOL	1700 ft	NO	8 ft	20	
BODDEN TOWN					
B.T. CIVIC CENTRE	600 ft	YES	3 ft	14±	
B.T. TOWN HALL	400 ft	YES	8 ft	55	
B.T. SCHOOL HALL	2000 ft	YES	8 ft	20±	EMERGENCY MEDICAL CENTRE
SAVANNAH PRIMARY HALL	2000 ft	YES	8 ft	10±	EMERGENCY MEDICAL CENTRE
BREAKERS COMMUNITY HALL	500 ft	YES	20 ft	20±	
NORTH SIDE					
N.S. TOWN HALL	500 ft	YES	7 ft	20±	EMERGENCY MEDICAL CENTRE
N.S. ADVENTIST CHURCH	500 ft	YES	6 ft	4	
EAST END					
E.E. CIVIC CENTRE	200 ft	YES	11 ft	14±	EMERGENCY MEDICAL CENTRE
E.E. PRIMARY SCHOOL	200 ft	YES	20 ft	25	
CAYMAN BRAC					
ASTON RUTTY CENTRE	2200 ft	NO	80 ft	16	EMERGENCY MEDICAL CENTRE
CREEK PRIMARY SCHOOL	2000 ft	YES	20 ft	25±	
WEST END PRIMARY SCH.	500 ft	YES	20 ft	25±	

* UP TO 1974

plans criteria to sustain major damage from a category 5 Hurricane. Moreover, fully thirteen shelters will have to be evacuated if the directives of the evacuation zones are to followed in the event of a category 3 Hurricane.

Furthermore, if a category 2 Hurricane hits Grand Cayman, compliance with the evacuation zone requirements will result in the evacuation of 12 shelters. Therefore, only in the event of a category 1 Hurricane can all of the shelters be utilized if compliance with the requirements of the evacuation zones is maintained.

CHAPTER 5: THE ADEQUACY OF PHYSICAL PLANNING

5.1 The Institutional Ability to Identify Problems

As outlined in Chapter 1, one of the six basic normative criteria was that the institutional organizations should have the ability to clearly identify problems. The identification of problems was what was attempted in the preparation of the 1975 development plan. This planning initiative was also an attempt at the legitimation of a form of rational comprehensive planning. This is not surprising, since it was the model of planning that was dominant in the 1950s and 1960s and was widely supported in the '70s, having evolved from the physical planning models of the 1920s and 1930s (Alexander, 1986, p.75). Comprehensive planning it is noted, is characterised by a recognition of:

the complexity of factors affecting and affected by what were previously perceived as purely physical or land-use decisions. These factors include social and demographic characteristics of population; economic variables such as income and local or regional economic base; and transportation factors, travel patterns, modal split and transportation networks. Comprehensive planning aims to take all of these factors into account in a rational analytical planning process (Alexander, 1986, p.75).

The contingent of experts that was assembled to create a plan and planning initiatives to replace the interimistic documents of the early 1970s and late 1960s drew heavily on the dominant planning paradigm of the day. This was one way that they were able to simultaneously arrive at a model of reality that explained how the Island society functioned and, reach a prescriptive conclusion about how it should evolve. There have been numerous attempts at successfully reviewing the Development Plan since its adoption in 1977. These have generally taken the form of reviews by outside agencies and, despite being "comprehensively" undertaken and filled with many numerical data and scientific facts, they have largely failed to have any impact on reforming the physical planning function.

Many of these technical studies called for restricting sprawl and the premature subdivision of property. The standard rationalizations against this form of development such as inflation of land prices, unproductive use of land, unproductive use of capital to maintain services to sparsely populated lands, the generally superior economic performance of more compactly built and better planned areas, etc., have also failed to bring about a consensus on the need for an expanded land use planning function.

Meanwhile, co-ordination of the development control function over development projects has progressively increased in scope and complexity. For example, the standards for road construction, sidewalk construction, parking lot construction, landscape provisions, electrical, plumbing, fire resistance, building construction and general site planning, favourably compare with requirements for these aspects of development in more developed metropolitan areas. This may be explained by the fact that much of the development has occurred as a result of offshore banking and tourism, the clientele of which are relatively affluent and therefore desirous of, and willing to pay for, high amenity development.

Nevertheless, some of the consultant produced studies over time have indicated that there are land use problems which are growing in intensity such as traffic congestion, solid waste disposal, inadequate public transport, the deterioration of the island Image and the proliferation of "anywhere" architecture. Additionally, there has been no consensus on the need for the establishment of standards, for parks, play grounds, sports fields, public beaches, launching ramps etc. Neither has there been any consensus arrived at on the extent of preservation of natural areas that is necessary to retain various ecological communities and cultural activities. More fundamentally, there is no general consensus on whether or not such preservation is a desirable national objective, much less where and to what degree it should occur.

5.2 The Protective Function of the Institutions

The second of the normative criteria put forward was that planning institutions that protect the islands against negative externalities and promote a healthy society should exist. Upon examination of the Planning Law and Regulations one will find that there are no requirements for the consideration of environmental/ecological factors in the development control process of reviewing applications for planning permission. Neither do these documents consider or require the consideration of socio-economic, demographic, functional and other factors in the formulation of Development Plans and the review of development projects. In fact, the development plans referred to in the Law have been criticised as "nothing more than zoning plans whose inadequacy for the purpose (of development planning) is common knowledge" (Pollard *et al.*, 1991, p.143).

The Planning Law can be described as primarily enabling, rather than normative or prescriptive regarding the provisions of a development plan. It provides for what can be done, but does not mandate what planning initiatives should be carried out, or when. The prescriptive provisions amount to procedural requirements, for example for the publication of advertisements, the extent of the public comment period etc. In this regard, it contains the flexibility to address the consequences and effects of future development pressures, anticipated or otherwise. On the other hand, because of this flexibility, preventative or anticipatory action is constrained. Within this framework, optimal solutions are therefore likely to be forfeited in the interest of expediency.

The dominant planning paradigm which has emerged in the Cayman Islands has been that of incrementalism. Many critiques of this model of planning action have been put forward, the main thrusts being that it does not recognise the impact of power in the policy making process whereby the elite exclude others, and that it assumes that all conflicts can

be resolved, and that consensus is always attainable. In reality, a forced compromise may be the end result, that is perceived as consensus.

Another, perhaps more fatal, set of criticisms of incrementalism has been put forward by Walker (1984) and Eddison (1972). Incremental or marginal adjustments, it is contended, prevent major problems from being tackled by major initiatives. Combined with the compartmentalisation of problems - i.e. the re-defining of problems to fit existing programmes, policies and legal or administrative structures - incremental problem solving becomes distorted and incapable.

Nevertheless, juxtaposed against rational-comprehensive planning, which was in 1975 soundly rejected, incrementalism has remained the culturally acceptable form of planning in the Cayman Islands. For a group of (previously) insular, small islands whose heritage and aspirations reflects "self reliance, seafaring, free enterprise and land ownership interests" (Cayman Islands Development Plan, 1977) a cautious approach to policy making and planning initiatives is not surprising. Its protective function, from a bio-physical perspective, to date does not appear to be appropriate. However this is difficult to verify since the baseline data necessary to compare the various states of the Islands' built and natural environments over time are absent. Systematic analyses are therefore suggested as desirable initiatives for the future in this regard.

5.3 A Plurality of Views

The third normative criterion was that a planning process which generates useful information and respects a plurality of views should exist. Part 1, 1.2 of the Development Plan for the Cayman Islands 1977 states "It is intended to define and develop a planning strategy for the Islands which is however flexible enough in concept and implication to

accommodate individual requirements, special circumstances and changing conditions." There are no other pronouncements on planning as a process within the Development Plan. It is suggested, however, that implicit in this is the concept of respect for a plurality of views.

Furthermore, Section 8 of the Development and Planning Law specifies that in the course of preparing or amending a development plan the CPA shall consult with various public authorities and may consult with other bodies or persons as it thinks fit. The CPA is obliged to ensure that the proposals are published in a newspaper circulating in the Cayman Islands and a two month period for objections and representations is provided for. Subsequently an Appeals Tribunal is required to hold an enquiry into the objections and representations both of which the CPA is bound to consider prior to submitting both its proposal and the Appeals Tribunal's report to the Legislative Assembly for consideration. Additionally, the Authority may choose to consult further with the public prior to submission of the plan to the Legislative Assembly. This last step, however, is not mandatory unless otherwise directed by the Governor.

From the above, it is clear that there is opportunity for a plurality of views to be considered in the planning process. The stages and degree of this public consultation, however, can be subject to a number of critiques. First, substantial discretion in theory is left to the CPA regarding whom it should consult. It is therefore arguable that the CPA can exclude certain actors from the consultation stage.

Secondly, to anyone familiar with typologies of citizen participation, it is clear that on Arnsteins ladder (See Chapter 2) this type of participation reaches rung 5 (consultation) and within this framework is considered a degree of tokenism. Measured against Sandercock's typologies it can be labelled as market research, which as previously stated

views the bureaucratic efficiency of the Government administration as its rationale. Simultaneously, it views the public as clients able to offer advice and suggestions on planning details but not on policy.

Thirdly, the semantics and method of input are at least suggestive, if not a determinant, of an adversarial process. For example, it is stated that "the public may be consulted with" rather than "must be invited to participate." Further the public is enabled to make "objections and representations" (through a public inquiry) on proposals rather than provide policy options or offer suggestions for alternative proposals through referenda, or workshops, or similar processes. As Travis (1969, p.96) has pointed out in using the Scottish Planning Bill as an example this "asks the planner to publicize, but tragically does not oblige him to get public participation throughout the planning process."

Regarding the generation of useful information, again section 7 of the law is enabling rather than prescriptive. It is mandatory that the CPA shall at least once in every five years carry out a fresh survey of the area considered for a proposal and discretionary in that it may carry out such surveys more frequently. The usefulness of the information in the survey will depend on the goals and objectives of the CPA at the time. There is no stipulation regarding the form and content of such a survey. Therefore, the issues that are raised therein maybe other than those most acutely requiring attention. Once again the flexibility and pragmatism of the incrementalist approach manifests itself by allowing the CPA to define the form and content of the survey.

5.4 Mechanisms for Conflict Resolution

The fourth normative criterion was that mechanisms and organizations that provide for conflict resolution in the discourse on physical planning should exist. From the

preceding discussion it is evident that the Section 8 actions of the appeals tribunal provides for a legally entrenched method of conflict resolution regarding debate on development plans. Additionally, Sections 40 and 41 of the Law offer legal mechanisms for those aggrieved by a decision of the CPA and the Development Control Board on an application for planning permission as a component of the development control function. The implications of the provisions of these sections warrant further comment. First, in keeping with the rules of due process an applicant or objector may represent themselves to the Authority in person or in writing prior to a decision being made. Secondly, once the decision is made, an appeal to a Tribunal may be made. Both respondent and appellant are required to be present before the Tribunal. Both the Tribunal and the CPA are appointed bodies. Thirdly, anyone aggrieved by a decision of the Tribunal may appeal such decision to the Grand Court. Clearly the decisions of the CPA, regarding applications for planning permission though dominated by highly structured legalistic processes provide for fair and equitable treatment within the constraint of affordability.

The mechanisms for conflict resolution in the development plan making arena however are not as certain in terms of their outcome. Once the Tribunal has compiled its report and submitted it to the CPA, the CPA is bound to consider it. That is to say there must be sufficient evidence to prove that the CPA in the final submission of its plan has reviewed and considered the Tribunal's Report. This may or may not impact on the contents of the Plan. However, a further discretionary provision exists within the process that might result in the CPA consulting further with those that initially made the objection or representation if instructed to do so by the Governor. This form of input in the past contributed to overt political dissension, which was manifest in highly charged public meetings and public protest marches. It is well known that in order to quickly resolve a

conflict one can escalate the conflict. However, the results are not always predictable nor desirable. Therefore, based on its historical propensity to generate conflict and divisiveness, policy debate on land use and planning issues appears to be a prime candidate for expansion of conflict resolution mechanisms.

This is suggested for a number of reasons. First, those mechanisms that exist are highly legalistic in nature and, as such, are fundamentally adversarial. Further, they promote the propensity for objections to initiatives to emerge by not mandating that citizen participation is undertaken throughout the plan making process. Additionally, the "top down" bent of the planning process almost guarantees that any opportunity for citizen input comes at a very late stage. Despite this fact, the initiating agency may choose to provide for it earlier. Nevertheless, any prior provision to that legally mandated, can be viewed as without legal standing, and therefore less meaningful.

5.5 Cultural Acceptability And Contextual Appropriateness

The fifth criterion was that a planning process that is culturally acceptable and otherwise contextually appropriate should exist. Lichfield (1979, p.7) suggests that in the U.K. context, dissatisfaction with the planning system results from a general unacceptability of a whole system where "we seem to stagger from issue to issue, and there is no clear lead as to what should be done". In the Caymanian context, cultural acceptability to planning has been expressed as political acceptability. Rational comprehensive planning was shown to be not acceptable and therefore its apparent nemesis, incrementalism was able to fill the planning void.

However, in terms of incremental change, it is primarily the development control function that has advanced in concert with the quality of private development initiatives.

Land use planning per se on a national scale, has largely been ignored. Cumulatively, the development of subdivisions, commercial buildings, apartment and hotel complexes, industrial buildings and public buildings etc., have combined to create land use patterns.

Such patterns are characterised by:

- i) Generally, a non hierarchical road system.
- ii) A tendency to locate buildings in fore shore areas.
- iii) A general propensity for wholesale landscape change by development projects including public roads.
- iv) A general underdevelopment of public recreational facilities.
- v) Inadequate parking provision in the Central Business district.
- vi) Traffic congestion to and from the Central Business District in the AM and PM peak hours.
- vii) A general under provision of conservation areas.

Additionally, in some waterfront locations, for e.g. Cayman Kai/Rum Point and the Boggy Sand Road area inadequate sea- side setbacks have failed to accommodate coastal dynamics. Resulting from this has been the "loss" of beaches and the perceived need for "property protection" in the form of armoured shorelines by sea walls, or groynes.

The extent and pace of mangrove swampland loss was chronicled previously (Ebanks, C., 1988), and earlier by the Natural Resources Unit (now Department of Environment). However, the need to limit swampland filling has not yet been agreed to. Adverse ecological effects that will result from excessive removal of swampland is also well documented (See for example Ebanks, C., 1988).

More recently, concern has been expressed about the destruction of buildings of historical value due primarily to their architectural quality. In this regard, the National Trust has taken a fairly active preservation role. Still, there is no articulated overall policy on long term land use planning. This is due, in part, to the provisions of the Development and Planning Law wherein, as noted in the section on road planning in this thesis, acquisition of property is limited to a five year period.

5.6 Implementation And Monitoring

The sixth criterion was that methods for the effective implementation of planning decisions that include sequencing and monitoring should exist. The Development Plan, and the Development and Planning Law and Regulations are conspicuously silent on the means of implementation and monitoring of development plans. Although sections 6 and 30 of the law provide for conditions and limitations to acquisition of property by the CPA, the development plan has not been implemented in this fashion.

Generally, because of the relative fragmentation of the planning function as described earlier, implementation of projects are left to the particular Ministry with jurisdiction over the given activity. The land use aspect of government development projects appears to be a secondary consideration relative to the budgeting process. There is a public sector investment committee that includes membership from the senior, technical civil servants. Within this body, all of the large government projects are reviewed from a multi-disciplinary perspective.

Most of these projects, however, will not have been identified in a development plan. Rather, in keeping with the incremental approach, they will have been identified in the annual budget process either as a one, two or three year project. Therefore, while development projects have been provided for in terms of implementation, there is very limited potential for the implementation of the Development Plan, except by affected Ministries. The degree that they will be affected depends primarily on how involved they were with the plan preparation, and how both the plan and the ministerial agendas are integrated.

Monitoring evaluation is a necessary component of the planning process. Alexander (1981, p.138) notes that

... without a diagnosis of the deficiencies of planning efforts which is more than the largely intuitive recognition we have now, we can expect little improvement beyond the groping attempts at trial-and- error and the succession of fad by fashion which have characterised the evolution of planning as an organised activity

The requirements for an annual report by the CPA, a mandatory five year review of the plan and a provision for more frequent discretionary reviews imply that the need for monitoring has been considered. However, as a highly organized systematic activity that provides evaluative criteria to distinguish between intentions and outcomes, planning monitoring in the Cayman Islands is largely underdeveloped. Alexander (1981, pp.138-139) contends that "Success or failure must be judged both as functions of internal or process consistency and of appropriate assessment of, and adaptation to the opportunities and constraints of the real-world environment." Initiatives that mandate evaluative or monitoring action for planning in the Cayman Islands context require additional formulation.

CHAPTER 6: CONCLUSIONS, RECOMMENDATIONS AND IMPLICATIONS

Development control, i.e. the evaluation of applications for planning permission, has been the primary form of planning that has taken place in the Cayman Islands. At least one previous study (Roakes, S., 1987) proposed various methods through which the development control function could be reformed. However, Roakes's study was based primarily on a comparison between the U.K. methods of development control and that of the U.S. Both were juxtaposed against the Caymanian system. The comparative analysis was augmented by interview questions posed to members of what was termed "the development community." These individuals were persons engaged in either architecture/engineering, real estate, construction, or the CPA. Some of them wore a number of hats in filling multiple roles, e.g. CPA Member/Contractor/Developer.

The proposals put forward, however, seemed to complicate rather than simplify the process (the latter of which it had set out to do). Alexander (1986, p.42) contends that "Development administrators, for example, may do their jobs in a Planning Agency, but if they are only applying existing regulations and controls they are doing very little or no Planning." It is presumed that Alexander does not include the modification of regulations and controls in this categorization. It is suggested that in developing areas, especially small islands, development control has a far greater impact on the aesthetic qualities than it does in larger, more developed metropolitan areas and, is therefore more crucial.

Development control issues are the tangible aspects of planning that the community observes, complies with, are constrained by and given opportunities through. In societies characterised by face to face relationships, scarcity of resources, and vulnerability to outside events, development control must be both protective and enabling. It must also be

anticipatory, and augmented by a correct measure of land use planning. Striking a balance is the crucial ingredient in planning both as a process and a product.

The following recommendations are put forward in a spirit of concern about the way planning is done and the effects of both the process and the content of plans. It is hoped that if these are given sufficient consideration, some positive change will occur in the way planning is both perceived and practiced.

6.1 Creating A Vision - Planning As Process

In the preceding discussion, much was said about the inadequacies of the current planning function as a participatory process. Additionally, the definition of planning put forward as appropriate for the Cayman Islands included collaboration and education. This is not to suggest that the education alluded to is solely that of positivism. Rather, it is envisaged as a meeting of minds from a broadly constituted, community based perspective. Within this framework are the seeds for the emergence of an Island Style of Planning. In keeping with the basic philosophical tenet of the approach no definitive manner form of action or physical plan of what must be done is put forward. Rather, a number of alternative forms for physical plans and ways within which the practice of planning can be more autonomously developed are suggested. Each neighbourhood, or electoral district can decide for itself how it can best articulate its aspirations to the elected officials. A mandated public input procedure, however, that is entrenched in Law will have to exist to augment the more experimental approach of community consensus building. This will ensure that what has been decided upon has an accepted avenue to become legally binding.

- (1) Planning staff should make a concerted effort to impart both process and substantive skills to the community through formal and informal networks and contacts. Group

dynamics, such as coalition building, co-optation, mediation, negotiation and other process oriented activities are beneficial methods of enquiry and action.

- (2) The beliefs and value systems of those engaged in the process should not be assumed but should be made explicit.
- (3) Planners should visit various communities along with the representatives for the area to see first hand what problems are being experienced and to learn from the communities what dreams and visions they may hold for the area (and beyond) and for themselves, the area residents.
- (4) The concerns of elected officials should be high on the planners lists of informative mechanisms through which information is filtered and proposals suggested.
- (5) Planning initiatives that will affect a community should involve the community throughout the planning process including the feedback and monitoring stages.
- (6) When, within an area, a specific grouping of people may be affected by a proposal that group should be afforded an early opportunity to participate in the planning process.
- (7) Communities should be facilitated by the Planning Department to articulate their aspirations and visions regarding their quality of life. However, it must be realized that these observations or expressions of desired futures are transitory, like knowledge itself, and thus are dynamic, to some degree. Therefore, this exercise will have to be iterative.
- (8) Forums other than public meetings should be used to insure that community members of various socio-economic levels and ages are given opportunities to participate in the planning process.
- (9) A clear description of the legal ramifications of decisions that are arrived at should exist to reduce the ambiguity of this aspect of the planning process.
- (10) The various initiatives that are proposed should be clearly labelled as to the range (in both time and space) of their intended consequences. This will eliminate or reduce unrealistic expectations of what the process can result in both temporally and spatially.

Such initiatives should take the form of the following hierarchy:

- 1) 30 years - a strategic (advisory) plan that would concentrate on long range planning policies regarding the provision of infrastructure open space, and the character of the community.
- 2) 10 years - a land use plan regarding zoning and spatial layouts of areas.

- 3) Executing or implementation orders 1-5 years to ensure that the policies of the long term plan are integrated with the day to day demands for services facilities and programmes.

These will give flexibility in terms of timing, and certainty in what is wanted spatially. Thus, if the economy is overheated implementation can occur more rapidly and if sluggish more slowly. As the cliché goes, change is constant. Its direction can only be constructively guided if a community articulates its aspirations. The community should be able to answer the following regarding the process, timing and product of its planning initiatives: If not us, who? Who should be engaged in the process? If not now, when? When should the planning initiatives and the process of planning occur? If not this, what? What are the characteristics of what can be agreed upon as a good community? The concept of habitability and what that engenders are provided in the following discussion.

6.2 Creating a Vision - Planning As Products

No one individual has a right, it can be said, to impose his/her will on an entire community about how it should look or function. But, without some idea of what a place should look and "feel" like, it is unlikely to look or "feel" like anything in particular. Through the collaborative process (or another variant), ideas can emerge on how an area will be constituted to achieve certain ends. Such ends could be increased recreational opportunities, increased sea views, or the maintenance of cultural activities, As a point of departure, the following are put forward to indicate how the island community may wish to evolve.

- (1) Increased or expanded views to the waterfront should be provided for along with access to the sea. Lineal Parks and pedestrian ways should be provided for especially in the George Town waterfront area.

- (2) Lands and the marine areas that support traditional activities such as fruit gathering, crab hunting, shore based fishing etc. should be identified with the affected communities. Subsequently, these lands should be acquired and held in perpetuity for the use and enjoyment by the general public.
- 3) When roads are being proposed either by the community, by the civic administration or the private developer, their impacts on the area should be subject to vigorous analyses. For example traditional footpaths impart a certain ambience and peacefulness to areas that is lost when they are replaced by roadways.
- 4) Incentives should be provided to encourage the preservation and perpetuation of the Cayman Image. Again it must be realized that aesthetics may be dynamic. However, the traditional scale, detail colouring and placement of structures suggest compelling and enduring qualities. Such incentives could include community awards for various types and styles of buildings, landscape treatments, ancillary structures such as gazebos and docks, and ecological preservation areas, public beaches and recreational areas.
- 5) Provision should be made to increase the incidence of travel by non-motorised means including walking and bicycling. This can include networks of pedestrian and cycling paths, the widening of road shoulders and or the provision of dendritic open spaces throughout urbanizing areas.
- 6) Current vacant waterfront properties should generally remain undeveloped. The coastal dynamics can be accommodated and scenic roadways can be provided for. Additionally, development projects located adjacent to such roadways can be tiered with increased heights away from the road towards the center of the island. This has the advantage of affording views to a larger segment of the community and decreasing the risk of storm surge damage to building projects. It is also likely to positively affect the cost of property insurance.
- 7) The use of endemic trees, plants and shrubs in landscaping projects should become more prevalent. Animal species associated with the endemic flora will retain a habitat and the use of biocides and expensive irrigation will be prevented or avoided.
- 8) Compact, mixed use arrangements of housing, businesses and institutional/civic centers should be planned and constructed. Face to face interaction can be enhanced and most everyday trips may be within walking distance for residents of these areas. This will save on fuel consumption, car maintenance, etc. and will reduce automobile emissions.
- 9) Within 8 above, tourist accommodations should be integrated with the mixed use cluster developments to provide for more cross cultural exchanges. The standard of facilities and infrastructure can therefore become more uniform.

This mixing will likely lead to expanded economic opportunities to local communities.

- 10) Additional consideration should be given to the site planning and the aesthetics treatment of supermarkets, office buildings and mini-malls. The hard, stark areas of asphalt parking lots should be provided with grassed areas, areas with brick pavers, areas with pea-gravel or packed white sand finishes, and landscaped islands and buffers to provide for visual relief.
- 11) Signs should be appropriately scaled, coloured and tastefully placed and appear as integral parts of the project presentation. They should be erected with the concepts of safety and their cumulative aesthetics effects in mind.
- 12) Civic squares and public recreational areas should be laid out to provide for the comfort and convenience of users. This should include shade trees, sitting areas and design solutions that encourage social interaction, such as attention to the heights, widths placement etc of street furniture. Additionally, drinking fountains, restroom facilities and information centres should be seen as integral components of such facilities.
- 13) Commercial user docks for fishing boats, dive boats and other recreational boats to use should be provided. This will eliminate land use conflicts between commercial boating activities and residential properties. It will also provide for the proper treatment and collection of waste from such boats. Additionally, the amount of refuelling areas can be lessened which leads to more comprehensive monitoring and thereby decreases the incidence of pollution via spills, leakages, etc.

There are many other initiatives which could and should be undertaken to provide improved quality, promote cohesiveness, and improve the habitability of the built environment. Obviously, these initiatives will have cost implications and will require proper planning and programming to guide their success. The point is that they demonstrate the kinds of initiatives that will be required if the planning function is to advance, beyond that of incremental development control.

6.3 Conclusions

Planning in the Cayman Islands has existed as a legal entity since 1935. The early planning initiatives took the form of Government capital works programmes involving the provision (development) of civic buildings and physical infrastructure. In this form, they were considered to be development plans (i.e. plans for development). Because it was wholly dependent on the Government budgeting process for implementation and provided tangible evidence of development (or gain) through works completion, capital works programming came to be viewed as development planning. Coupled with a generally low level of land based economic activity, due to the size, insularity and, marine oriented nature of the community precluded the need for land use planning was precluded.

By the late 1960s and early 1970s, an increase in tourism, banking and a concomitant increase in population and the extent and pace of private development necessitated the creation of Planning Laws and Regulations that enabled the civic administration to influence the location, scale and nature of development projects. Additionally, the civic administration and some political actors supported the general expansion of Government intervention in land use activities. Other political actors however, though supportive of an expanded government function in the control of use of land, disagreed on the nature and degree of such intervention. As a result, community dissension and divisiveness was prevalent in the 1970s regarding appropriate land use policy.

Rational comprehensive planning, previously the dominant planning paradigm was put forward as a means of addressing the concerns of a rapidly evolving island society. The assumptions of this initiative proved to be culturally unacceptable. This was due in part to the previous dearth of both land use activity and land use regulation. Another contributory factor was the timing of the initiative relative to the economic opportunity of the day. The

economic expansion that suggested the need for land use control and planning had temporarily slowed. The pressing need therefore was economic activity.

Incrementalism, though not formally identified as such by name by the island society has offered a more flexible, pragmatic, culturally acceptable and, therefore, enduring approach to land use. It has persisted as the main form of planning action in the Cayman Islands. Included in this approach has been the gradual advance of development standards. The primary form of planning action that has taken place has been development control, in the form of reviews of applications for planning permission. Land use planning has, on a community wide scale, remained largely under-developed.

6.4 Implications

Planning involves contradictions (Lucy, 1988, p.219). Such contradictions may manifest themselves as problem specific (myopic) vs comprehensive (overgeneralized). They arise because of limitations on for example time and certainty. Other limitations include sensitivity to the decision context, attention to implementation, monitoring and the evaluation of results (Lucy, 1988, p.221). However, one of the important functions of planning is to adapt to such limitations in specific cases (Patton and Sawicki, 1986, pp. 1-38).

As population and development pressures increase in the Cayman Islands, the benefits that can be achieved through land use planning will come to be recognized by more people. In the interim, the opportunities for optimum spatial planning will decrease as virgin land becomes "developed." Institutional inertia and cultural resistance may combine to produce constraints to an expanded planning function if the methods and policies do not appear to be appropriate. In determining appropriateness, correct timing and

clear problem identification must occur. This can best be achieved through a form of collaborative planning action that provides for the articulation of aspirations of a community as was previously described. A collective of these aspirations can be viewed as a community vision, regarding both the process of planning and the product to be achieved as a result of plans. Such a process will demand commitment in terms of capital, and effort and other resource allocation. The benefits of the process may be contained in various time frames and therefore may not lend themselves to easy evaluation or political acceptance.

As an initial advance towards the establishment of a collaborative planning system, Section 8 of the Development and Planning Law (R.) it is recommended, should be amended. Such an amendment should include the creation of district planning committees and, a co-ordinating committee. These committees should generally be non-partisan and, should included approximately seven to eleven members. Membership, initially, should be a two year appointment to allow for some continuity in the process of planning. The mandate of the co-ordinating committee should provided for strong public/private coalitions to be formed by allowing for a broad based membership. Organizations that should be included are the Chamber of Commerce, the Real Estate Brokers Association, the National Trust, etc. Each electoral district committee however, should concentrate on a membership of individuals from within the district.

In keeping with the concept of incremental advance, the second stage should be to entrench in Law the formation of neighbourhood advisory councils. Entrenchment should include procedures for their relationships with the CPA and the district committees. These groups would then be able, through legal forums, to advance their fears, concerns and aspirations for the future of their neighbourhoods. Additionally, in keeping with a collaborative approach, staff from the various technical agencies should be assigned to

facilitate, mediate, negotiate and advocate for and against proposed initiatives. Such staff would, thereby, directly contribute to the realization of a more dynamic and open planning system, wherein mutual learning and goal clarification can occur.

Another beneficial incremental advance, that compliments the collaborative approach, is that socio-economic, demographic, and, ecological considerations should be explicitly accommodated in the application review process. This will result in more appropriate development projects from both a bio-physical and socio-economic perspective. Long range planning, however, should not be overlooked during the process of incremental reform. A fundamental goal of any such system, should be that of a healthy community for healthy people. This goal, that could be called heightened habitability, should form the basis for any planning initiative in the future.

Despite such a noble goal, there will be constraints to this process that should be borne in mind, that may include:

- 1) Political inertia, and or resistance, that can be brought about through pressures from Landownership and business interests.
- 2) Particularism and the intense face to face rivalries among advocates of various aspects of the development process that may come about as a result of the size of the islands and their limited resource bases, for e.g. the traditional environmentalist vs. developer dispute.
- 3) A history of political conflict and divisiveness because of, and resistance to, planning initiatives.
- 4) The inability of the island community to recognize the urgency of appropriate planning methods to address the threats and negative effects of the development process.
- 5) The identification of planning initiatives as impediments to progress, rather than as necessary and inherent parts of the development process.

Simultaneously, a number of opportunities to realize advances in the planning function exist, that include:

- 1) The relative ease that fact to face communication between elected representatives and other stakeholders in the development process can occur.
- 2) The potential for the clearly articulated concerns and visions of the constituent committees to garner a high degree of political concern and support.
- 3) The growing awareness that prudent planning is not just desirable, but also essential, if the achievement of a more healthy community is to be realized.

With an increase in both population and land-use intensity, it will become increasingly apparent that there should be greater attention paid to the process of planning and the context of plans. The demonstration effect of various successful projects, programmes and, other initiatives overseas will help to further the acceptance of planning as an essential guiding element in the development process.

A long (59 years) association with planning in the Cayman Islands has witnessed the emergence of a sceptical view of its value as a long term, guiding and enabling mechanism. Incrementalism, in the form of a gradual expansion of the development control aspects of physical planning, has emerged as the culturally acceptable form of planning. Such an approach is pragmatic because of its ability to respond to changing circumstances. However, because it does not contain a long-term perspective, its utility as a proactive planning tool is severely limited.

Inherent in any form of planning is the concept of predictably influencing the outcome of an action or strategy. Land use problems will likely expand in the absence of land use planning. There are, however, several indications to suggest that there is cause for optimism.

First, there is a growing awareness in the civic administration of the Islands on the need for planning of various forms that manifest themselves as, sectoral planning from both a programme budget and a strategic perspective. Secondly, there is an increasing cadre of university educated Caymanians that have been exposed to various methods of dealing with complex problems, who continue to have access to global information networks. Third, the concept of "clean living" both from a personal health and a broader ecological perspective appears to have taken root among many of the youth. Fourth, the concepts of people as stewards of the community, the benefits of eco-tourism and bio-diversity appear to have become accepted by many in the business community. Fifth, Government has seen it fit recently to recruit a number of planners and establish a long range planning section within the Planning Department.

Future research will determine how effective land use planning becomes and whether it realises its potential to positively influence the direction of change in a timely fashion. Meanwhile, it is hoped that the presentations of this thesis have shed some light on the historical development of physical planning initiatives in the Cayman Islands. Additionally, it is hoped that it will aid, in the acceptance of its value, and its perpetuation.

BIBLIOGRAPHY

A. Government Documents

- Cayman Islands Government: Annual Report - 1988. George Town: 1989.
- . Cayman Islands Development Plan 1947. Kingston: The Govt. Printer.
- . Development Plan 1977.
- . Development and Planning Regulations (1972).
- . Development and Planning Regulations (1977).
- . Economical and Financial Review, 1982.
- . Hansard parliamentary debates (especially between 1968 and 1977).
- . Hurricane Preparedness Plan for the Cayman Islands. George Town: Office of the Financial Secretary, (Typewritten), 1990.
- . Statistical Abstract of the Cayman Islands - 1988. 1989.
- . Statistical Abstract of the Cayman Islands 1987. George Town: 1988.
- . The Development Planning Law (1971).
- . The Development and Planning Law (Revised) (1978).
- . The Land Development (Interim Control) (No 2) Regulations 1970.
- . The Land Development (Interim Control) (No 2) Regulations 1969.
- . The Master Ground Transportation Plan 1988.
- . The Proposed Development Plan 1975.
- . The Regional Planning Law, 1935.
- . The Regional Planning (Amendment) Law, 1965.

B. Primary Sources

(i) Newspapers

Cayman Star, August 29th, 1972.

The Caymanian Weekly - The issues from 1969 to 1976.

The Cayman Compass - The issues throughout the 1970s.

(ii) **Periodicals**

The Nor'wester - All of the issues from 1972 to 1977.

(iii) **Personal Conversations**

Ebanks, Kenneth S., Deputy Director of Planning, May 1993.

McTaggart, Rick. Director of the Water Authority, March 1994.

C. **Secondary Sources**

Arnstein, S.R. "A Ladder of Citizen Participation", Journal of the American Institute of Planners Vol.35, No.4 (1969) pp. 216-224.

Alexander, Ernest R. Approaches to Planning: Introducing Current Planning Theories, Concepts, and Issues. New York: Gordon and Breach Science Publishers, 1986.

Alexander, Ernest R. "If Planning Isn't Everything, Maybe it's Something." Town Planning Review. Vol.52, No.2 (April 1981).

Beatley, Timothy and Brower, David. J. "Public Perception of Hurricane Hazards: Examining the differential Effects of Hurricane Diana." Coastal Zone Management Journal, Vol.14, No.3 (1986) pp. 241-269.

Boyle, Robin and Rich, Daniel. "In Pursuit of the Private City: A comparative Assessment of Urban Policy Orientations in Britain and the United States" Strathclyde Papers in Planning, No.3. Glasgow: University of Strathclyde, 1984.

Branch, Melville C. Comprehensive Planning. General Theory and Principles, California: Palisades Publishers, 1983.

Burchell, Robert W., and Sternlieb, George (eds) Planning Theory in the Nineteen Eighties: A Search for Future Directions. New Jersey: Center for Urban Policy Research New Brunswick, 1978.

Carter, W. Air Vice Marshal. Procedures and Guidelines for Disaster Preparedness and Response. Honolulu: East West Center, 1984.

- Clavel, Pierre. The Progressive City: Planning and Participation, 1969-1984. New Jersey: Rutgers, University Press, 1986.
- Coastal Management: "Planning on the Edge", Journal of the American Planning Association. Vol. 51, No. 3 (Summer, 1985).
- Coccosis, Harry N. "Planning for Islands", Ekistics, Vol. 323/324 (March/April - May/June, 1987): pp. 84-87.
- Connor, Desmond M. Constructive Citizen Participation: A Resource Book. Victoria B.C.: Development Press, 1981.
- Cruz, M, D' Ayala P.G., Marcus E., McElroy J. L. and Rossi O. "The demographic Dynamics of Small Island Societies", Ekistics, Vol. 323/324 (March/April - May/June, 1987): pp. 110-115.
- Daniels, Thomas L., Keller, John W. and Lapping, Mark B. The Small Town Planning Handbook. Chicago: American Planning Association, 1988.
- Davies, Elizabeth W. The Legal System of the Cayman Islands. Oxford: Law Reports International, 1989.
- Diamond, Derek, "The Uses of Strategic Planning: The example of the National Planning Guidelines in Scotland", Town Planning Review. Vol. 50, (1979): pp. 18-35.
- Dinell, Tom, "Hawaii: Planning for Paradise", Ekistics Vol. 323/324 (May/June 1987): pp. 153-157.
- Dommen, E. and P. Hein (eds.) States, Microstates and Islands. London: Croom Helm, 1985.
- Dorney, Robert and Rich, George. "Urban Design in the Context of Achieving Environmental Quality Through Ecosystems Analysis" Contact May 8th 1976, pp. 28-48.
- Drabek, Thomas E. Human System Responses to Disaster: An Inventory of Sociological Findings. New York: Springer- Verlag, 1986.
- Ebanks, Carson. "Integrating Resource Protection and Development in a Mangrove System: The Case of Grand Cayman." Senior Honours Essay, The University of Waterloo, 1988.
- Eddison, P.A. "Comprehensive Planning for Local Government", in Stewart M. (ed.) The City: Problems of Planning. Penguin Education, 1971 pp. 409-424.
- Equinox Travels, The Cayman Islands. January, 1987.

- Fagence, Michael. Citizen Participation in Planning. Oxford: Pergamon Press 1977
- Forester, John. Planning in the Face of Power. Berkeley: University of California Press, 1989.
- Franklin, George H. "Physical Planning and the Third World." Third World Planning Review. Vol. 1 (1) (Spring, 1979), pp. 7-22.
- Friedmann, John. Planning in the Public Domain: From Knowledge to Action. Princeton: Princeton University Press, 1987.
- Hache, Jean Didier. "The Island Question: Problems and Prospects," Ekistics, Vol. 323/324 (May/June, 1987), pp. 88-92.
- Hannerz, Ulf. Caymanian Politics: Structure and Style in a Changing Island Society. University of Stockholm, 1974.
- Heap, Sir Desmond. An Outline of Planning Law. London: Sweet and Maxwell, (Ninth edition.), 1987.
- Hoch, Charles. "Doing Good and Being Right: The Pragmatic Connection in Planning Theory", APA Journal Vol.50, No.3 (Summer, 1984), pp. 335-345.
- Hope, Kempe R. "Development Planning in Guyana: Promise and Performance." Third World Planning Review. Vol.4, No.1 (February, 1982) pp. 61-73.
- Jalan, B. (ed). Problems and Policies in Small Island Economies. London: Croom Helm, 1982.
- Klosterman, Richard E. "Arguments For and Against Planning." Town Planning Review. Vol.56, No.1, (1985), pp. 5-20.
- Leung, Hok Lin. Land Use Planning Made Plain. Ronald P. Frye & Co., Kingston, (Ontario), 1989.
- Lichfield, Nathaniel. "Towards an Acceptable Planning System." Town Planning Review. Vol.50, No.1(1979) pp. 5-17.
- Lichfield, N., Kettle, P. and Whitbread M. Evaluation in the Planning Process. Oxford: Pergamon, 1975.
- Lucy, William. Close to Power. Setting Priorities with Elected Officials. Washington: APA, Planners Press, 1988.
- Masser, Ian (ed). Evaluating Urban Planning Efforts: Approaches to Policy Analysis. Hampshire England: Gower Publishing Co. Ltd., 1982

- Meadows, Donella H. "Lessons from Global Modelling and Modellers," Futures, April 1982.
- McElroy, Jerome; de Albuquerque and Towle, Edward L. "Old Problems and New Directions for Planning Sustainable Development in Small Islands," Ekistics, Vol. 323/324 (May/June,1987), pp. 93-100.
- Pace, David and Hunter, John. Direct Participation in Action: The New Bureaucracy. Hants, England: Gower Press, 1978.
- Patton, Carl V. and Sawicki, David S. Basic Methods of Policy Analysis and Planning. New Jersey: Prentice Hall, 1986.
- Pollard, Duke E.E. et al. Environmental laws of the Commonwealth Caribbean. Analysis and Needs Assessment. Caribbean Law Institute, 1991.
- Potter, Robert B. Urbanisation and Planning in the Third World: Spatial Perceptions and Public participation. London: Croom Helm Ltd. 1985.
- Reade, Eric. "If Planning Isn't Everything ..." Town Planning Review. Vol. 53 No.1 (January 1982), pp. 65-78.
- Rhoda, Richard. Urban and Regional Analysis for Development Planning. Colorado: Westview Press, Boulder, 1982.
- Roakes, Susan L. "Attitudes and Viewpoints of the Real Estate Development Community Toward Development Control: Grand Cayman as a Case Study." Masters Thesis. Knoxville: The University of Tennessee, 1987.
- Sandercock, Leonie. "Citizen Participation: The New Conservatism," in Sarkissian, Wendy and Perlgut, Donald (eds.) The Community Participation Handbook: Resources for Public Involvement in the Planning Process. Roseville, Australia: Impact Press, 1986.
- Sarkissian, Wendy and Perlgut, Donald (eds). The Community Participation Handbook: Resources for Public Involvement in the Planning Process. Roseville Australia: Impact Press, 1986.
- Sauer, Jonathan D. Cayman Islands Seashore Vegetation: A Study in Comparative Biogeography. Berkeley: University of California Press, 1982.
- Schellenberg, James A. The Science of Conflict. Oxford: Oxford University Press, 1982.
- Slater, David C. Management of Local Planning. (Municipal Management Series), Washington DC: International City Management Association, 1984.

- Straub, Conrad P. Practical Handbook of Environmental Control. Boca Raton, Florida: CRC Press, Inc., 1989.
- Susskind, Lawrence, and Ozawa, Connie. "Mediated Negotiation in the Public Sector: Mediator Accountability and the Public Interest Problem." American Behavioural Scientist. Vol. 27, No. 2 (November/December 1983) pp. 255-279.
- Swaby, Christopher and Lewis C. Bernard. Report on Forestry in the Cayman Islands. Great Britain Comptroller for Development and Welfare in the West Indies, 1946.
- Tannehill, Ivan Ray. Hurricanes, Their Nature and History. Princeton University Press, 1942.
- The Conservation Foundation. Coastal Environmental Management: Guidelines for Conservation of Resources and Protection Against Storm Hazards. Washington, DC: U.S. Government Printing Office, 1980.
- Thomas, John Clayton. Between Citizen and City. Neighbourhood organizations and Urban Politics in Cincinnati. Lawrence, Kansas: University Press of Kansas, 1986.
- Travis, Anthony. "Ends and Means: Planning for a Changing Society." Town Planning Review. Vol. 40 #1 (April 1969) pp. 91-101.
- Walker, J. Social Planning: A Strategy for Socialist Welfare. Basil Blackwell, Publisher, Ltd 1984.
- Williams, Neville. The History of the Cayman Islands. The Government of the Cayman Islands Grand Cayman, 1970.