Review

Quality of life: public planning and private living

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In memoriam for Panayotis Kampouris: may his grandchildren Alexandra and Laurent enjoy quality lives

Abstract

The search for meaningful definitions and ways to measure and describe the quality of life (QOL) is the focus of this paper. It is argued that planners need to pay close attention to the concept of QOL in order to assess the effects of plans and projects on places and lives of all citizens. The linkages between QOL and the concept of sustainability are explored. A review of a wide variety of literature on QOL is presented and a discussion of the relationships between QOL and the public good. An overview and critique of the variety of indicators used to measure QOL is offered with example of specific projects. A number of case studies are reviewed and particular attention is placed on a set of six recent initiatives in Canada to define and measure QOL. A detailed case study on the perceived QOL of residents in three towns near to Puerto Vallarta, Mexico is presented as part of a larger project on the effects of tourism on the QOL of residents in small communities near to international tourist resorts. A description of the use of multi-criteria techniques for analyzing data on QOL is presented as part of the Puerto Vallarta project. © 2002 Elsevier Science Ltd. All rights reserved.

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CHAPTER 1

What is quality of life? An overview

1.1. Quality of life: a complex concept

Life is lived privately, publicly and secretly. The lives we lead reflect the choices we make within the bounds of constraints and information. Our genes and income contribute to the opportunities we have. Our families, community and place of birth all influence our views about what is important in defining a quality life. Our individual and collective memories and histories play major roles in determining our opinions as to the quality of our lives. We should be wary of reification of the concept of QOL, for the good life is much more than a commodity to be produced, distributed and consumed. The philosopher Kingwell (2000: 207) in his book: The World We Want: virtue, vice and the good citizen, examines the concept of quality life and he reminds us of the unstable relationship that many thoughtful people encounter between *success* and *meaning*. "They want to know what it all means, what their personal prosperity is in aid of: fulfillment, virtue, happiness, something. They want a *telos* of some kind, in other words, an end in view that helps to make life worth living." The search for the good life can be construed as the good life.

The desire to improve the quality of life (QOL) in a particular place or for a particular person or group is an important focus of attention for planners. We could go further and suggest that the enterprise of planning as a public activity is strongly motivated and justified in terms of the contributions it potentially can make to the QOL of citizens. Friedmann's (1987) classic book on Planning in the Public Domain makes it abundantly clear that planners have considerable responsibility to contribute to open, legitimate and accountable societies in which complex choices are evaluated and plans implemented. Such plans have direct consequences on both the public and private good and the QOL of citizens.

Planners, bureaucrats, politicians, non-governmental organizations and the public have tried to influence planning processes and outcomes to change conditions and circumstances that are perceived to be detrimental to QOL, and to promote projects that protect and enhance the material and cultural milieu within which QOL improves.

The purpose of this monograph is to focus attention on the concept of QOL, and to encourage all that have an interest in planning to think about the concept. I argue that perceived and/or actual QOL can be viewed on the one hand as an indication or cause of attraction of a place, and on the other hand QOL can be treated as the outcome of conditions that are perceived to exist and the degree to which they meet the desires and expectations of individuals. Hence QOL can be envisaged as a composite quasi public-private good which is both a 'means'/'cause'/'input', or an 'end'/'effect'/'output'. In a word the concept is extremely complex and hard to define, though it is tempting to treat it as a commodity, but by so doing we risk loosing sight of the attributes of QOL that impinge on individuals as they live their lives and give meaning, significance and purpose to human existence. Planners and planning are well served by careful and informed consideration of the impacts of plans on QOL. And this monograph seeks to contribute to the debate on the concept of QOL as a key element of responsible public planning. At

the aggregate level we can envisage that QOL is very much part of public planning, while at the disaggregated individual level QOL is a personal matter of private concern.

In this chapter an overview and critique of selected literature on QOL drawn from the field of planning and other disciplines will be offered. I will address the general question: what is QOL? And more specifically I will try to relate answers to this question to the field of planning as a public enterprise. Chapter 2 will extend the debate by looking at QOL as a public good, and this will include a review of selected literature on the good society, the good city, the good place and the good life: these topics are closely linked to the variety of interpretations of QOL. In Chapter 3 I will focus attention on the search for appropriate indicators, criteria and factors that are used to measure QOL. A discussion on the differences between subjective indicators will be included. Chapter 4 will include details of a recent case study on the QOL in three towns in Mexico that is part of a study on the impacts of tourism on local communities near the resort of Puerto Vallarta. The first part of this chapter will present an analysis of a small set of hypothetical data for a group of individuals using scores for indicators of QOL. The analysis in this chapter will involve the use of three multi-criteria techniques to produce a classification of people and places in terms of their QOL. Chapter 5 will include a set of six case studies in Canada on QOL at a variety of scales. Throughout the paper references will be made to work on QOL that has been undertaken in other parts of the world. Chapter 6 will offer brief closing remarks about the study of QOL, and the conditions of the world as the new millennium unfolds and new challenges face planners who wish to improve the QOL of citizens.

1.2. QOL and planning

The study of QOL in planning rests to a large extent on the assumption that variations in QOL among individuals, groups or places can be identified, and that prescriptive measures can or should be taken to eradicate the differences. However, there is little agreement among scholars and policy-makers as to the precise definition of QOL, the individual components that comprise QOL and the way specific plans improve QOL. Yet many reports, planning statements and projects refer to the term QOL as either the 'outcome' of conditions—economic, environmental, social, aesthetic, civic—or the 'cause' of impressions about QOL, and these impressions can influence the perceived or actual prosperity or attractiveness of a place. Earlier I have referred to these views of QOL as dichotomous categories, for example, as ends or means, causes or effects and inputs or outputs. Obviously all these are closely linked as has been recognized explicitly, for example, in the new plan for the City of Toronto, Canada. Comments on this plan will be given later in this chapter.

Why are there differences in QOL among places and individuals? There are no simple or even complex explanatory or predictive models that enjoy wide-scale credibility to handle empirical evidence. Inherited advantages, genetic disposition, individual enterprise, environmental constraints and opportunities, as well as collective actions by governments and central authorities all combine to yield attitudes and expectations, needs and wants, rights and obligations that interact to produce patterns and distributions of QOL among individuals and places. Why are some people happy and content with their actual or perceived QOL while at the same time others who seem to have similar situations are

miserable and suffer? The search for answers to these fundamental questions continues to challenge all that seek knowledge of the human condition, and especially those who seek to make positive changes to the QOL of humans through planning interventions.

Since the 1930s researchers from diverse fields have expressed an interest in defining, investigating and measuring QOL using different perspectives. In 1933 a sociologist in Chicago, William Ogburn produced the two-volume report Recent Social Trends for the Hoover administration. According to Sharpe (2000) this effort played a major role in the emergence of what became know as the social indicators and QOL movement in the social sciences. The basic purposes of this movement are to improve the reporting of social conditions and to assist in policy making and monitoring of changes. If the efforts are successful then it is argued that more informed and effective public planning decisions will be made. By the 1970s the movement had blossomed with the advance in computing power and the creation of specialized journals such as Social Indicators Research. International agencies took on the task of compiling reports on conditions in countries and today they see this as a major part of their activities to bring to public attention changing conditions and the need to address specific problems concerning homelessness, poverty, HIV/AIDS and human rights, for example. Zapf (2000) and Sharpe (2000) provide full elaboration of the evolution of the social indicators movement.

1.3. QOL surveys

Public policy-making in the fields of social services, economic development and environmental planning and management often focuses on the protection and improvement of the QOL for individuals, communities and places. Recent studies on QOL include surveys undertaken by the United Nations Development Program at the aggregate level of the state to provide a ranking of states in terms of a human development index (HDI). Details regarding the calculation and purposes of this index, as well as a critique, are provided on the web site (www.undp.org/hdro). This index is calculated using empirical scores on three basic indicators relating to education, health and income. A simple additive weighting (SAW) model is used to calculate dimensionless scores using standardized values of the raw data. A number of other studies using objective and subjective indicators for a variety of spatial observational units such as census tracts, cities and regions have been reviewed by Murdie *et al.* (1992) and Williams *et al.* (2001). Typically many of these studies use approaches based on economic, social, political and environmental indicators, and rely on SAW models to produce maps of well-being, livability, sustainability and QOL. Details of studies on livability are given on the web site (www.bestpractices.org). The work of Smith (1974) on social indicators to identify areas of deprivation in cities, for example, is well know as part of a welfare approach to human geography and planning. There are also a number of studies that attempt to use data on cities to produce a ranking of the cities in terms of their success and/or QOL. Details of a large-scale and ongoing project concerning the classification of world cities using business type data are provided on the web site (www.lboro.ac.uk/gawc). Such descriptive studies may serve to enhance the reputations of the 'winners', but provide scant advice to citizens and others, for example, investors, politicians or NGOs, as to how to improve the lot of the 'losers'. With respect to studies that seek to offer consumers information on the best place to life to take advantage

of a high QOL a number of almanacs have been produced. For example, the Places Rated Almanac (Boyer and Savageau, 1981, 2000) offers a ranking of over 300 metro areas in the United States and Canada using scores for a set of nine indicators that refer to QOL. The indicators include: climate and terrain, housing, healthcare and environment, crime, transportation, education, recreation, the arts, and economics. For each indicator a standardized score is measured and a cumulative score is calculated for each place using a SAW approach. Marlin (1992) has focused on health as the major component for a survey of the livability of cities in the USA. Data and rankings of cities are based on scores for a set of eight indicators that include: death rates, public safety, economic health, environment, health services, recreation, school-health education and services, disclosure. From data on these indicators a four-level scale of attractiveness was derived: best, middle, worst and inadequate information. Each city is described in some detail using the scores on the indicators. Citizens and others are left with the data to draw their own conclusions.

1.4. Dimensions of QOL

A number of researchers, for example, McCall (1975), Myers (1987), Davidson and Cotter (1991), O'Brien and Ayidya (1991), Grayson and Young (1994), Diener and Suh (1997), Turksever and Atalik (2001) have reviewed literature on QOL and there is general agreement that a meaningful definition of QOL must recognize that there are two linked dimensions to the concept, namely a psychological one and an environmental one. Grayson and Young (1994: ii) note that "There appears to be a consensus that in defining quality of life there are two fundamental sets of components and processes operating: those that relate to an internal psychological mechanism producing a sense of satisfaction or gratification with life; and those external conditions which trigger the internal mechanism." With respect to the first dimension other terms have been used, for example, individual/personal QOL, subjective well-being, or life satisfaction. For the second dimension there are different levels and terms used, for example, urban QOL, community QOL, quality of place, environmental QOL. Since QOL is such a complex multi faceted concept it is often argued that it is important to combine the two dimensions to provide a complete picture of QOL for a person or place. Dissart and Deller (2000: 136) argue that "A person's quality of life is dependent on the exogenous (objective) facts of his or her life, and the endogenous (subjective) perceptions he or she has of these factors and of himself or herself."

The linkages among objective and/or subjective scores, levels of performance or satisfaction levels on indicators and well-being, social needs and outcome levels for individuals in terms of health, education, economic prosperity, happiness, the capacity to cope and take control of life chances and opportunities, have been explored by researchers in a number of disciplines. The approach of Friedman (1997), for example, focuses attention on what he refers to as a holistic scientific strategy for the improvement of QOL. He acknowledges the contributions of science to raising the standard of living of individuals, and the benefits of adhering to the basic tenets of science in the search for ways to improve QOL. Measurement of scores for indicators is a key element here with emphasis on replication, as well as the search for covariance and causative relations. Examples of indicators will be given in Chapter 3. Friedman (1997) wisely recognizes that theological, philosophical and humanistic approaches to the study of QOL deserve attention as part of

the grand scheme to understand, explain and improve QOL and the human condition. The Nobel laureate Sen (1999) and Nussbaum and Sen (1993) have elaborated arguments on the need to move beyond economic indicators to define well-being and QOL, and to embrace freedom, liberty and human capabilities. In his Presidential address to the Association of American Geographers Helburn (1982) reviewed the importance and significance to the discipline of examining QOL. He stressed that the discipline has much to contribute to help policy making if efforts are made to understand the differences in QOL among people and places. Cutter (1985) has given an overview of the field. She defines QOL as: "…an individual's happiness or satisfaction with life and environment, including needs and desires, aspirations, lifestyle preferences and other tangible and intangible factors which determine overall well-being. When an individual's quality of life is aggregated to the community level, the concept is linked to existing social and environmental conditions such as social and environmental conditions such as economic activity, climate, or the equality of cultural institutions. It includes both tangible and intangible measure reflecting local consensus on the community's values and goals."

Massam (1999) offered an overview of QOL as a public good in his Past President's address to the Association of Canadian Geographers. The topic of QOL as a public good will be addressed in Chapter 2. A recent review of indicators development by Hancock *et al.* (1999) concluded that, without policy relevancy, an interested constituency and most importantly, stakeholder engagement in indicator development and selection, there is little likelihood that QOL indicators will be adopted or be influential in policy-making. Williams *et al.* (2001) note that, "Such an integrated approach to QOL research is crucial to furthering awareness about the impact of social, economic and political decisions and activities, while operating as a guide to decision-makers in both the private and public sectors."

1.5. Responses to inequities in QOL

Political movements and public policies, as well as civic actions and individual initiatives have all responded to perceived and observed inequities in QOL. There is much public outpouring of opinion, at least from some, about the need to improve the lot of those who suffer poor QOL, and are deprived of liberty and freedom, as well as decent living conditions, health care, education and control over their lives. Yet the public will to change the situation on a global scale is still lacking, and even at the local scale differences in QOL are often pronounced and seem to be permanently present.

At the 50th Annual Meeting of the Canadian Association of Geographers held in Montreal in May 2001 a special session was organized to discuss QOL in cities. Some of the papers that were presented have been published in the Canadian Journal of Urban Studies (2001). The paper by Townshend (2001) was particularly interesting as it combined statistical analysis of data for census tracts in Lethbridge, Alberta, Canada with an elaboration of arguments on the contributions of 'community' to well-being and QOL in a city. He provided an excellent review of literature from psychology and other disciplines that is less often considered by planners who are interested in QOL in a city. To quote Townshend (2001):

Ideas linking cities or urbanization to QOL or psychological well-being…can be traced back to the work of the classic ecologists, such as Simmel's (1905) argument that urban stimuli affect the personality and the self as well as Park (1925) and

Wirth's (1938) linkage of population density to psychological disorders and claims that urban malaise creates loneliness, depression and anxiety. Subsequent studies of the crowding hypothesis and the malaise hypothesis have shown that the relationship between urban life and increased psychological disorder and decreased well-being generally have little empirical validity (Fischer, 1973; Choldin, 1978). Although there has been a long-standing interest in inter-urban variations in QOL and individual well-being (Schmandt and Bloomberg 1969; Smith, 1972; Liu, 1976), and more recent attempts to integrate social, bio-physical and urban functional forms as predictors of variations in QOL (Stover and Leven 1992; Lo, 1997), detailed studies of intra-urban ecology of well-being are virtually non-existent.

What is well-being? The concept…has been explored…in the social psychology and social indicators literature. …well-being encompasses both objective conditions (e.g. the degree to which physical needs are being met), as well as subjective conditions such as assessments of one's life or specific facets or domains of one's life. Wheeler (1991) argued, for example, that the global well-being concept centers on the convergence of seven major dimensions of the individual: emotions, beliefs, temperaments, behaviors, situations, experiences and health. Chamberlain (1988) viewed subjective well-being from a rather different perspective, arguing that the concept involves a number of cognitive as well as affective constructs. These have been shown to exhibit a tripartite structure of: life satisfaction, positive affect and negative affect. Life satisfaction is typically viewed as a cognitive (rational) evaluation of one's life. The affective elements of subjective well-being are more difficult to summarize. Based on early work by Bradburn (1969), it has been recognized that both positive and negative affect contribute to the affective character of well-being. For example, at any given time an individual may have positive emotions about some of life's domains (e.g. marriage, family, neighborhood), but may simultaneously experience negative affect with other domains, such as work (e.g. very bad day at the office). A number of measures of both the positive and negative affect are typically incorporated in well-being research-often directly using Bradburn's (1969) specific measures. However, Campbell *et al.* (1976) devised a method for integrating the two in such a way that affective states are assessed over the major domains of life. Their eight-item semantic differential index, the Index of General Affect (IGA) combines positive and negative affect across life domains. Campbell *et al.* (1976) explored the relationship between well-being and virtually all major domains of life experience in great detail and developed a summary Index of Well-being (IWB) which integrates global measures of life satisfaction as well as more specific measures of positive and negative affect.

Quality of life (QOL) on the other hand may be an even more elusive concept than well-being, and has historically proven difficult to make operational, as Beesley and Russwarm (1989) have shown. QOL is more complex or multi-dimensional than well-being.

1.6. QOL projects

The Quality of Life Research Group of the Department of Geography at the University of Strathclyde, Glasgow, Scotland has undertaken a number of studies of QOL in cities in

the UK. Also they have examined methodological problems of measuring QOL, this work is reported in studies by Rogerson and coworkers (1989, 1995, 1996, 1997, 1999) (r.j.rogerson@strath.ac.uk). A set of empirical studies on QOL in urban areas around the world is presented in Yuan *et al.* (1999). The Institute for Social Research at York University, Toronto has undertaken a series of surveys on QOL in Canada in recent years. Details of the reports are available from the website (www.yorku.ca/isr). A study of the QOL of citizens in the province of Ontario, Canada has been undertaken by the Quality of Life Research Unit at the University of Toronto (www.utoronto.ca/qol). A large-scale international project on the assessment of QOL is being undertaken and details are available from the website (www.iqola.org). The project is based at the Health Assessment Laboratory at the New England Medical Centre Health Institute, USA.

The Ontario Social Development Council and Social Planning Network of Ontario, Canada have defined QOL as "The product of the inter-play among the social, health, economic and environmental conditions which affect human and social development." They have also undertaken a survey of QOL in the province of Ontario (www.qli-ont.org). An annotated review of literature on QOL has been produced as part of this project and details are available on the web site. In March 2001 the Federation of Canadian Municipalities published their Second Report on the Quality of Life in Canadian Municipalities (www.fcm.ca). A project to solicit opinions from citizens of the city of Toronto regarding the vital signs that reflect the QOL in the city is given on the website (www.toronto vitalsigns.com). Also there is an initiative in Canada at the federal level to promote a new piece of legislation entitled the Canada Well-being Measurement Act. Details and the status of this effort are provided on the website (www.SustainWellBeing.net). An attempt to implement an index to measure genuine progress toward a quality life in the province of Alberta, Canada was released in 2001. Comments on these six Canadian studies will be given in Chapter 5.

1.7. QOL of individuals

It has been suggested by Renwick and Brown (1996) that QOL means, simply, how good one's life is for an individual. Improving the QOL of individuals is becoming an increasingly important goal of a number of social and behavioral scientific research fields ranging from health care to psychology, and including planning. Along with this increased interest has come an attempt to make the concept of QOL a more robust construct so that it can encompass a wide range of interests in its definition and investigation. Clark (2000: 700) suggests "…that quality of life for an individual is affected significantly by his or her social environment", hence there is a strong collective or public dimension to QOL to complement the private individual dimensions, and the social environment is in many ways closely connected to the built environment. Clearly planning has to be directly concerned with QOL issues. There are many references to QOL in planning studies, and the planning literature offers a wide variety of interpretations, definitions and applications of the concept. QOL means different things to different people and embraces well-being and satisfaction which focuses on the individual, to 'good place' that is centered on location. Szalai and Andrews (1980) makes it clear that while the concept of QOL does not have a specific origin in time or space, there are a number of generally accepted attributes

that have gained recognition. "Roughly speaking, however, quality of life refers to the more or less 'good' or 'satisfactory' character of people's life" (Szalai and Andrews, 1980: 8). He goes on to argue that "…the concept has several interesting attributes: (1) it refers to human life only, (2) it is rarely if ever used in the plural, (3) it is used as a single indivisible generic term whose meaning can be clarified, and (4) it is difficult to classify into any discrete category of related social sciences" (Dissart and Deller, 2000: 136). Romney *et al.* (1994) offer arguments as to "…why there are no universally accepted definitions of quality of life: (1) psychological processes relevant to experience of quality of life can be described and interpreted through many conceptual filters and languages: (2) the concept of quality of life is to a considerable degree value laden: (3) the concept of quality of life embodies the understanding of human growth and development processes, the average life span of individuals within communities, and the extent to which these psychological processes are influenced by environmental factors and individual value systems." Because there is no single standard operational definition of QOL Dissart and Deller (2000) suggest that related terms have emerged, for example, well-being, level of living, standard of living, life satisfaction, happiness and morale. Implicit in all this is the notion of the possibility for an individual to take some control of the outcomes of their life, as opposed to the fateful acceptance of things as beyond control or being in the hands of the supernatural. The emergence of the state as a civic institution has brought about a breaking of bonds with God and Destiny. Perhaps the state's evolution has not necessitated a cutting off of ties with a supreme being, but it has resulted in a relocation of the deity, a shift to a sphere that will not interfere too much in government and consumerism. This is the 'great escape' cited by Saul (1997) as perhaps the most significant human experience that is confronting the contemporary world. Governments are expected to provide conditions to enhance QOL of citizens, while reducing tax levels and offering improved public services. The contradictions are clearly evident.

1.8. The measurement of QOL

The enlightenment approach to the study of life plays a powerful role in QOL studies and planning. QOL is directly influenced in contemporary times, according to some, by human agency. Dissart and Deller (2000) provide an excellent overview of the term QOL as applied in the planning literature, and they include in their review paper an annotated bibliography of approximately 130 papers.

Over the last 30 years Progress in Planning has published many articles that directly relate to QOL though the term has been used sparingly as an explicit concept. To mark the 30th birthday of the journal five internationally recognized experts on urban planning each wrote review essays and tackled the question: has there been progress in planning in recent decades? The essays are published in Progress in Planning (2002). Implicit and explicit references were made in their essays to the notion that the main purpose of planning is to help ensure that the future is somehow better than the past, and this reference to better is inextricably bound up with the concepts of fairness, freedom, justice, liberty, efficiency and sustainability for individuals and groups: all these elements are critically important to QOL. Rivlin (1971: 144) argues that "…to do better, we must have some way of distinguishing better from worse." Such a principle underlies movements and policies to collect

data relating to the human condition. Let me just mention two initiatives in this regard. First, the establishment of agencies of the state to collect census data. Most countries now engage in this type of data collection activity, but it is left to Hacking (1990) to delve deeply into the significance of such activities as they impinge on matters of explanation, prediction and state policy making. With the erosion of determinism for explaining causes and effects Hacking (1990) demonstrates that laws of chance began to be developed. "The idea of human nature was displaced by a model of normal people with laws of dispersion…chance made the world seem less capricious…it was legitimated because it brought order out of chaos. The greater the level of indeterminism in our conception of the world and of people, the higher the expected level of control. These events began with an avalanche of printed numbers at the end of the Napoleonic era." In Chapter 2 the work of Caplow *et al.* (2001) will be discussed. They argue that the 20th century was the first measured century and this has had, and will have an enormous impact on planning and understanding of QOL differences among places and people.

The second initiative I wish to mention focuses on specific practical efforts to raise awareness of citizens as to their QOL, and to seek their involvement through civic actions to reverse adverse trends, and to reinforce positive elements of planning policies that yield desired results. In Chapter 5 a set of case studies on QOL in Canada will be reviewed that have as one of their major aims the raising of public and private consciousness regarding the importance of QOL in the lives of all citizens.

An important contemporary view of QOL in planning is that through human actions we can alter QOL. The assertion is that QOL can be controlled, modified, improved. This approach tends to suggest that QOL is a commodity or a tangible output. This enlightenment approach of reason relies on causative explanatory models and prescription that confronts an alternate view of QOL that essentially argues that QOL entails internal and external experiences, perceptions, attitudes, values and mores combined with the genetic make up of a person that yields to that individual a sense of well-being that they, and they alone, experience. Happiness, well-being, satisfaction, sense of self-worth, self-esteem and overall identity are inter-connected components of QOL as mentioned earlier.

1.9. Some global patterns of QOL

Conscious efforts to change and control the world clearly recognize that intervention by human agency is an acceptable endeavor that directly confronts a more fatalistic vision of life and the world. This latter view held sway for centuries in the west and still remains prevalent in many parts of the world where individuals are trapped in their local conditions with few chances to change their QOL. Let us consider some patterns: if the population of the world was reduced to a village with 100 people and the same global ratios were preserved then we would find:

57 Asians;
21 Europeans;
14 from the western hemisphere;
8 Africans;

52 women and 48 men;

6 people would possess 59% of the entire world's wealth, and all six would be from USA;

80 would live in substandard housing;

70 would be unable to read;

50 would suffer from malnutrition;

1 would be near death;

1 would have a college education;

1 would own a computer.

The stark reality of facts about the world is that 1 000 000 will not survive this week. Some 500 million have experienced the dangers of battle, the loneliness of imprisonment, the agony of torture or the pangs of starvation. If you have food in the fridge, clothes on your back, a roof over your head and a place to sleep you are among the top 8% of the world's wealthy.

A further point is worth noting namely that as QOL increases in one place this can reflect an increase in differences among places in terms of QOL: the inequities are more and more pronounced. This is a serious concern to many planners who take a long-term view and adopt a large-scale perspective on QOL. Stackhouse (2001) among others makes the point clearly with respect to the situation in many third world countries where private initiatives to improve QOL are so overwhelming that external public efforts are typically seen as the preferred route to improvement. Stackhouse (2001: ix) argues that, "By the 1980s, development organizations believed they had a pretty clear idea of how wealth was generated, as if the centuries-old struggle to end poverty and deprivation was a problem that could finally be solved…. Establishing an open economy and a reasonable standard of civil liberties was important. Add to that the right public investments—in education, healthcare, affordable housing and accessible credit—and any human life anywhere could be transformed…. At the start of the 1990s, this simple formula—democracy plus free markets equals progress—was treated as the new universal truth. To the believers, an end to the long, noble project of development was in sight, just 200 years after the great Scottish economist Adam Smith wrote, 'Little else is required to carry a state to the highest degrees of opulence from the lowest barbarism, but peace, easy taxes and tolerant admin-istration of justice'."

Stackhouse's basic conclusion after spending almost a decade in India and traveling widely in third world countries was that poverty continues to be well entrenched in dozens of countries—except where people had some control over their lives. He began to see development as a process of struggle that was internal to each place and deeply democratic in nature. To an enormous extent QOL is improved if individuals have control over their lives, even if only to a modest degree and they have hope for a better future: the struggle continues. Intervention by outsiders and public initiatives can assist and complement individual and private efforts, but in and of its self–public intervention is not sufficient to sustain improvements to QOL for individuals and communities in the third world or elsewhere. However, the efforts of planners to promote the public good continue through collective initiatives and the role for such activities is still vitally important. The Chapter 2 examines QOL as a public or common good to be enjoyed by all. Planners among others

have dreamed of a good world and in such a utopian place the QOL is beyond reproach! Some of this literature will be discussed in Chapter 2.

The challenges presented by postmodern thinking is causing some planners to re-evaluate the classic public planning rational paradigm of Patrick Geddes that relies on survey, analyze, plan, and to modify this to explicitly acknowledge the place of individuals with their unique views and perceptions as to what is meant by better or worse. The study of QOL must recognize both the public aspect, that is the aggregate situation and also the private dimension, namely what each individual believes to be of significance. A major challenge facing planners is to reconcile these two imperatives of QOL and to recognize the power of the private sector in influencing QOL. With this latter point in mind Barlow and Clarke (2001) remind us that transnational corporations are the major players in the world of today that confront states as the regulators of a world within which planning occurs. "The top 200 global corporations are now so big that their combined sales surpass the combined economies of 182 countries, and they have almost twice the economic clot of the poorest four-fifth of humanity. Of the 100 largest economies in the world, 52 are now transnational corporations. Wal-Mart is bigger than 163 countries. Mitsubishi is larger than Indonesia. Ford is bigger than South Africa…. Eighty-nine countries have lower per capita incomes today than they did a decade or more ago and 200 million more people this year are living in absolute poverty (less than \$1 a day)" (Barlow and Clarke, 2001: 19).

As mentioned earlier there is no single date when we can say that individuals decided to define something called QOL, to seek to define it and measure it and then to be concerned as to how this phenomenon could be systematically determined. However, it does seem clear that some necessary conditions need to exist in order that planners should turn their attention to QOL. Galbraith (1996: 1) puts the matter clearly "Before knowing what is right, one must know what is wrong." We could of course reverse this aphorism! Further, we could delve into the mechanisms for problem solving as a formal intellectual exercise following rigorous analytical and statistical approaches, or the literary and humanistic approaches to the identification of an ideal utopian world that has no wrongs and plenty of rights. Comments on the good society, city, place and life are given in Chapter 2 together with comments on the concept of utopia. In the 2000 Massey Lecture Series of the Canadian Broadcasting Corporation, Ignatieff (2000) offers comments on the rights that are an intrinsic part of a good society. This topic is also included in Chapter 2.

1.10. Planners and QOL

At the turn of the 20th century the American planner Burnham pronounced in no uncertain terms the need for planners to think big, offer grand schemes, design cities that would endure and perhaps above all else make citizens proud, confident and enthu-siastic about their built environment. Clearly he subscribed to the general philosophy of planning that argued that if we built the right sort of buildings, using the right design and land use layout then behavior of individuals within the community would respond accord-ingly. In the introduction to his 1909 plan for Chicago Burnham noted:

"Make no little plans; they have no magic to stir men's blood and probably themselves will not be realized. Make big plans: aim high in hope and work, remembering that a

noble, logical diagram, once recorded, will never die, but long after we are gone will be a living thing, asserting itself with ever growing insistency." The magnificent work of Hall (1998) on Cities in Civilization offers a detailed survey of the conditions that gave rise to golden ages for western cities over the last two millennia. While there is some empirical evidence as shown by the architect Newman (1973), for example, in his study of QOL, crime rates, and the design and layout of public housing projects in New York City, it is virtually impossible to assert a direct causative relationship between design and behavior of individuals and groups. Nevertheless, planners have persisted to seek such relationships and promote specific plans to improve QOL. The high-rise tower and the suburban sub-division have at different times been promoted as plans to enhance QOL. Hall (1996) and Sewell (1995) among others have drawn attention to the folly of blind adoption of such an approach. Clearly the development industry has a particular view of such plans in terms they recognize as effective and profitable, but as public planning ventures there is conflicting evidence on the merits of these types of projects on QOL. Suburban sprawl and high-rise projects continue to dominate the urban scene in many countries; the consequences on the quality of life for citizens is hotly debated in recent planning literature on 'smart growth' as noted by Chen (2000), for example. Information about the efforts to promote Smart Growth in the province of Ontario is given on the website (www.smartgrowth.gov. on.ca). But can we say that the monster towers in Hong Kong are failures in terms of QOL of citizens there? Or should each place and case be judged on its own merits in the context of the social, political, civic culture of a specific time and place. How is life lived in Hong Kong, London and Toronto?

1.11. QOL and the new plan for Toronto, Canada

On 1 January 1998 the government of the province of Ontario in Canada implemented legislation to create a new City of Toronto. This new city embraced local governments and citizens that previously comprised Metropolitan Toronto. A full discussion on metropolitan reform and amalgamation, and its consequences on the delivery of services as they affect QOL of citizens in cities are given in Heywood (1997). Toronto is now the fifth largest city in North America. Toronto generates $95 billion a year in gross domestic product (GDP). More than $21 billion is sent in taxes to the provincial and federal governments by its inhabitants in that comprise 15% of Canada's population. The city attracts 25% of the nation's annual migration and according to Miller (2001) "It has been called the most cosmopolitan place known to modern civilization." However, this city is facing serious questions regarding QOL that result from inter alia, traffic congestion, growing suburbanization, lack of affordable housing, increasing demands on public services and air quality deterioration. Serious challenges face the three levels of government—city, provincial and federal to re-align resource allocation and involve citizens in active participation to improve QOL. In the early part of 1999 the chief planner of Toronto, Paul Bedford, began a process to develop an imaginative and innovative new plan for the city. The current status of this plan is given on the city website (www.city. toronto.on.ca/torontoplan). One of the central themes of the process for creating this plan is the explicit recognition that the concept of QOL and its actualization lies at the heart of a successful planning process and vision for the city.

Implicit in this view is the principle that QOL is both a cause and effect within a planning process as mentioned earlier in this chapter, and the vital element of a sustainable human condition in a civic state. An elaboration of the concept of a civic state is provided in Massam (2000). The civic state exists in its ideal condition to protect and enhance the betterment of all: this is the common or public good. There is no linear path to follow on this quest for the ideal civic state. The challenges faced by each state and each citizen are continually changing, and while we might invoke decency and civility as guiding principles toward liberty, freedom and justice there are darker forces of powerful self-interest that are ever present. To contend with the darker forces the civic state must continually strive to give to each citizen the opportunity for self-fulfillment and protection from piracy in whatever form it may occur.

Citizens, as individuals, perceive, feel, experience and contend with their living conditions and QOL. Those who enjoy high levels of QOL seek to protect it while those at the bottom of the pile feel frustrated, disenfranchised and marginalized. An example of the latter in Toronto is the homeless. An indication of the former is provided by the gated community and the security arrangements that afford protection for residents in some condominiums in the city. As a public policy issue it is recognized in the Toronto planning exercise that many elements—economic, environmental, political, social, personal and collective—result in higher or lower categories of discretion and control over choices enjoyed by citizens. And if an overall high level of QOL is achieved by each citizen in the city this will enhance its attractiveness, not only for individuals now resident there, but as a collective indication of attraction for investments to further improve QOL. Of course, while this 'investment-QOL' cycle may improve conditions in Toronto, at a provincial, national or international scale such improvements and perceived or experiences higher levels of QOL, will possibly serve to make the city a pole of attraction for immigrants. This point is dealt with in detailed case studies of immigration in Canada and Australia cities in the papers edited by Ley and Murphy (2001). They focus specifically on the two major gateway cities in the two countries, namely Vancouver and Sydney.

1.12. Summaries of approaches to QOL

To close this introductory chapter I will offer some brief summary comments on the variety of approaches to the study of QOL. Myers (1988: 353) has developed a very useful table (Table 1) that summarizes the major differences among major alternate approaches to measuring QOL. He notes five major distinctions: "First, what have been the scientific or professional origins of each approach? Second, how does each approach focus its measurement process regarding quality of life? Third, what is the statistical basis for measuring quality of life? Fourth, what aspects of quality of life have the conclusions of such studies emphasized in the past? And finally, what political or economic implications have been drawn from such studies in the past?" Murdie *et al.* (1992) offered an overview, shown in Fig. 1, of the variety of approaches to the study of QOL. This figure draws together and shows some of the major linkages among the topics presented in this chapter, and clearly indicates the wide variety of approaches that are available to study QOL. To complement Fig. 2 presents a summary of the three basic dimensions regarding the study of QOL that have been referred to earlier in this chapter and which are of direct

Table 1
Alternative approaches to knowledge about quality of life (source: Myers (1988: 353))

Distinctions	Approaches			
	Livability comparisons	Wage differentials	Personal well-being	Community trends
Origins of professional approach	Journalism, geography, or other	Economics	Psychology, sociology	Recommended approach for planners
Measurement focus	Shared, objective characteristics of communities using secondary data	Disamenity compensation using secondary data	Determinants of life satisfaction based on personal interviews	Local trends in components of quality of life using secondary data and personal interviews
Statistical means	Additive combinations of objective indicators using weights supplied by researcher judgment	Regression models estimating weighted contribution of objective amenities to wage differentials between places	Regression models estimating weighted contribution to self-evaluations of different life domains to overall life satisfaction	Objective indicator profile of changing community character and subjective citizen assessment of each separate factor
In past has directed attention to	Which places are 'better' or 'worse'	Which places must pay higher wages	Personal characteristics and private life	Which factors are growing better or worse—emphasis on the future and citizen priorities
Political/economic implications of past work	Aids competition for relocating firms and workers	Indicates lower/higher costs of doing business	Local government cannot help much	Highlights local problems and goals related to development process

Objective ⟷ Subjective

Economic/Political
Social Context

Input Measures
Quantitative

Intermediate
Output Measures
Quantitative

Intervening Variables and
Final Output Measures
Qualitative

Family/Home

Household/Group Characteristics
Income, education, class, ethnicity, religious
Preference, gender, age, marital status

Financial Resources
Economic growth/decline
Economic restructuring
Political 'climate'
Community 'values'
Resource allocation

Physical Environment
pollution, green space

Political Civic
Society

Leisure/Recreation

Life Experience, Attitudes,
Values, Expectations, Aspirations

Health

Dwelling Quality
space, affordability

Safety/Crime

Perception

Standards of
Comparison

Education

Public Service
*Health, education
Recreation, police,
Fire protection,
Public works,*

Employment options
Job security

Domain Satisfaction

Family/ Home	Political/ Civil Soc.	Leisure/ Recreation	Health
Safety/ Crime	Education	Employment	Local Environment

Local Environment
*Dwelling
Neighbourhood
Access to public service*
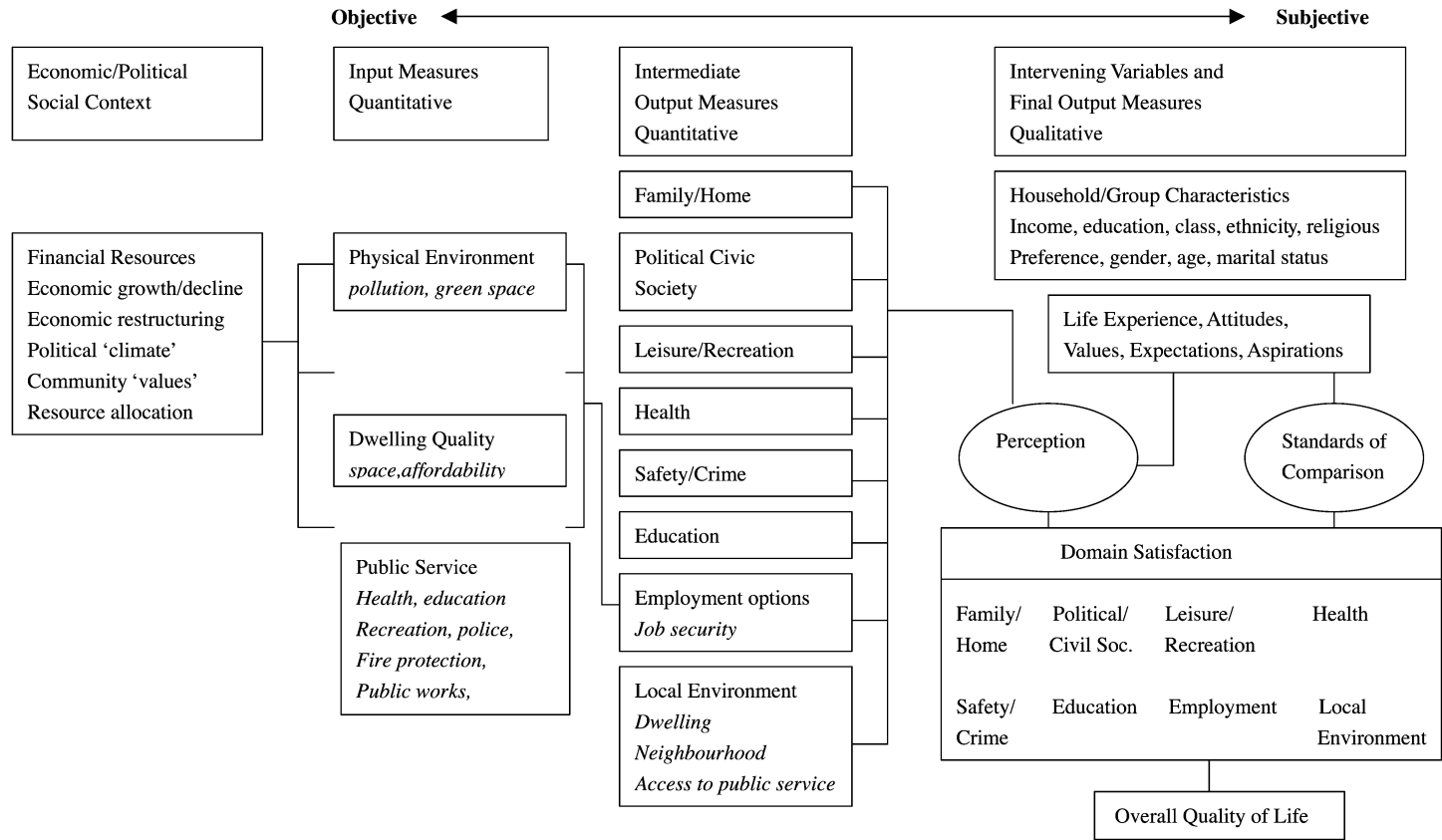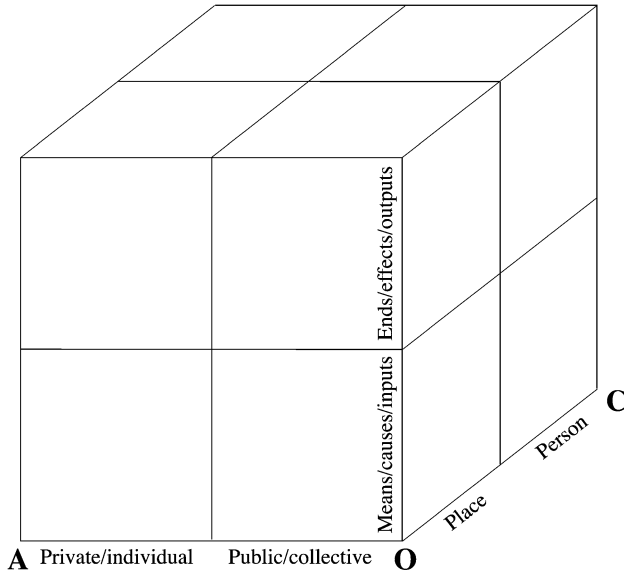
Overall Quality of Life

Fig. 1. Conceptual framework for quality of life at the urban level (Source: Murdie et al., 1992).

DIMENSIONS

O – C   Place or person

O – A   Private/individual or public/collective actions

O – B   Means/causes/inputs or ends/effects/outputs

Fig. 2. A typology of approaches to the study of quality of life.

interest to planners. The first dimension indicates that the focus can be on either the 'private/individual' or 'public/collective' perspective; the second dimension divides the study of QOL into a focus on either 'means/input/causes' or 'ends/output/effects'; the third dimension suggests that the focus can be on either 'place' or 'person'. Of course this crude typology of QOL approaches can be adjusted to accommodate changes over time and to undertake work at different scales. Further it is implicit that the study of QOL relies on subjective as well as objective data. The case studies offered in later chapters give substance to the conceptual diagrams presented in Figs. 1 and 2, and the information in Table 1.

CHAPTER 2

Quality of life and the public good: the good world

2.1. Introduction to the public good

The study of the public good is a worthy topic of inquiry for planners and of considerable significance in the formation and evaluation of public policies that focus on QOL. In April 1996 a conference was held at St Francis Xavier University, Canada to explore the term *the public good* and to celebrate the contributions to its realization made by Alan MacEachen. The occasion marked his retirement from the Canadian Senate on his 75th birthday. Kent edited the papers and commentaries delivered at the conference in the book, In Pursuit of the Public Good. Kent (1997: 157) reminds us that "…the public good relates to minimum incomes, social security, health and education; and it is about the degree of equity in a society as well as its total wealth…(also)…the public good…is about relationships within the community", all of which concern the QOL for citizens.

The cement that bonds a community or society is trust as Locke (1954) declared over 300 years ago in his book, Essays on the Laws of Nature (W. von Leyden, 1954). Hollis (1998) has examined the propositions that 'trust grows fragile when people become too rational', and that 'truly rational people are both trusting and trustworthy'. He argues that a deep notion of reason founded on reciprocity and the pursuit of the common good will yield trust and provide strong identity for citizens in their diverse commitments to communities both local and universal. The rational project of the Enlightenment argues that through trust the bonding of truth, virtue and happiness will occur and yield increases to human well-being. The famous applied projects of successful community planning in Mondragon, Spain as discussed by Massam (2000), and Kerala in India as elaborated by Sen (1993) attest to the view that theory about community involvement leading to direct improvements in QOL can be converted to practice.

In the preparation of this chapter I am mindful of the seventh and final proposition of Wittgenstein (1922) in his treatise, *Tractatus Logico-philosophicus*, concerning the appropriate use of silence in discourse. The proposition states that that "What can be said at all can be said clearly, and what we cannot talk about we must pass over in silence." In this chapter I will attempt to follow the advice offered in the first part, but I encourage planners not to be intimidated and pass over in silence matters concerning the public good and QOL on the grounds that we lack clear operational definitions of the terms and absolute standards and formal measures to describe and explain the patterns, or that civic behavior, institutional practices of government and private agencies, as they relate to the public good and QOL, are hard to identify, categorize and analyze.

As an introduction to this topic it is appropriate to offer a few comments on the words *public* and *good*, but I will not attempt a long discourse on the term *the public good* other than to repeat Saul's (1997: 3) definition—"the good of the whole." As an adjective, *public* is defined in Black's Law dictionary as "pertaining to a state, nation, or whole community; common to all or many, open to public use." The Oxford Dictionary offers the following definition of the word *good*, "desirable end or object, thing worth attaining; movable property; merchandize, names, useful, reliable for a purpose, efficient in

function." Economists from the 1950s on have defined and analyzed theories of a pure public good, and thanks to the contributions of Teitz (1968), Dear (1974), Jones and Kirby (1982) and Pinch (1985), among others, we now have solid geographical studies which complement the earlier aspatial work of other disciplines. This newer work is generally referred to as the geography of collective consumption.

A term similar to *the public good* is *the common good*, and Black's Law Dictionary defined this as "a generic term to describe the betterment of the general public." I interpret this to suggest processes that yield positive outcomes on QOL to individuals and groups living in de facto or de jure territories. This definition is perhaps a useful place to start a discussion of the topic. The public good has important distributional characteristics, as outcomes of QOL do vary enormously over space, and at all scales of analysis—global, regional, state and local, as was mentioned in Chapter 1. Distribution questions are a focus of a number of disciplines in the social sciences. For example, Lasswell (1958) defined political science as the study of "who gets what, when, how", and Samuelson (1973) asserted that economics is concerned with "what, how, and for whom." Smith (1974) makes it clear that he views human geography as the study of "who gets what, where, and how." It is important that planners work closely with colleagues in the life sciences and the bio-physical sciences to connect social and political processes to environmental quality, QOL, sustainability and well-being. Recently the government of the UK has launched a project to relate sustainability to the public good and QOL. Details are available on the website (www.sustainable-development.gov.uk).

2.2. Access to public goods

We do not all enjoy the same degree of access to public goods, or equal ability and opportunity to influence the public good through active participation in collective choice. Who we are, what we are and where we are all impinge on the roles we play as citizens and the determination of the public good and QOL.

Clearly there is a strong relationship between the number, size and location of facilities that provide collectively consumed goods and services, and the distribution of benefits and costs to citizens, as well as QOL. The range of public goods and services provided is considerable and typically includes health and education, as well as utilities such as water, electricity and gas, emergency services (fire, police, ambulance, for example) under a variety of regimes of public and private financing through taxation and user-fees. This list is of course not inclusive of the full range of public services that are generally available to citizens. A more complete list must embrace services offered by all branches of government at different levels and scales, from the local to the national, depending upon the particular style of organization and administrative structure, as well as the constitution of the individual state. We should also never forget that government itself is a public good that belongs to the people under the quasi-contractual system of consensus and covenant. Current efforts to establish new relationships of the public–private partnership (PPP) sort to encourage private investment in public services are occupying the attention of the Labor government of Blair in the UK as it begins its second term in office.

It has been argued by Whitfield (1992: 11) among others, that unfettered market systems do not operate with appropriate efficiency to satisfy all of the needs of citizens. For

example, "…social goods or services such as roads and street lighting, defence, law and order, would not be provided if left to the market, and services such as health and education probably cannot be produced in sufficient quantities at an affordable price."

2.3. The state and the socially concerned

The celebrated economist and social thinker Galbraith (1998) has recently reminded us that "…the survival and acceptance of the modern market system is, in large measure, the accomplishment of the socially concerned. It would not have so survived had it not been for our successful civilizing efforts." In a word, for capitalism to thrive a necessary condition is that a full suite of collectively consumed goods and services be provided. Specifically with respect to Canada Gwyn (1995) has argued that a necessary condition to enhance civitas—the sense of responsibility toward the larger society, beyond the individual citizen—is to support, nurture and encourage things Canadian, for example, in the sphere of arts and sports, as well as a sense of values and a role in the world community of states and agencies such as the United Nations. Recently Murphy (1999) gives a review of the rise and decline of social programs in Canada. She argues that the brunt of responsibility lies with Canadians for this situation, not politicians or big business. Citizens must participate actively in political activities. But recent statistics on voter turn out in Canadian elections, for example, suggest a high degree of indifference by citizens. A similar situation occurred in the UK in the 2001 election of the Labor government where one of the lowest turnouts ever was recorded in a national election.

The Canadian sociologist O'Neill (1994) vigorously attacks market liberalism and he argues strenuously for the need in Canada, and elsewhere, to rethink the concept of the state. Specifically, he offers a convenant theory of society that aims at restoring a sense of civic commons in political life; a culture in which the individual only becomes free when commitment obtains and all are free. There is, in his view, a clear need to create a politics of civic presence, grounded in our obligation to solidarity, prior to any contractual consent and rights theory. We cannot hope to redeem the civic life-world merely through risk-management agencies. Ignatieff (2000) has argued that QOL in Canada is inextricably linked to rights legislation and practice as ascribed and asserted by groups and individuals. However, even though legislation regarding rights and entitlements may exist not all citizens have equal access to ensure equal outcomes. O'Neill provides us with a trilogy of reciprocity lessons that can be treated as necessary conditions to promote the improved civic state and QOL. First, there must be an acknowledgement that citizens have a duty to care for each other; second, there are no *moral strangers*, people beyond the pale; third, justice must be conceived as inter-generational as well as intra-generational.

The fixed facilities that provide goods and services are easy to identify as we travel through a state, for example, power stations, garbage dumps, schools, universities, colleges, hospitals, health clinics, libraries, day-care centers, retirement homes, drop-in and recreation centers, mental health units and half-way houses, police, fire and ambulance depots, roads, railways, pipelines and power-line corridors. However, it is very difficult to assess precisely the positive and negative consequences of the facilities on QOL and on building viable, sustainable, decent states in which citizens feel secure, protected and satisfied with a strong sense of identity.

I argue that the public good is in large measure the perceived QOL of individuals, and hence the collectivity, and it owes much to the availability and the effective, equitable utilization of the facilities that cater to the myriad needs of citizens as we progress through life from birth to death.

2.4. Commodification, corporatism, individualism and QOL

The commodification of the public good yields attitudes and practices of the market place including ownership and property rights, price and cost, competition and consumption patterns. The unfettered enterprise culture is described by Friedmann (1987: 313–314) in his magistral work on Planning in the Public Domain as offering "…the pleasant ascent up the candy mountain of consumption…" He goes on to argue that

> Although there are strong arguments both for and against the concept of a public domain, the recovery of a political community requires that we believe in the reality of common interests and, thus, in the possibilities of the common good. Failing this, we clear the way for a retreat into privatism that will leave the political terrain undefended against an authoritarian and repressive state.

Saul (1997) in his book on Canada at the end of the 20th century refers to the public (common) good many times. He asserts that corporatism and individualism are on the rise and the public good is suffering as a consequence; a view shared by Murphy (1999). The regulatory state is emerging in some jurisdictions as part of so-called third way politics to protect and encourage markets for public goods while seeking to implement citizen's charters and other instruments to regulate quality and acceptable standards of performance. The standards apply to explicit public services, such as waiting times in hospital, which affect QOL. In Chapter 4, comments on indicators of QOL as performance measures is given. The public good is more than a commodity: it is a vital part of community, citizenship and consciousness that adds significantly to identify and a sense of belonging and control: both contribute very significantly to QOL.

The topic of the public good has attracted the attention of scholars from a number of disciplines in the humanities and social sciences, and some politicians and journalists as well as citizens as was evident on November 7, 1998, when almost 1400 people attended a series of presentations at Convocation Hall, the University of Toronto, Canada. The speakers—Ignatieff, Laxer, Kingwell, McQuaig, Ray and Saul—offered thoughts on 'Reflections on the Public Good'. The collection of papers from the conference is published in the *Queen's Quarterly* under the title: Toward the Common Good (1999). The speakers reminded the audience about growing inequities in Canada. They examined the assertion that citizens have diminishing control of wealth distribution programs, the defence of third way politics with its supposed-appeal to social-democrats who prefer more state intervention and those who favor markets, the conflicting positions of those who place emphasis on liberty and personal freedom and those who promote social justice and equity. More abstract elaborations were offered by the philosopher Kingwell about the existence of the public good as something desirable and worth desiring, and as choice worthy, and all that entails in the context of a collectivity of individuals in a democracy that asserts the primacy of the will of citizens. It is clear that debates on these topics are

important for planners, and the debates will be enriched if they are rooted in space as well as time; locality, place and community are worthy of inclusion and as focii for examining the public good and QOL.

2.5. QOL and the civic state

Let me now turn to the civic state and begin with the proposition that such a state is a necessary condition to promote the public good and QOL. Ideally the civic state enjoins and challenges individuals to accept covenants, contracts, and compacts to co-operate, share, sacrifice and celebrate together, to become citizens in a community with a recognized collective identity. Consciousness and social existence are inextricably connected by subtle and yet powerful links that engender identity, security and direction for citizens: all contribute to the QOL. Spinner (1994: 170) elaborates on this:

> The state is about space and memories; through these commonalities, liberal citizens often develop overlapping memories. The civic state …is eclectic, pragmatic, fair, just and reasonable; it stresses identity and recognition while working for egalitarian, democratic institutional arrangements for individuals, voluntary groupings and state agencies to cater to all the needs of all citizens…

The civic state is a work in progress that seeks to promote and protect the public good. But what is this good? Certainly it refers to the betterment of the whole and QOL, but not all citizens in a state share the same definition of either the ways to achieve it or the desired end results. Ignatieff (1998: 245) reminds us of the views of Isaiah Berlin that

> Since human nature was not always one and the same, the truth would not always appear the same to each human group… It was unintelligible, therefore, to believe that all human societies were stretched out in a caravan called progress, heading towards the same horizon line… Sincerity, authenticity, toleration and variety— these new values formed the presuppositions of modern liberal individualism… Not all good things could be had at once. Conflict of values and tragic loss were unavoidable.

That a state's territorial boundaries do not coincide with the extent or limits of political authority over economy and society is a well-known thesis, yet the precise consequences and causes of this dissonance are not clearly defined. This is the view of Strange (1996) and in her book she elaborates on the structuration approach to explain how and why non-state authorities have increased their power over individuals, while the corresponding powers of states have declined. But let us not forget that it is at the local level, the community and family level, that much of life is lived by citizens of a civic state. It is the search for the right balance of local QOL outcomes, for example, housing, health-care, education, security and overall satisfaction in material and spiritual terms, against the large-scale and often distant state and inter-state policies and practices of trade and commerce as well as the activities of corporatism in all its forms that challenge the civic state. Theobald (1997: 3) argues that to promote QOL within communities: "We now know the directions in which we must move: the required success criteria for the 21st century are ecological integrity, effective decision-making, and social cohesion. These are

progressively replacing current commitments to maximum economic growth, compulsive consumption, and international competition." Living in a community is a political activity and two fundamental explanations of what this means are identified by Strong (1992) as first, *I* being prior to *we*—that is, individuals choosing to forgo some of their wishes in order that the community can enjoy greater rewards; or second, *we* has priority over *I*, humans living in groups provides the basis for interactions and a model of citizenship. An elaboration of these concepts as they impinge on QOL is provided in Massam (2000). With respect to individuals living in communities Saul (1995: 73) notes "The individual therefore lives in society. That is the primary characteristic of individualism…the form of society turns upon where legitimacy lies. There are four options—a god, a king, groups, or the individual citizenry as a whole." It is the latter two categories that constitute the civic state through the actions of a civil society and citizenship. Together they find a balance that allows individual citizens to strive toward improvements to QOL while contributing to the protection of QOL for all.

2.6. Views of happiness and citizenship

The joyful experience of selfless giving can yield that love know as *agape*, which contrasts with love as *eros*. Both kinds potentially yield happiness, contentment and a heightened sense of worth, well-being and QOL. Watson (1998) has elaborated on this in his review of Kingwell's (1998) book, Better Living. Watson offers a definition of happiness that embraces feeling accepted in and a real member of a community (*appartenance*). This French word captures the sense of belonging, and it is arguably the essence of happiness. At its narrowest, Watson suggests, it is the family that offers the opportunity for such feeling. At its most powerful, it is tribal: belonging, exclusive and dangerous. At its transcendent best it is citizenship in the Thomas Paine and Alexis de Tocqueville sense, or the sharing of a common project.

As mentioned earlier O'Neill (1994) is a strong advocate of the need for a covenant theory to handle the vagaries of human existence that confront individuals, and specifically with respect to young people he asserts that "The covenant concept of life chances and opportunities represents a more generous affirmation of what is owed to children and youth than either the scarcity-bound concept of basic needs or the market-driven concept of individual autonomy achieved in a society that continuously reproduces failures and dependency" (O'Neill, 1994: 98). Surely O'Neill's view has broad relevance and resonance as it can readily apply to that which is owing to all individuals in a civic state. The civic state demands the promotion of all aspects of civility, civil institutions and practices including, in measured and regulated ways, the effective and efficient functioning of a strong market-driven economic system. A major concern of the civic state must be on providing identity and recognition to support 'imagined communities', to use the term of Anderson (1983), that comprise individuals often and not atypically as strangers with full and equal rights and obligations of citizenship. The successful civic state can serve as a powerful means to promote well-being, justice and peace. The civic state with a strong identity that does not focus on the QOL and the well-being of its citizens, and the public good is doomed to fail. Further, the civic state that does not respect the rights of citizens in other states will be a less-than-acceptable member of the global community of states.

I argue that the civic state does not require construction de novo of a state, rather what is needed is explicit recognition, by government agencies via their policies and practices, of the worth and merit of promoting identity for their citizens so that pride, respect and self-esteem become hallmarks of statehood.

2.7. QOL and the welfare state

I subscribe to the view of Hutton (1995) and others that the welfare state is a good and appropriate place to start in the exercise of constructing a civic state to promote QOL. The classic work of Myrdal (1960) on the welfare state made it abundantly clear that such a state will always be a work in progress, helping to bridge the gap between rich and poor within and among states, and as national and international economic policies and practices change. Innovations will never end. For example, in the fall of 1998 the Fabians in the UK published a pamphlet by Blair (1998) on The Third Way, and this coincided with Giddens (1998) book of the same title. In New York on September 23, 1998, Prime Minister Blair (UK), President Clinton (USA) and Italian Prime Minister Prodi announced their support for programs that will deal with five dilemmas identified by Giddens. A summary of these is offered in *The Economist* (September 19, 1998): "(1) that globalization is changing the meanings of nation-hood, government and sovereignty. There exists (2) a 'new individualism' that is not necessarily selfish but which means that social solidarity can no longer be imposed in a top-down way. Although distinctions between left and right keep changing, the left cares more about social justice and equality. However, (3) there is a category of problems—such as global warming, devolution, the future of the European Union—about which it is unhelpful to think in terms of left versus right. (4) Some jobs (defence, lawmaking) can be done only by governments, even though politicians are becoming less influential and pressure groups more effective. And do not forget (5) that while environmental dangers can be exaggerated it is highly dangerous to be sanguine about them, not least because, as in the case of mad-cow disease, experts sometimes differ."

Critics of the Third Way point to the lack of explicit policies that can be implemented to handle the dilemmas.

The Report of the Commission on Social Justice (1994) in the UK makes the case for an 'intelligent' second-generation welfare state that works for change in a number of directions to take account of a number of important issues, for example:

- Wealth creation and wealth distribution are two sides of the same coin; wealth pays for welfare, but equity is efficient.
- Social justice cannot be achieved through the social security system alone; employment, education and housing are at least as important as tax and benefit policy in promoting financial independence.
- Labor-market and family policy go together; the social revolution in women's life chances demands a reappraisal of the role of men as workers and fathers as well as that of women as employees and mothers.
- Paid work for a fair wage is the most secure route out of poverty. Welfare must be reformed to make work pay; if 80% tax rates are wrong at the top, they are wrong at the bottom too.

- The intelligent welfare state prevents poverty as well as relieving it, above all through public services that enable people to learn, earn and care.
- The welfare state must be shaped by the changing nature of people's lives, rather than people's lives being shaped to fit in with the welfare state; the welfare state must be personalized and flexible, designed to promote individual choice and personal autonomy.

If public and private initiatives and energy can be marshaled to provide and enhance all those elements of culture, as well as health, education and general welfare, that stimulate and promote civic virtues and identity then a civic state may emerge, then the public good as QOL is surely enhanced. In order to be a strong and free state it is apparent that a necessary condition is a clear cultural identity, and this must be a major focal point for governments as Griffiths (1996) has forcefully argued with respect to the contemporary scene in Canada. In his words, "To be able to look after ourselves as a people, we need first to assert Canada's political culture of civility. In turn, for civility to thrive, we must look anew to the needs of popular culture and communications in this country" (Griffiths, 1996: 37). A strong case can be made for the promotion of the civic state to enhance QOL and the public good.

2.8. Social justice and distribution issues in Canada

The public good and private affluence are both alive in Canada, but there are distributional characteristics of wealth and QOL that are disturbing to anyone interested in social justice. The fact that Canada has consistently ranked in the first place in recent years among a list of over 170 states using the UN's HDI is of little comfort to the unemployed and homeless. In 2001, the position of Canada slipped to number 3 and awareness of this has sharpened debate on the inequities that are evident in the country. One person in eight is now living below the poverty level, and one person in six is defined as functionally illiterate. Signs of these depressing statistics have been around for some time, yet many politicians and planners have ignored them. In 1995 J.E. Newell, the CEO of Calgary's Nova Corporation spoke to the Business Council on National Issues upon his retirement. He noted that, "The fact that poverty is a major problem in our country is not subject to debate—it is a fact. In 1993, when our economy once again out-performed most of the developed world, Statistics Canada reported that an additional 348 000 Canadians had incomes which put them below the poverty line. More than 3 million Canadians are on welfare or social assistance. By some definitions, more than 20% of our citizens are below the poverty line…" (Valpy, 1997). The Organization for Economic Co-operation and Development (OECD) has examined poverty in Canada, the United States and 12 European countries (Little, 2001). They note that some people are poor for short periods while others are caught in poverty over the long haul. The OECD has devised a measure of poverty that is relative and varies from country to country. "Simply put, the OECD takes the median after-tax income. Meaning that half of the households are above that level and half below it, and cuts it in two. Then it counts the number of people in homes where the income falls below that half-of-the-median figure" (Little, 2001).

Canada's annual poverty rate was 10.9% in the 1993–1995 period: in the middle of the

14 countries studied, well below the 16% for the United States, but well above Denmark's low of 4.7. The average for the 12 European countries was 11.7%. Poverty rates were high if we count everyone who was poor at least once during this period. Canada continues to rank in the middle, however, if long-term poverty is examined, Canada is no longer seventh on a list of 12, but shifts to 10th place with over 5% of Canadian homes counted as persistently poor. The European average is below 4% and Denmark has a remarkable value of 0.8% while the United States is 9.5%. In October 1996, at a press conference of the Canadian Conference of Catholic Bishops, it was made clear that while Canada is a success according to the HDI, much is left unsaid about the QOL as almost one child in five lives in poverty in one of the richest societies in world history. Marvyn Novick is a long-term advocate of the need to focus on improving conditions for children in Canada and he claims that children and youth have become a national priority. However, he reminded the audience in his presentation in Toronto in October 1997 at The Children at Risk Symposium (Goar, 1997) that public awareness of a problem does not by any stretch guarantee a reallocation of resources, and sacrifices to change the situation. While there may be considerable moral authority to support the claim that children deserve first call on the state's resources, in reality their advocates have to make the case in economic, political and social terms by highlighting the costs of failing, and the expected benefits of supporting child-centered initiatives.

In January 1999, The Report on Homelessness in Toronto was released. The report is available on the website (www.city.toronto.on.ca/pdf/homeless_action.pdf). Among other statistics, the report noted that between 1992 and 1998 there had been very significant increases in usage of the emergency shelters in Toronto; the need for homes grew substantially. For example, in the family category the growth was almost 125%, and for youth, single women and men the figures are 80, 78 and 55%, respectively. Among industrial countries, the report tells us that Canada ranks 10th in a 'new human poverty index'. The Nobel laureate in economics, Robert Solow, opines that, "Those who argue so urgently about not inflicting poverty on the future [to support sustainable development] have to explain why they do not attach even higher priority to reducing poverty today" (UNDP, 1996). Homer-Dixon *et al.* (1993) continue to report on the dire consequences of population growth and resource exploitation within and among states that exhibit remarkable inequities. Civil or international conflict is very likely, they argue, as the have-nots struggle to survive. The civic state must take up the challenge to deal with issues such as inequities within the state, resource utilization and regulation, and contemporary poverty. Rhetoric abounds on the need for renewable or sustainable development. But where is the political will to implement change? The promotion of civil society with active involvement of citizen groups can help to improve the QOL and the public good.

2.9. International comparisons of QOL and GDP; the genuine progress indicator

The Fraser Institute in Canada has attempted to rank countries according to the level of economic freedom, including freedom from inflation, but not freedom from unemployment, poverty or illiteracy. Stanford (1996) argues that the former is important to the owners of financial wealth; the latter are important to a much broader constituency. Hong Kong, New Zealand and Singapore ranked at the top of the Fraser list but they were 24th,

17th and 35th on the HDI. However, the Scandinavian countries dominated the top 10 positions on the HDI while they ranked no higher than 41st on the Fraser list. Stanford has undertaken a correlation analysis of the two lists for the top 20 countries on the HDI list for 1993–1995 and concludes a zero correlation. While the GDP of a country may suggest economic growth and prosperity, it is worth remembering that such an indicator has little to say about the prosperity of individuals. GDP represents paid activity, not wealth or per capita well-being; it is not a measure of real product. Rather it describes the flows and size of the commercial marketplace. The GDP measures dollars changing hands in the market-place. Work to repair damage from a catastrophic flood can result in a sharp increase in GDP, for example. GDP measures price not value, income, but not directly the QOL. One jurisdiction, the state of Oregon, is developing a composite score based upon approximately 250 indicators, for example, the percentage of people commuting 30 min or less, percentage of streams not meeting environmental standards, number of pedestrian and cyclist fatalities, attendance of arts events, as well as the three basic criteria used in the HDI, namely education, health and income.

An attempt to define an index that comprises price and value is being undertaken by the San Francisco Institute: Redefining Progress. Their index, the genuine progress indicator (GPI) includes the value of household work, parenting and volunteer work and subtracts the cost of crime, family stress and breakdown, pollution and commuting time. Details of this indicator are available on the web site (www.rprogress.org). It is clear that the crude use of the GDP as the last word in measuring prosperity or QOL is inappropriate and other indices are needed to complement it. No single numerical index can capture all aspects of individual or collective life in a civic state. The World Bank is developing a new index (Wealth Accounting System) to include four kinds of assets expressed on a per capita basis in an attempt to measure the prosperity of the state. Environmental assets are combined with human-made assets, human resources, and social capital (families, communities, institutions). Arithmetically, the weighting is 60% human and social, 20% in human-made assets. Previously, the latter asset comprised the GDP index. While Australia and Canada jump to the top in per capita wealth, given Canada's high population and rapid environmental asset depletion, the rate of per capita wealth decline is the steepest in the western world.

2.10. The public good in a small community: Field British Columbia, Canada

The prospects for enhancing the public good and QOL as a worthy enterprise of collective action, to ensure inter alia stability and equity in economic, social, and environmental matters, are enhanced if citizens participate willingly, knowledgeably, and energetically in its promotion, and governments work closely with citizens through regulatory processes and community practices. In my past President's address to the Canadian Association of Geographers (Massam, 1999), I discussed the ways that the small community of Field, British Columbia is working with governments at three levels—federal, provincial and local—as well as with NGOs to develop and implement a plan to make Field a sustainable community with emphasis on maintaining a high QOL. Field is situated in one of Canada's National Parks that has been designated as World Heritage Site by UNESCO. Details of Field plan are available on the Parks Canada web site (www.parks.gov.ca).

In July 1994, Parks Canada, in the Department of Canadian Heritage, published a report that outlined alternatives for the administration, responsive and cost effective operator of (the six) national park communities in Canada's western parks. This review was prompted by the recognition that the average annual deficit over the period 1991–1994 was $6.4 million for these communities. A series of recommendations was proposed to reduce or eliminate subsidies, increase efficiencies and operate the communities with reduced impact on federal appropriations. The recommendations proposed would ensure the long-term protection of the parks. The publication of this report provoked a series of actions by the residents of Field, perhaps the most significant of which was the development of a Vision Statement for the Village of Field during the early part of 1995. This statement is shown in Fig. 3. The emphasis in this statement is on QOL for all residents of the community.

It is clear that there are two major stakeholder groups that residents of Field must contend with: Parks Canada and the Canadian Pacific Railway. To the citizens of this small community, this is a formidable task as both organizations have access to considerable resources that are not readily available to Field residents. In recent years, individual citizens have worked with the Field Community Council to mobilize residents in Field to support the Vision Statement and to work with consultants on the preparation of budgetary plans to raise appropriate revenues via rate structures to provide local services, especially water, sewage and garbage collection. The first year for the local budgeting of roads, storm-water management and administration was in 1997–1998. The basic question for planning is one of affordability, and this is a topic of continuing debate in the community. Closely related to this process is the land use plan. In essence, by changing land use zoning regulations, more private investment in property and commercial development may occur, which would in turn enhance revenue-generating capacity. Of course an increase in need would also occur and an acceptable balance is being sought which matches the spirit of the Vision Statement to preserve both the community's identity and the village's sustainability, while following the primary mandate of Parks Canada to maintain ecological integrity. The concepts of 'identity', 'sustainability' and 'ecological integrity' are all bound up with the term QOL.

Field is at an important junction in its community life. The Field Community Plan was signed by Sheila Copps, the Minister of Canadian Heritage in August 1999 (Parks Canada 1999). Plans are in progress to privatize Parks Canada, and this will have an effect on employment opportunities. A land use proposal is part of the Community Plan, and rate setting is under negotiation. Some residents have expressed the view that these circumstances provide an opportunity for Field to become a model community of sustainable development within the national park system. To implement this will require continuing leadership in the community and the support of residents to legitimize the public policy actions. To this end it seems that considerable energy is being expounded on the promotion of principles to ensure that the process is fair, full, thorough and legitimate. An overview of these principles is given in Table 2. The principles of fullness, thoroughness, fairness, efficiency and legitimacy are key to public policy making as clearly demonstrated by O'Riordan *et al.* (1988) and his team in their evaluation of the Sizewell B public enquiry in the UK. Also, it is apparent that the five core principles identified by the Social Planning Council of Metro Toronto (1996) for building a local state as necessary conditions of a

Vision Statement
for
The Village of Field

The Village of Field will be a safe, economically self-sustaining, family-oriented community, where quality of life is paramount. Residents will actively participate in a partnership with Yoho National Park to maintain ecological and environmental integrity.

The residents are proud to share their special place in Yoho National Park, a World Heritage site: a place where visitors are able to meet the residents and share in the pride of Field's tranquil beauty.

Field, the gateway to British Columbia, was established in 1885 and reflects a history of the Canadian Pacific Railway, Logging and Mining activities.. It is located in the Main Ranges of the Canadian Rockies and is nestled at the base of Mount Stephen, beside the Canadian Heritage Kicking Horse River.

An eclectic assortment of small affordable houses defines a unique character of architecture which compliments its surroundings. Select heritage buildings will be protected and maintained. The style of new buildings will reflect the architectural motif designed by the Field Community Council. Residential ownership will be encouraged. The character of Field will not be sacrificed.

Field will encourage pedestrian access. Commercial development will consist of locally-owned cottage industry and home-based businesses that will provide the visitor and residents with high quality personal experiences. The village will evolve to a size that enables it to achieve optimum economic viability, within its physical limits. It will provide essential community services and assist Yoho National Park in sharing these costs.

Field will actively support interaction with visitors and share the services with the neighbouring communities of Lake Louise and Golden.

The Village will commit to providing recreational and educational facilities for residents and visitors that will continually encourage a strong representation of all age groups to visit and reside in Field.

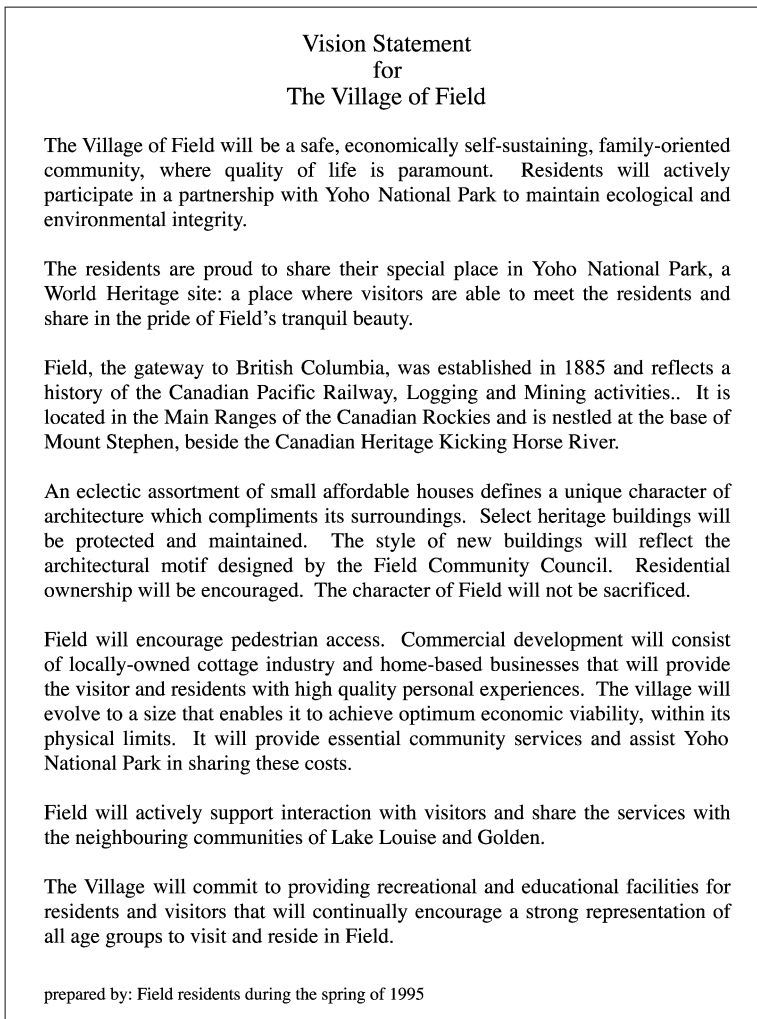prepared by: Field residents during the spring of 1995

Fig. 3. Vision statement for the village of Field, B.C., Canada, 1995.

civic state that promotes QOL are implicitly adhered to in the development of the community plan. The five principles are:

1. Security: people must feel secure and safe.
2. Inter-dependence: community members need to recognize that reliance on others is a right and an obligation.
3. Fairness and equity: social and economic relationships should be governed by those principles that stretch the notions of effectiveness and efficiency.
4. Participating and contributing: there are many ways that identity and a sense of

Table 2
Basic principles for evaluating public policy-making

Fairness. Central to the rule of law; *Nemo judex in causa sua*: rule against bias; *Audi alterem partem*: right to a fair hearing.
Refers to form of investigation and the substance of investigation and the dissemination of information.

Fullness. Refers to the scope of the inquiry, the evaluation and the needs assessment process, i.e. the variety and breath of issues covered and the relevancy of issues.

Thoroughness. Refers to the depth of examination of the issues: the detail, accuracy, use of professional advice, good instrumentation, good sampling procedures, replication and traceability.

Legitimacy. Refers to the sanctioning of actions by the populace. A legitimate process is one that is normatively sanctioned by the population. Ideal normative conditions include:

Access to argument: gain access to argument and ability to follow up responses.

Intelligibility: be authentically understood and comprehensible.

Honesty and sincerity: ability to express feelings and intentions.

Creative: development of a case based on evidence and full justification.

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   belonging and worth can be engendered by allowing citizens to play meaningful roles in
   decision making.
5. Diversity: respect and celebration of differences enhances the community and gives
   dignity to the individual.

There is no simple way to measure explicitly the adherence to specific principles other than in general terms with respect to the final outcome. Overall I would suggest that good progress is being made in Field to make it a sustainable community with a high QOL.

2.11. The good society/state/city/world—utopia

The search continues for the necessary and sufficient conditions that characterize the good society, the ideal state, and the perfect society in which a quality life is guaranteed for all. Bellah *et al.* (1992: viii) explore the fundamentals of a good society and global system of civic states. Their focus and emphasis is on institutions as the framework for structuring life, and providing purpose and meaning to individuals and communities. They argue that

> As this century draws to a close there remains, we believe, vital opportunities—as
> well as urgent necessity—for transforming our national and international institu-
> tions so as to bring about a new, more democratic, more peaceful world order under
> the leadership of the United Nations. Without excessive optimism, we continue to be
> hopeful about our capacity to pay attention and take responsibility for realizing those
> possibilities.

The perfect pattern of human organization may occur if the system for reaching collec-
tive decisions is perfect, and it may be that the latter is a necessary and sufficient condition
to achieve the former. The search for the perfect structure for reaching collective decisions

has been tackled by workers in many fields, but as Samuelson (in Gardner (1975: 120)) makes clear:

> The search of the great minds of recorded history for the perfect democracy, it turns out, is the search for a chimera, for a logical self-contradiction… Now scholars all over the world—in mathematics, politics, philosophy and economics—are trying to salvage what can be salvaged from Arrow's devastating discovery that is to mathematical politics what Kurt Godel's 1931 impossibility-of-proving-consistency theorem is to mathematics.

Perhaps the search for utopia continues as a dream for social thinkers, but it is worth acknowledging with Dahrendorf (1958: 103) that "All utopias from Plato's *Republic* to George Orwell's *Brave New World* of 1984 have one element in common: they are all societies from which change is absent…the social fabric of utopias does not, and perhaps cannot, recognize the unending flow of historical processes." Robertson (1984: 303) goes further and argues that "The ideal world is a *perpetuum immobile* predicated on an assumption of consensus and stability."

The means of finding the right balance between those needs and opportunities that are necessary to achieve a just world is at the heart of the struggle to improve the public good and QOL. In the words of Mumford (1922: 36) on utopias: "The unjust state comes into existence, says Plato through the mouth of Socrates, by the multiplication of wants and superfluities." But how to curb wants to match resources and allocate reasonably among citizens of the globe? Mumford (1922: 23) makes it clear that there is a need to unite the two solitudes which have characterized much of the utopians' writing: "…the reconstruction of the material environment and the reconstruction of the mental framework of the creatures who inhabit it, have been kept in different compartments." Tuan (1974: 248) in his discussion of the sentiments and attachment that humans feel to some places more than others concludes his work on *Topophilia* with the claim that "Human beings have persistently search for the ideal environment…seeking a point of equilibrium that is not of this world." The dream of a mystical ideal place came to Emperor Yu, the Noah of China, according to Burgess (1972: 80) under the following circumstances. "…Emperor Yu, walked along the banks of a tributary of the Yellow River one after the great flood. He saw a tortoise rising from the river with a strange pattern on its back. Miraculously, this pattern resolved itself in his eyes into the Magic Square, the ideal arrangement of the *yin-yang* digits. Out of this came a plan for reconstructing the world and devising the perfect system of government." We are left to speculate what the Emperor did with this precious piece of information! De Beauvoir, concludes the third volume of her autobiography, after leading the reader on a lively extensive journey through literature and life, by noting wistfully:

> I think with sadness of all the books I've read, all the places I've seen, all the knowledge I've amassed and all that will be no more. All the music, all the paintings, all the culture, so many places: and suddenly nothing. They made no honey, those things, they can provide no one with any nourishment… I can still see the hedge of hazel trees flurried by the wind and the promises with which I fed my beating heart while I stood gazing at the goldmine at my feet: a whole life to live. The promises have all been kept. And yet, turning an incredulous gaze towards a young and

credulous girl, I realize with stupor how much I was gypped. De Beauvoir (1975: 674).

For the opinions of those in the planning professions who are concerned with developing theories of planning which relate to QOL and ideal worlds, we can consider the comments of Chadwick (1971: 309). He argues that

> Utopianism is, however, the opposite of rational action, for its results cannot be determined, although its advocates may be convinced that they can be predicted confidently: confidence takes the place of rational calculation. Utopias have a place for setting goals for societies, but they are not a substitute for rational methods, though their glamour may make them appear so.

Riesman (1954) provides a contrasting view. "A utopia I define as a rational belief which is in the long-run interest of the holder; it is a belief, not in existing reality, but in a potential reality; it must not violate what we know of nature, including human nature. Though it may extrapolate our present technology and must transcend our present social organization." A wide-ranging survey of views of utopia is provided by Carey (1999) in The Faber Book of Utopias.

The title *The Good Society* has been used by a number of writers, including celebrated work of Lippman (1937). Most recently Galbraith (1996) has turned his attention to the subject, and told us in plain language that we can set achievable goals as individuals living in communities, and we can realize these goals so as to produce outcomes of improvements to personal liberty, basic well-being, social and ethnic equality and the opportunity for a rewarding life. Immense value and importance has to be attached to education and environmental responsibility, as well as accountable political action. These are demanded by the good society and a global system of civic states that seeks to enhance the public good and QOL for all. At the World Economic Forum in Davos it was reported by Laurance (1999) that with 1.3 billion people trying to survive on less than $1.00 per day and with a recession affecting a third of the world, humanity is facing a crisis. There is no time to loose in supporting the project of constructing and bolstering civic states to improve the public good and QOL.

Let me close this chapter by noting that, Pierce (1992: 307) has argued that "…in the ethos of western society, where individualism, materialism, and the emergence of a technocratic and sensate culture became established", dramatic changes are forcing human progress, the public good and QOL to be defined by economic growth. Inevitably, this will occur at the cost of diminished environmental protection: *homo economicus* reigns. Further, the rise in the importance of the state—with its vested interest in growth for strategic reasons—exacerbates the issue of reconciling economic growth and environmental protection to ensure sustainable communities. The question remains: precisely what is to be sustained or conserved, via what kind of stewardship? Is there such a person as *homo sustiens*? Ultimately the focus of the public good must be on the QOL of citizens, taking into account existential aspects of being and having. The heightening of consciousness from the Hegelian perspective argues that this is the cause, not the effect, of the material world. The means of enhancing consciousness to empower citizens to define and implement alternate paradigms of progress beyond economic growth continues to challenge policy makers and ordinary folk, as well as academics and practitioners including planners.

CHAPTER 3

Indicators, criteria, factors: the measurement and description of QOL

3.1. Introduction and basic definitions

In the first two chapters, I have explored a wide range of opinions and views concerning QOL, public planning, private lives and the public good. In this chapter, the emphasis is on data collection with specific reference to some of the major issues concerning the choice of indicators, criteria and factors that are used to describe patterns of QOL among places and people. In general, I will use the term indicators to refer to criteria or factors. This is the common terminology in the literature.

Maclaren (1996: 27) claims that

> There is a fairly widespread agreement in the literature that two distinct types of indicators are appropriate for measuring societal well-being. The first type comprises objective indicators which measure concrete aspects of the built environment, the natural environment, economy and social domain. The second type is the subjective indicator, which is an evaluative statement of an individual's sense of well-being or satisfaction with a certain aspect of life. Thus a measure of people's attitudes toward crime in the neighborhood is a subjective indicator, while the number of burglaries or assaults that have occurred in the same neighborhood represents an objective indicator (Rossi and Gilmartin, 1980). Unlike objective indicators, which usually rely on secondary sources of data, subjective indicators require attitudinal data derived from personal interviews or surveys.

There is now a well-established body of literature on the choice of indicators that purport to measure various aspects of QOL. Typically each indicator is supposed to reflect or capture the *magnitude* and *importance* characteristics of a specific dimension/component of QOL. Implicit and explicit in this assumption is the notion that QOL can be disaggregated into a set of components or dimensions, and if these are combined correctly then an overall value or score for QOL can be derived. It is argued that each dimension is defined in such a way that measurement can be undertaken and the value can be scrutinized so that its validity and credibility can be assessed. Further, it is the usual practice to ensure that a clear operational definition for each indicator is given in order that the work can be replicated.

In general the magnitude value for an indicator refers to the quantity of a particular indicator that is present at a particular place or for a specific individual or group of individuals. For example, for a city we might wish to look at 'level of employment' as one of the indicators that influences QOL of the place. Hence we might select to use the measure *unemployment rate over the last 12 months* as the appropriate operational definition of this indicator. If we are using the same kind of indicator for a person we might opt to define it as *the number of days without work in the last 12 months*.

With respect to the importance dimension of an indicator we are considering the degree of significance of this indicator as it contributes to overall QOL. This aspect of an indicator is usually referred to as the subjective or qualitative aspect, even though a numerical value

or weight may be assigned to the indicator to describe the importance. With respect to a place and the indicator of unemployment we might determine, from interviews or by general consensus, that among a set of indicators that influence QOL this particular indicator should carry a very high weight to reflect the high level of importance attached to it by the population. Hence, if there are 10 indicators used in a specific study of a place then we might assign a weight of 55% to unemployment and to each of the other nine indicators a weight of 5% each. In total the weight is 100% allocated among the 10 indicators. This weight is supposed to reflect the relative importance of the indicators.

We can argue that the measurement of magnitude is essentially a scientific exercise with a level of certainty relating to the accuracy of the estimate: this is the technical error component of the measurement of an indicator. Of course we may choose to ask a subject for their opinion about the magnitude for a particular indicator. If we use this approach we obtain subjective data, as opposed to objective data. Typically the latter are derived by direct measurement or formal survey techniques, for example, a national census. The measurement of importance relies principally on the expression of opinions, preferences and attitudes of individuals, stakeholders or other interested parties who are explicitly asked to provide data for a specific QOL project. Examples of projects in Canada are given in the case studies described in Chapter 5. There are a variety of ways to determine the importance of indicators. Four of the most popular ones are:

- The allocation of points among a set of indicators. The more points assigned to an indicator the greater the importance. One method is to allocate 100 points among the set of indicators.
- The pair-wise comparison of indicators to assess the relative importance of all pairs of indicators. This information can be used to derive a scale of weights for the relative importance of the indicators. Details of this pair-wise procedure are given in Massam (1993).
- The ranking of indicators from the most to the least important.
- The allocation of weights to indicators for use in sensitivity tests. The allocations are made to capture particular scenarios, for example, we might consider that all indicators are equally important. Another scenario could put a lot of weight on a specific indicator.

Prior to undertaking the tasks of measuring the magnitude and importance of indicators two other tasks have to be undertaken in the study of QOL of a place or for individuals. These tasks are inter-related and they refer first, to the identification and definition of the indicators that are to be used in the study. This task also includes defining the scale of the study and the type of measurement scale used to measure the score for each indicator. Basically there are four types of measurement scale available-nominal, ordinal, interval and ratio. A discussion on these is offered in Massam (1993). The time period has also to be determined, for example, should each indicator be measured as of today, the last month, last year or estimated for some future time? The second task concerns the use of the data that are collected. Typically data are analyzed using formal techniques to produce indices, tables, maps, charts and graphs. Prior to the collection of data it is important to give some thought to the selection of procedures to be used in the analysis. It is necessary to ensure that the appropriate data types and measurement scales are used to satisfy the

specifications of the techniques used. If we choose to measure the magnitude or importance of indicators using a ranking method, then we cannot use this information in a SAW arithmetic model that sums the weighted scores for indicators to produce a dimensionless summary index of QOL. The SAW model is widely used to calculate QOL indices. An example of the use of the SAW model is provided by the HDI that was mentioned in Chapter 1, as a surrogate for QOL in places, namely states. The technique of Renwick and Brown (1996) to measure QOL for individuals uses an arithmetic procedure and this relies on the measurement of indicators on a ratio scale. If scores for the indicators are measured on nominal or ordinal scales then the technique should not be used.

In the selection of indicators it is important to keep the following points in mind:

- Do the indicators used in the study replicate those of other studies so that comparative work can be undertaken? Such work may refer to a time-series analysis—same place/people at different times, or a cross-sectional analysis—same time, but different places/people.
- Can the indicators be measured using credible and reliable data?
- Do the indicators reflect clearly, unambiguously and accurately the specific dimensions of QOL that are deemed to be appropriate? With this in mind we might ask, 'whose opinion about appropriateness' is to be relied on? Citizens, stakeholders, members of NGOs, politicians, developers and bureaucrats may have different perspectives on the appropriateness of indicators. This selection of indicators touches on the matter of the public good and private interest. These topics were addressed in Chapter 2. It is not surprising that no consensus may emerge regarding the selection of indicators hence the planner has to ensure that the information is in the public domain to contribute to responsible public planning.
- Does each indicator measure a separate dimension of QOL and are these dimensions independent, or are they correlated or linked in some way?
- Does a particular indicator stand alone or is it a composite of two or more attributes, and if this is the case who determines these attributes and their relative importance?

The variety of indicators used in QOL studies is enormous, and in this chapter selected examples will be given. In Chapters 4 and 5 further examples of indicators will be included. Hancock *et al.* (1999: S23) argue that with respect to health, well-being and QOL: "…the well-being of the individuals in a community depends upon how well the community functions, not only in terms of ensuring equitable distribution of the determinants of health, but in terms of the processes of governance in the community such as the degree of participation, the degree of social cohesion and the extent of 'civicness'": these points were part of the discussion of QOL in Chapters 1 and 2. The authors provide a basic framework for indicators (Fig. 4) and three categories of indicators (Table 3). In summary, they note the importance of the 'three-legged stool'—community, environment and economy, that are basic to community sustainability, well-being and QOL. An elaboration of the indicators is given in their paper that specifically refers to planning efforts by two high-level central agencies in Canada—Canada Mortgage and Housing Corporation and Environment Canada to develop tools to measure progress in QOL among Canadians and communities in Canada.
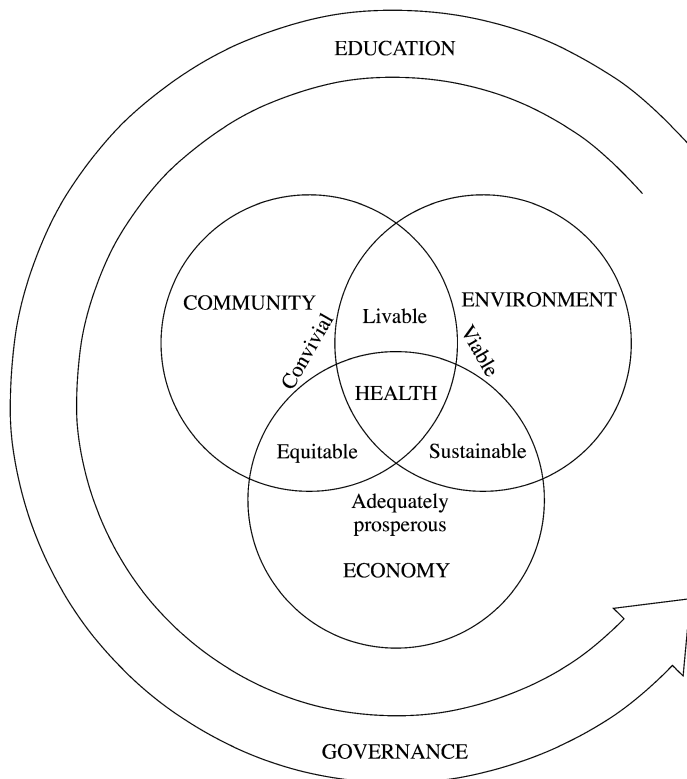
Fig. 4. Basic framework for indicators (Source: Hancock et al., 1999).

3.2. The desire to measure: statistical inquiry

Caplow *et al.* (2001: xii–xiii) in their book on social change in the United States during the 20th century assert that this was the first century that could be measured in a systematic fashion. They quote from a speech by President James A. Garfield, who while a congressman in 1869, stated that "The development of statistics are causing history to be rewritten. Till recently, the historian studied nations in the aggregate, and gave us only the story of princes, dynasties, sieges, and battles… Now, statistical inquiry leads him into the hovels, homes, workshops, mines, fields, prisons, hospitals, and all places where human nature displays its weaknesses and its strength." They continue and claim that, "This tradition of counting and measuring social conditions gradually spread to virtually every nook and cranny of life in America. Numerical discourse became the discourse of public life. Complicated statistics about arcane matters of national policy permeated presidential debates. The numbers that fill the news—the Gross National Product, the Consumer Price Index, the unemployment rate, the teenage pregnancy rate, the poverty rate, and so forth—were inventions of the American century. This was the first measured century in human history." This book was written as the companion volume to a PBS television documentary The First Measured Century, and it is a mine of factual data on social

Table 3
Indicator categories (Source: Hancock *et al.* (1999, Table 1))

A: DETERMINANTS	B: PROCESSES
Sustainability	Education
Energy use	Early childhood development
Water consumption	Education/school quality
Renewable resource consumption	Adult literacy
Waste production and reduction	Lifelong learning
Local use	Governance
Ecosystem health	Voluntarism/association life
Viability	Citizen action
Air quality	Human and civil rights
Water quality	Voter turnout
Toxics production and use	Perception of govt. leaders/services
Soil contamination	Healthy public policy
Livability	C: HEALTH STATUS
Housing	Quality of life
Density	Well-being
Community safety and security	Life satisfaction
Transportation	Happiness
Walkability	Mastery/self-esteem/coherence
Green/open space	Health-promoting behaviors
Smoke-free space	Disability/morbidity
Noise pollution	Stress/anxiety
Conviviality	Other/morbidity/disability measures
Family safety and security	Health utility index
Sense of neighborhood	Mortality
Social support networks	Overall mortality rate
Chartable donations	Infant mortality rate
Public services	Suicide rate
Demographic	
Equity	
Economic-disparity	
Housing affordability	
Discrimination and exclusion	
Access to power	
Prosperity	
A diverse economy	
Local control	
Employment/unemployment	
Quality of employment	
Traditional economic indicators	

conditions in America. It is noted that while the selection of data on facets of American life cover such diverse topics as population, work, education, family, living arrangements, religion, active leisure, health, money politics, government, crime transportation, business and communications there is no attempt to combine the scores for places, people or time periods into aggregate summary indices. The authors attempt to be as objective as possible in their selection of indicators that are measured. If nothing else this project should raise public interest in the topic of social conditions and QOL in America. Bennett (1994) has

undertaken a similar project on a much smaller scale and focuses on cultural indicators over a 30-year period (1960–1990). He includes indicators that measure conditions relating to crime, family and children, youth pathologies and behavior, education, popular culture and religion. In a word he concludes that "…according to the findings in this book, in many ways the condition of America is not good"; this view of life in the United States is shared by Putnam (2000) in his book *Bowling Alone* in which he examines civic activities and community in America. Bennett goes further than reporting data on selected indicators and drawing conclusions by making specific policy suggestions to set things right. Reliance on government to protect the public good and QOL is unrealistic he argues, and more responsibility of individuals and families is called for.

A carefully conducted study of perceptions of American adults regarding their well-being and QOL has been conducted by Andrews and Withey (1976: v) using a sample of over 5000 interviews. This work is unusual in as much as the way the data were collected involved a series of sequential cycles. Each cycle "…consisted of conceptual development, instrument design, data collection, analysis, and interpretation. Ideas and findings generated in prior cycles affected the design of subsequent cycles." A good review of the concept of well-being is given and this is related to QOL. The proposition of Bateson (1972) that QOL is not adequately defined by physical conditions is discussed, and it is argued that what people care about most is "…not episodes or things as such but the pattern and setting of their personal relationships—how they stand in love, belonging, hate, respect, responsibility, dependency, trust, and other similar abstract but nonetheless real relationships." Hence it is the private and secret lives of individuals, to use the terms in the first sentence of this monograph, which need to be examined to determine QOL. The need is for surveys of how social conditions are perceived and evaluated to help planners and others ameliorate conditions. Affective evaluations are discussed and a 7-point 'Delighted–Terrible' semantic scale is developed and applied in the project. The daunting task facing planners is to unravel the findings of this kind of study to relate the findings to activities that planners can meaningfully participate in, and to improve QOL of places and individuals. Surveys may be carefully conducted, imaginative in terms of the indicators and scales uses, and creative with regard to the mapping of the complexities of the relationships. But without clear focus and relevance for decision makers such surveys may contribute little to public planning other than to reinforce the view that the concepts of well-being and QOL are indeed complex, private, and hard to measure!

An important approach to the measurement of QOL is through the use of indicators. As Evans (1994: 53) argues "…objective measures, or social indicators, represent in a broad sense the individual's standard of living represented by verifiable conditions inherent in the given cultural unit." This approach was broadly used in the early stages of the QOL movement in the 1970s and early 1980s when social indicators were employed to evaluate social policies and the QOL of people. It is also frequently used to compare the quality or livability of places. An example of QOL research using the objective approach is the study by Liu (1976) of QOL indicators in 243 metropolitan areas in the United States. On the other hand as mentioned earlier the subjective approach emphasizes the individual's personal well-being. Evans (1994: 53) defined subjective QOL as "…the degree to which the individual's life is perceived to match some implicit or explicit internal standard or referent." This approach that modifies the objective approach is often employed in such
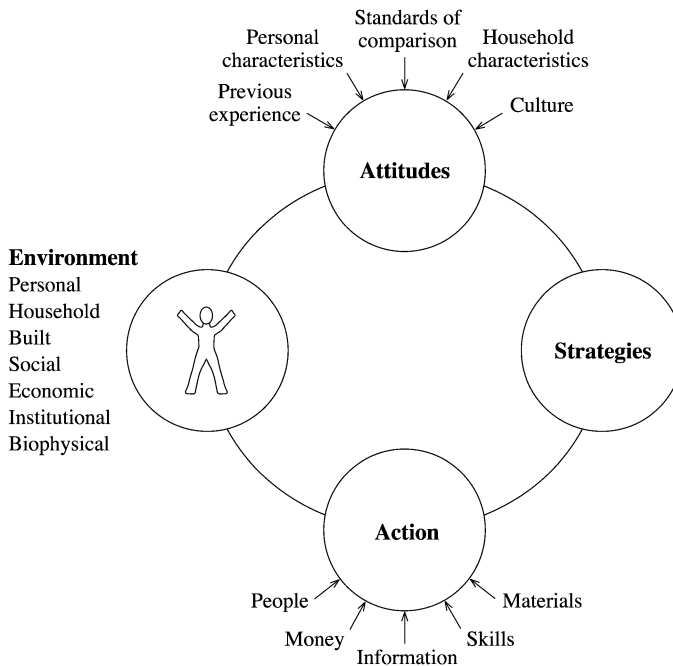
Fig. 5. Person–environment perspective model (Source: Brown, 1977).

disciplines as psychology (Mui, 1998), medical sciences (Dempster and Donnelly, 2000), or social science (Campbell, 1981; Wood and Johnson, 1989; Brown *et al.*, 1998). To seek and explain which factors contribute to individual happiness or satisfaction, this measure uses interviews and questionnaires, and obtains the subjective responses directly from participants. A third category is the approach combining subjective and objective indicators. This is the preferred approach of many researchers and planners including Wish (1986), Myers (1988) and Diener and Suh (1997). Brown (1997) presents a conceptual framework for assessing the QOL at the urban level that employs objective and subjective indicators. The framework is shown in Fig. 5. Most literature on QOL deals with the problem of selecting appropriate indicators and lists are defined. However, the search for a definitive list is a chimera. The appropriate list is determined by the circumstances of each specific planning study.

To measure subjective well-being Campbell (1981) selected 12 domains of people's lives that influence people's satisfaction with life, they include marriage, family life, friendships, standard of living, work, health and the self. These indicators are different from those used in some objective studies that rely on data from census surveys. A report on QOL indicators in Canada was released in April 2001 by the Canadian Policy Research network (www.cprn.org). Details are given in Chapter 5. Nine themes and 40 indicators are recommended from a series of focus group discussions. The themes include political participation and rights, health, education and learning, environment, social programs and conditions, personal well-being, community economy and government.

Table 4
Indicators of the quality of life in American cities (Source: Schneider (1976: 301))

I. Income, wealth, and employment
 a. Percent of labor force unemployed
 b. Percent of households with income less than $3000
 c. Per capita income

II. Environment
 a. Percent substandard dwellings
 b. Air quality (average yearly concentration of three air pollution components)
 c. Cost of transportation for a family of four

III. Health
 a. Infant (under 1 year) deaths per 1000 live births
 b. Reported suicide rates per 100 000

IV. Education
 a. Median school years completed by adult population

V. Participation and alienation
 a. Percent of voting-age population that voted in presidential election
 b. Per capita contribution to United Fund Appeal

VI. Social disorganization
 a. Reported robberies per 100 000
 b. Reported narcotics addiction rate

The shortage of available data has led to the neglect in using subjective indicators. However, as mentioned at the beginning of this chapter a number of arithmetic models that are used to combine the scores for indicators to derive QOL scores require estimates of the importance of indicators, and this attribute has significant subjective qualities. Some definitions of QOL, for example, the work of Campbell *et al.* (1976) include the notion of 'the perceived discrepancy between aspirations and achievement'. An elaboration is offered by Schwab (1992: 184) who states that "Quality of life is the difference between what should be and what is in a community—the difference between goal and appraisal states. Therefore …quality of life is defined as the measurement of the conditions of place; how these conditions are evaluated by individuals, and the relative importance of each of these to individuals." This approach to QOL lies at the heart of the case study offered in Chapter 4 in which the focus is on defining the QOL of individuals using aspiration levels for a set of indicators.

3.3. Toward a holistic view of QOL

According to Friedman (1997) "The development of a holistic scientific strategy begins with a review of research on quality of life indicators." Societal indicators, personal indicators and indicators referring to place have been developed and applied by planners and others. Smith (1973: 70) provided six broad categories that have been used by Schneider (1976) in his study of American cities. A summary is provided in Table 4. Miringoff (1995) has conducted a study at Fordham University's Institute for Innovation in

Social Policy and a single Index of Social Health was devised to combine a set of 16 social problems listed below:

Children:
    infant mortality,
    child abuse,
    children in poverty.
Youth:
    teen suicide,
    drug abuse,
    high-school drop-out.
Adults:
    unemployment,
    average weekly earnings,
    health insurance coverage.
Aging:
    poverty among those over 65,
    out-of-pocket health costs for those over 65.
All ages:
    homicides,
    alcohol-related traffic fatalities,
    food stamp coverage,
    access to affordable housing,
    gap between rich and poor.

While the GDP in the United States has been steadily increasing during the study period from 1971 to 1993 the Index of Social Health has been steadily declining. This widening gap is surely of concern to all in the United States. Slottje *et al.* (1991) have looked at QOL among a set of 126 states. A summary is offered in Tables 5 and 6. At the level of individuals a number of indicators have been used by health care planners. For example, Rosser and Kind (1978) have developed a Matrix of Health Statistics, shown in Table 7 that provides data to calculate a Quality of Adjusted Life Years, or QUALY's Index. Further examples of indicators used in two specific projects—the 'health of a community', and the 'state of the city of Toronto' are given in Tables 8 and 9.

Basically objective indicators are used to determine achievement levels for indicators but some studies rely on self-reporting by subjects as to their perceived levels of achievement. At the Institute for Social Research at the University of Michigan and the Institute for Social Research at York University, Canada studies of QOL have been undertaken that are based on the use of self-reporting questionnaires and survey instruments. Gill and Feinstein (1994: 622) have reviews 75 articles that refer to indicators used to measure QOL and they have produced a summary table. This is shown in Table 10 and clearly there are an enormous variety of aspects of QOL that planners could focus on. The important point is to ensure that the data collection and analysis is clear and of use to stakeholders to assist in dealing with specific planning issues.

Table 5
US ranking among 126 nations on 20 quality of life indicators (Source: Slottje *et al.* (1991))

United States ranking[1]	Indicators
14	Political rights (e.g. legitimate election of government officials, campaigning opportunities, minority self-determination)
10	Civil liberty (e.g. freedom of press, speech, assembly, religion)
2	Average household size
108	Soldiers per 1000 civilians
3	Energy consumption per capita
37	Percent of women in labor force
30	Percent of children in labor force
27	Length of roads per square kilometer of territory
1	Telephones per capita
19	Male life expectancy
9	Female life expectancy
17	Infant mortality rate per 1000 births
32	Population per hospital bed
20	Population per physician
4	Daily calorie consumption
13	Male literacy rate
11	Female literacy rate
1	Radio receivers per 1000 people
2	Number of daily newspapers
1	Real gross domestic product (adjusted gross national product)

[1] Higher ranking indicates higher quality of life.

Table 6
Quality of life ranking of nations on the 20 indicators in Table 5 combined (Source: Slottje *et al.* (1991))

1	Switzerland	21	Denmark
2	United Kingdom	22	Botswana
3	New Zealand	23	Hong Kong
4	Jamaica	24	Senegal
5	New Guinea	25	Honduras
6	Canada	26	Uruguay
7	Australia	27	Netherlands
8	Luxembourg	28	Finland
9	Australia	29	Norway
10	Sweden	30	Dominica
11	Mauritius	31	Bolivia
12	Barbados	32	Italy
13	United States	33	Fiji
14	Iceland	34	Kenya
15	Japan	35	Trinidad-Tobago
16	Gambia	36	Belgium
17	Costa Rica	37	Spain
18	Portugal	38	Uganda
19	Ireland	39	Argentina
20	Ghana	40	Colombia

Table 7
Matrix of health statistics (Source: Rosser and Kind (1978: 349))

Disability[1]	Distress (physical and mental)			
	No distress	Mild	Moderate	Severe
1				
2				
3				
4				
5				
6				
7				
8				

[1] (1) No disability; (2) slight social disability; (3) severe social disability and/or slight impairment of performance at work. Able to do all housework except very heavy tasks; (4) choice of work or performance at work very severely limited. Housewives and old people able to do light housework only but able to go out shopping; (5) unable to undertake any paid employment. Unable to continue any education. Old people confined to home except for escorted outings and short walks and unable to do shopping; (6) confined to chair or to wheelchair or able to move around in the home only with support from an assistant; (7) confined to bed; (8) unconscious.

3.4. QOL and sustainability indicators

As mentioned in Chapter 1, QOL is often directly related to sustainability. With this in mind, Maclaren (1996) has undertaken a project to define and develop indicators of urban sustainability drawing on experiences in Canada. The project was sponsored by Environment Canada, the Canada Mortgage and Housing Corporation and the Inter-governmental Committee on Urban and Regional research. One of the most useful aspects of this work for planners is the appendix that focuses on environmental, healthy city and QOL indicators, and urban sustainability indicators.

Operational definitions of a full range of indicators that embrace aspects of the environment such as air quality, land quality, water quality are included. Also indicators developed by Murdie *et al.* (1992) that measure housing, land use, employment and commerce, social welfare, health, education, natural environment, recreation, crime and safety, transportation are dealt with under three sub-headings. These headings are economic vitality, social well-being and environmental integrity. Specific indicators for three case studies are also included namely

1. The Sustainable Seattle project USA, 1993.
2. The Hamilton-Wentworth project, Ont., Canada, 1995.
3. The British Columbia State of Sustainability project, 1994.

Researchers associated with Columbia University, Yale University and the World Economic Forum have developed an Environmental Sustainability Index (ESI). Twenty-two major factors that contribute to environmental sustainability, such as urban air quality, overall public health and environmental regulators are used. Sixty-seven variables are included to measure these factors, for example, sulphur dioxide levels in the air,

Table 8
List of potential indicators for measuring the health of a community (Source: O'Neill and Cardinal (1992))

Determinants	
Lifestyle	
Tobacco	Regulations protecting non-smokers
	% Population smoking more than 26 cigarettes per day
Alcohol	% Population consuming more than 14 drinks per week
Transportation	% Population not wearing seat belts
	Kilometers of bicycle paths per 1000 persons
	Kilometers of sidewalks per 1000 persons
Physical exercise	% Population exercising 15 min or more per week
Environment	
Population	Rate of population growth
	% Population under 15 and over 65, living alone
	% Population single parent families with children under 18 months
	Among all families with same age children
Economic	Rate of unemployment
Socio-political	% Population dissatisfied with social aspects of the community
	% Population with no social support
Physical	Recreational area per 1000 persons
	Times water unswimmable due to pollution
	% Treated water
	% Population recycling
	Rooming houses per 1000 persons
	Assisted housing per 1000 persons
Condition	
Physical health	
General	% Population who feel in poor health
Accidents	Number of injured in car accidents per 1000 persons
Social health	
Safety	Number of crimes. Fires per 1000 persons
	Existence of emergency services
Public health	
Food poisoning	Number of cases of food poisoning per 1000 persons
Vaccinations	% Children immunized under 6 months
Consequences	
Morbidity causes	Number of patients hospitalized due to mental illness
Mortality causes	Number of deaths due to automobile accidents
	Number of deaths due to circulatory illness

deaths and disease due to poor sanitation and the percentage of land protected from development. Canada is ranked third on the ESI behind Finland and Norway. Details are provided on the web site www.ciesin.columbia.edu/indicators/ESI. Another web site that offers information about QOL as related to environmental indicators is www.environmentalindicators.com.

3.5. Indicators as performance measures

Indicators can be viewed as measures of output and as such have been used by agencies,

Table 9
Toronto state of the city indicators (Source: Healthy City Toronto (1993))

Theme	Indicator[1]	Measure	Time span
Economic life	Employment	% By sector	1992
	Unemployment	Rate	1982–1992 (quarterly)
	Wages relative to poverty lines	Average, by sector	1992
	Low income households	Incidence by census tract	1986
Environment	Nitrogen oxides	% By source	1989
	Particulates	% By source	1989
	Carbon monoxide	% By source	1989
	Volatile organic compounds	% By source	1989
	Beach posting (closures) for western, eastern and island beaches	Number of days/year	1986–1991
	Waste generation	kg/capita/year	1988–1992
	Waste landfilled	kg/capita/year	1988–1992
	Waste diverted from landfill	kg/capita/year	1988–1992
Community health	Leading causes of death	Number, by age group and gender	1990
	Mortality	Rate by census tract	1984–1988
	Deaths of homeless people	Number	1987–1990
Transportation	Person trips versus full time office employment	Index (1975 = 1.0)	1975–1989
	Travel mode	% By type	No date
Safety	Violent crimes	% By type and by gender of victim	1991
	Non-sexual assaults	% By gender of victim	
		% By location (metro vs. city of Toronto)	1991
		% By age of victim	1991
	Sexual assaults	% By gender and by age	1991
	Charges laid in domestic violence incidents	% By source of charge (victim vs. police)	1990

[1] Only indicators that are presented in graphical or tabular form in the State of the City report have been included in the table.

both public and private, to assess performance, productivity and consumer satisfaction. There is a large body of literature on the topic of performance measurement, and one example that was developed in the UK toward the end of the 20th century related to the notion of a Citizen's Charter of rights and entitlements regarding the provision of public goods and services that influence directly the QOL of citizens. An elaboration of this work is given in Massam (1993). More recently The Economist (April 28, 2001) has published articles on the problems of governments setting performance targets as a way to enhance accountability and QOL. It is argued that the UK government is relying very heavily, perhaps more than any other country, on these indicators as targets to get the best out of its public services that influence QOL. New output targets have been set by the Labor government in 2001 as precise numerical commitments to reduction in mortality rates from heart disease and cancer by 2010, for example. "These new targets overlap with the

Table 10
Names of quality of life instruments used in the 75 articles reviewed (Source: Gill and Feinstein (1994: 622))

Ability of work
Activities of daily living
Activity Index
Additive daily activities profile test (ADAPT)
Affective reactions to life
Anamnestic comparative self-assessment (ACSA)
Angina pectoris quality of life questionnaire (APQLQ)
Arthritis categorical scale
Arthritis ladder scale
Attitude towards warfarin
Body satisfaction scale
Bradburn affect—balance scale
Cancer instrument (ad hoc)
Cancer rehabilitation evaluation system (CARES)
Centre for epidemiologic studies depression inventory (CES-D)
City of hope medical center quality of life survey
Chronic disease assessment tool (CDAT) quality of life scale
Chronic disease count
Cognitive impairment
Colorectal cancer quality of life interview
Daily activities
Digit symbol substitution test
Disease symptoms
Eating behavior (adapted from Sickness Impact Profile)
Eastern cooperative oncology group (ECOG) performance score
Emotional experience (adapted from RAND)
Emotional state (ad hoc)
Employment status
EORTC GU group's quality of life form
Feelings about present life (hard/easy)
Feelings about present life (tied down/free)
Functional disability
Functional living index-cancer (FLIC)
Functional status (adapted from Sickness Impact Profile)
General health index
General health perceptions (GHP MOS-13)
General health perceptions (five-point scale)
General symptoms
General well-being adjustment scale
General well-being index
Geriatric depression scale (GDS)
Geriatric mental state schedule
Global perceived health (adapted from GHP MOS-13)
Good days last week
Hand grip strength
Happiness
Health assessment questionnaire (HAQ)
Health index
Health satisfaction
Hearing handicap inventory for the elderly (HHIE)
Home parenteral nutrition questionnaire

Table 10 (*continued*)

HR—quality of life instrument (using multi-trait–multi-method analysis)
Index of general affect
Index of overall life satisfaction
Index of psychological affect
Index of well-being
Inflammatory bowel disease symptoms questionnaire (ISQ)
Intellectual function (ad hoc)
Jenkins sleep dysfunction scale
Kamofsky performance index
Katz adjustment scale—relatives' form (KAS-R)
Keitel assessment
Kidney disease questionnaire
Ladder scale (Cantrell) for quality of life
Lee functional index
Life events
Life satisfaction (four domains)
Life satisfaction (global with Cantrell ladder)
Life satisfaction (Likert—7-point scale)
Life satisfaction (10 item scale)
Life satisfaction index
Life style questionnaire
Linear analogue self-assessment (LASA)
Locus of control of behavior (LCB)
McGill pain questionnaire
McMaster health index questionnaire (MHIQ)
McMaster-Toronto arthristis (MACTAR) patient function preference questionnaire
Mental health index
Mental status
Metastatic breast cancer questionnaire (MOS-36)
Minnesota multi-phasic personality inventory (MMPI)
National institute of mental health depression questionnaire
Need for control
Nominal group process technique
Nottingham health profile
Other symptoms
Overall current health (adapted from RAND)
Overall health (global with Cantrell ladder)
Overall health scale (10 cm)
Overall life satisfaction (OLS)
Pain index
Pain ladder scale
Pain line (10 cm)
Patient diary
Patient utility measurement scale (PUMS)
Perceived health questionnaire (PHQ)
Perceived health status
Perceived quality of life scale (PQOL)
Performance status classification
Physical sense of well-being
Physical status
Physical symptoms (standard questionnaire)
Physical symptoms distress index

Table 10 (*continued*)

Present pain and discomfort
Profile of mood states (POMS)
Psychological adjustment to illness scale (PAIS)
Psychological general well-being schedule (PGWB)
Purpose designed questionnaire (ad hoc)
QL-index
Quality of life checklist
Quality of life questionnaire
Quality of life questionnaire in severe CHF (QLQSHF)
Quality of life scale
Quality of well-being (QWB)
Quantified Denver scale of communication function (QDS)
RAND current health assessment
RAND general health perceptions questionnaire
Rey autitory verbal learning test
Rey–Osterreith complex figure test
Rotterdam symptom checklist (RSCL)
Satisfaction with life domains scale (SLDS)
Self-assessment scale
Self-evaluation of life function (SELF)
Self-perceived overall quality of life
Sentence writing (timed)
Serial 7s
Sexual function
Sexual symptoms distress index
Short portable mental status questionnaire (SPMSCQ)
Sickness impact profile
Side effects and symptoms (hypertension)
Side effects of chemotherapy (ad hoc)
Sleep, energy, and appetite scale (SEAS)
Social activity
Social difficulty questionnaire
Social participation index
Social participation (global with Cantrell ladder)
Standard gamble questionnaire
Subjectively appraised work load
Subjective rating scale
Symptom checklist (SCL)-90
Symptom experience report (SER)
Taylor complex figure tests
Time trade off
Toronto activities of daily living questionnaire
Unfavorable external working conditions
Unfavorable inter-personal difficulties
Uniscale
Uremia quality of life questionnaire (ad hoc)
Visual analogue scale for global state of well-being
Walking test
Well-being ill-being clinical observation scale
Willingness to pay questionnaire
Word recall
Work/daily role well-being scale

first lot, which were introduced in early 1999 and mostly extend to 2002. There were around 600 of them. So how successful are the public services meeting them? …the targets regime is virtually impossible to follow…the government has engineered an increasingly complex world where targets and indicators change and it is very difficult even for experts to keep a grip on what they are and to understand whether they are being achieved" (The Economist, April 28, 2001: 53). In the earlier versions of targets, the UK government argued they would satisfy five general conditions, namely they would be specific, measurable, achievable, relevant and timed (SMART). All are admirable aspirations but ones that are easier to formulate in general terms than to apply to actual situations to improve accountability and QOL. Nevertheless the use of indicators as targets continues to be relevant for planners as components in the process of public debate on QOL and sustainability. A survey of the position of the UK government on sustainability indicators and QOL is given on the web site www.sustainable-development.gov.uk.

3.6. QOL of specific groups

As the population of the world ages increasing emphasis is being placed on the planning of services for seniors to enhance and protect their QOL. Rosenberg and Everitt (2002) offer an overview of this field. Many countries face planning issues regarding the provision of services to the elderly, for example, housing, transportation, health care and social support. The absence of appropriate levels of supply can have significance adverse effects on QOL for seniors. The QOL of seniors has attracted the attention of a number of scholars, for example, Gee (2000), Mui (1998), Lai and McDonald (1995), and Herr and Weber (1999) from a variety of disciplines including sociology, psychology and medical sciences. Articles on QOL of seniors can be found in journals such as Journal of Gerontological Social Work and the Canadian Journal on Aging. A project to improve the QOL of seniors living in urban areas in Canada has been launched by a group of researches at the University of Toronto, Canada. The details are available on the web site www.utoronto.ca/seniors.

The study of the QOL of ethnic groups is also gaining prominence. Loo (1998) notes that "…there is a need to assess the determinants of well-being among various cultures because the structure of subjective well-being for one cultural group may not necessarily hold for another." In Chinese culture, for example, as Loo points out Fook, Look and Sow—happiness, prosperity and long life—reflect the three principles of the good life. Lai and McDonald (1995) have studied the life satisfaction of Chinese elderly immigrants in Calgary, Canada. They employed six indicators—activity level, general health, psychological health, social support, self-esteem and sense of personal control and a Life Satisfaction Index (LSI). The LSI is a multi-dimensional measure that assesses five components of life satisfaction including zest (versus apathy), resolution and fortitude, congruence between desired and achieved goals, positive concepts, and mood tones. The individuals respond to a set of 20 statements and the scores are used to calculate an LSI score on a range from zero to 20. Details of this approach are given in Neugarten *et al.* (1961) and Lai and McDonald (1995). A multiple regression approach was used to examine the influence of the six indicators (independent variables) on the LSI. The latter was treated as the dependent variable in a regression model. Among these six indicators, psychological

health, social support and the sense of personal control were the strongest predictors of Life Satisfaction. Upon arrival in the host country the Chinese elderly immigrants tend to depend on their younger family members or other relatives for financial, emotional and social support. They often feel stigmatized and alienated, but most in the sample of 81 were satisfied with their QOL and scored high on the LSI.

It is clear from the studies cited in this chapter that there are many kinds of indicators that can be used to tackle problems of describing, predicting and improving QOL. Planners have to exercise care when selecting indicators to ensure that the users of the planning reports on QOL fully understand why certain indicators were selected, how the indicators are described and measured, and also how the data that are collected for the indicators are used in the analysis that describes patterns of QOL. The Chapter 4 will turn attention to the analysis of data for indicators of QOL.

CHAPTER 4

The classification of QOL of people and places using multi-criteria techniques: two case studies

Chapter 3 examined the problem of identifying indicators of QOL, and in this chapter the focus is on the analysis of scores for indicators in order to describe the QOL of people and places. The first part of the chapter will discuss the use of two multi-criteria techniques for analyzing a set of QOL data. The two techniques are the Aspiration Interaction Method (AIM) and DEcisions on a FINITE set of alternatives (DEFINITE). Specifically I will use a hypothetical data set for nine indicators and a set of 11 individuals. The justification for the selection of the nine indicators will be provided. It is assumed that each individual has provided a score for each indicator. The multi-criteria techniques will be used to classify and rank the overall QOL of the individuals. A discussion on the use of such a classification for planning purposes will be offered. Following this analysis of hypothetical data a similar approach will be used to analyze data for individuals in three towns in Mexico. This analysis will be used to provide a score for the QOL in each of the three towns. The multi-criteria technique to be used in this work is a composite one developed by Hwang and Yoon (1981) that involves a set of procedures. Details will be given later. This project is part of larger study by Massam and Everitt (2001) on the impact of tourism on QOL near the resort town of Puerto Vallarta, Jalisco Province, Mexico.

4.1. The generic QOL classification problem

Renwick and Brown (1996) have developed a procedure to collect information from individuals concerning their perceptions of their QOL. This work was mentioned in Chapter 1. Basically a questionnaire is used and individuals are asked to indicate the importance and satisfaction levels for a set of indicators relating to QOL. The terms 'importance' and 'satisfaction' correspond to the terms 'importance' and 'magnitude' referred to in Chapter 3. In the Mexican case studied discussed later the terms 'importance' and 'achievement' will be used. The measurement scale is a five-point ratio one. A value of 5 indicates very high importance and satisfaction/magnitude/achievement while a value of 1 indicates very low level of importance and satisfaction/magnitude/achievement. A value of 3 is interpreted as neutral in the sense of neither contributing positively or negatively to QOL. The scores for importance and satisfaction/magnitude/achievement are combined to derive an overall QOL score. The conversion table is shown as Table 11. It is noted that this conversion does not use a typical SAW model to combine the importance and satisfaction/magnitude/achievement scores. In the paper by Massam *et al.* (2001) this point is elaborated. The paper is available on the web site www.geodec.org.

The set of nine indicators are derived from the arguments of Renwick and Brown (1996) that there are three aspects of QOL for an individual namely, being, belonging and becoming and that each of these embraces three dimensions. The dimensions are shown below:

Table 11
Calculation of QOL scores using importance and satisfaction ratings (Source: Brown et al. (1998: 16))

If importance	And satisfaction	Quality of life score
5	5	+10
	4	+5
	3	0
	2	−5
	1	−10
4	5	+8
	4	+4
	3	0
	2	−4
	1	−8
3	5	+6
	4	+3
	3	0
	2	−3
	1	−6
2	5	+4
	4	+2
	3	0
	2	−2
	1	−4
1	5	+2
	4	+1
	3	0
	2	−1
	1	−2

Being:
   physical: my body and health,
   psychological: my thoughts and feelings,
   spiritual: my beliefs and values.
Belonging:
   physical: where I live and spend my time,
   social: the people around me,
   community: my access to community resources.
Becoming:
   practical: the daily things I do,
   leisure: the things I do for fun and enjoyment,
   growth: the things I do to cope and change.

The generic QOL classification problem can be stated as follows:

Given a set of observations units, for example, people or places, and a set of indicators which characterize individual components of QOL, for each person or place, and for each indicator a measure of the importance and satisfaction/

magnitude/achievement, combine the scores for all the indicators and generate a summary QOL score for each person or place.

A ranking of the people or places can be produced from these summary scores. As mentioned in Chapter 3 it is important that the procedure used to tackle the problem of data analysis be clearly presented so that the arguments can be scrutinized, and the logic examined to ensure it is acceptable to the users of the results. In order to assist in public planning it is useful to provide information on QOL scores in such a way that alternate policies can be evaluated and compared, and a preferred policy to enhance QOL can be presented. With this in mind, if we have different rankings of individuals using different policy scenarios regarding the importance of the indicators then it may be possible to suggest which individuals benefit or suffer under each policy option. This approach typically uses aggregate analysis with the same set of weights or levels of importance being assigned to the indicators by each individual. The SAW model is often used to tackle the generic QOL classification problem as was mentioned in Chapter 1. Hwang and Yoon (1981: 99) suggest that the "…simple additive weighting (SAW) method is probably the best known and very widely used methods of Multi Attribute Decision Making." While we might contest the legitimacy of using a simple additive function for combining scores in order to obtain a single QOL score for each person or place, it has been argued by Hwang and Yoon (1981: 103) that "…theory, simulation computations, and experiences all suggest that the SAW method yields extremely close approximations to very much more complicated non-linear forms, while remaining easier to use and understand." A review of the errors that are associated with the SAW model is given by Rowe and Pierce (1982). They use hypothetical data and introduce errors of known types and magnitudes in an attempt to determine "…in a general way the sensitivity of the weighting summation decision model to some classes of error to which it is subject." For those who rely on SAW models it is important that clear recognition of potential errors is incorporated into the study, and specifically that sensitivity tests be part of the analysis. This sensitivity-testing aspect of multi-criteria analysis is contained within the software package in DEFINITE. Solomon and Haynes (1984) also conclude that while there are a variety of models for accumulating impacts into a final score "…the use of the simple weighting summation is probably justified." In philosophical terms, we are reminded of the debate propounded by Moore in *Principia Ethica* when he argued that the worth of what he termed an organic whole, such as QOL, bears no regular proportion to the sum of the values of its parts. In particular Rosenbaum (1975: 127) argues that "…the value of a whole must not be assumed to be the same as the sum of its values of its parts." Further we should note that if we wish to defend the use of a SAW model the following two conditions should be satisfied. First, the preferences for or the trade-off for pairs of indicators should be preferentially independent of fixed levels for any other indicators. Second, that indicators should be utility independent of other indicators. However, rarely are such formal conditions tested rather the assumption is that the SAW model is robust, easy to use and generally acceptable to tackle the generic QOL classification problem.

4.2. Analysis of QOL data using Aspiration Interaction Model

This model requires three pieces of information for each indicator: an ideal value (Ii), a

Table 12
Hypothetical data set: 11 individuals and 9 indicators[1]

	Being			Belonging			Becoming		
	F_1	F_2	F_3	F_4	F_5	F_6	F_7	F_8	F_9
I_1	4	5	4	2	1	2	2	3	2
I_2	3	2	2	4	5	4	4	3	4
I_3	1	1	1	5	5	5	3	3	3
I_4	5	5	5	1	1	1	3	3	3
I_5	5	5	5	3	3	3	1	1	1
I_6	4	3	4	4	3	4	4	3	4
I_7	3	4	3	3	4	3	3	4	3
I_8	1	1	1	1	1	1	1	1	1
I_9	5	5	5	5	5	5	5	5	5
I_{10}	1	2	3	3	4	5	1	5	5
I_{11}	3	3	3	3	3	3	3	3	3

[1] A score of 5 on an indicator is the highest value and contributes positively to QOL. A score of 3 represents a neutral contribution to QOL. A score less than 3 represents negative contributions to QOL. I_9 has the overall highest QOL with 5 for each indicator. I_8 has the overall lowest QOL with 1 for each indicator. I_{11} is a marker individual separating positive from negative scores for QOL. F_1–F_9: indicators.

nadir value (Ni) and a desired/acceptable or aspiration value (Ai). Scores for each indicator for each person or place are required. Details of Aspiration Interaction Model (AIM) as a multi-criteria technique are given in Massam (1993) and its application to the problem of classifying the QOL of individuals is presented in Massam (2000). Details of this paper are available on the web site www.geodec.org. The idea of AIM is based on the approach of a satisfying solution rather than an optimizing solution. Levels of aspiration are used to explore the set of non-dominated solutions and classify the people or places with respect to the ideal and the aspiration levels for each indicator. The technique does not require weights or levels of importance to be assigned to each indicator. However, AIM does calculate weights for each indicator using information on the ideal, nadir and aspiration levels for each indicator. The weight for an indicator (Wi) is calculated from the formula Wi = (Ai − Ni)/(Ii − Ni). It is argued that Ii and Ni represent maximum and minimum values, or best and worst scores for each indicator. Ai represents an acceptable or aspiration level for each indicator. Ai can be set to a level to suit the wishes of the user of AIM. For example, if Ai = Ii this implies that the user attaches a lot of importance to indicator i, and a high weight is assigned to it. On the other hand if Ai = Ni then the user attaches no importance to indicator i. if Ai = Ii for all indicators then the indicators are assigned equal weights as they are seen as equally important. Alternate values for Ai can be used to describe different policy scenarios. For example, if it is assumed that those indicators concerned being are of no importance, these indicators can be set to the level of Ni. Under different scenarios perhaps different ranking of the individuals may result and this information can be used to evaluate alternate policies. For instance, if certain individuals rank high when a particular set of indicators is weighted heavily then a policy that focuses on improving these indicators will yield benefits to these individuals. A hypothetical set of data for nine indicators and 11 individuals is given in Table 12. The nine indicators are
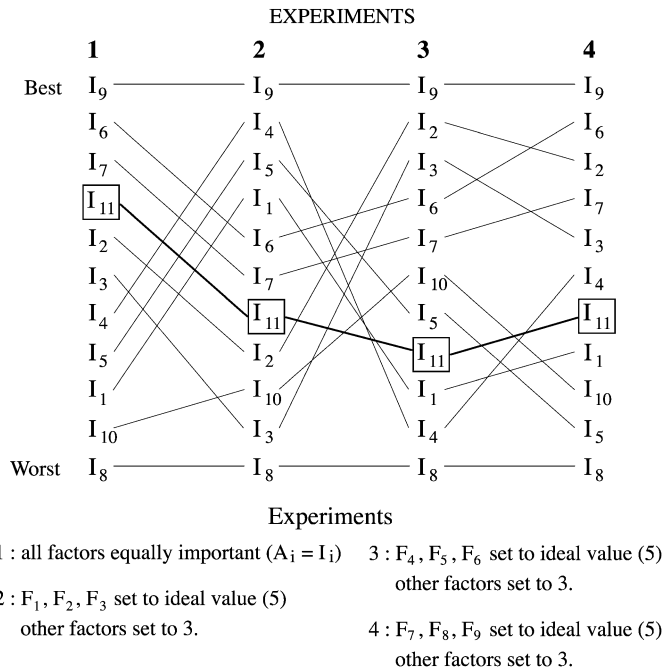
Fig. 6. Classification of individuals: four experiments using AIM.

grouped into three sets referring to the categories being, belonging and becoming as mentioned earlier. Using the data in Table 12 four experiments have been conducted under different assumptions regarding the aspiration levels for the groups of indicators. Each experiment generated a different ranking of the individuals. Details of the rankings and the experiments are shown in Fig. 6. A marker individual (11) is included among the 11 individuals. This marker is assigned a score of 3 for each indicator and this is the neutral level for QOL. Individuals 8 and 9 are assigned minimum and maximum scores, respectively, for each indicator, and they serve as reference individuals. If all indicators are equally important then only three individuals 9, 6 and 7 rank better than marker 11. However, if emphasis is placed on specific groups of indicators, while setting the aspiration level to 3 for all other indicators, then many more individuals appear to have overall positive QOL scores, that is a score superior to the score for the marker (11). When emphasis is placed on the three indicators concerning being, then individuals 2, 10, 3 and 8 have negative QOL scores. For experiment 3, which places emphasis on the indicators concerning belonging, individuals 1, 4 and 8 have negative QOL scores. Finally, for experiment 4 that places emphasis on indicators relating to becoming, individuals 1, 10, 5 and 8 have negative scores. In Fig. 6 lines that join the individuals for each experiment indicate the shifts in positions among the four experiments. While individuals 9 and 8 occupy stable end positions, as is to be expected given the scores shown in Table 12, the variations in rankings are interesting. For example, only individuals 6 and 7 have positive QOL scores for all experiments. Individual 10 is consistently low, and only for experiment

3 is a modest positive QOL score achieved. Individual 2 moves from negative QOL scores for experiments 1 and 2 to very positive scores for experiments 3 and 4.

The significance of the shifts in ranking provides useful information for planning purposes. For example, if a finite amount of resources is available to allocate among the indicators to improve overall QOL, then the question is what proportion should be allocated to each indicator to achieve greatest overall improvement to QOL? If we assume the total resource base as unity (1.0) then the allocation to the indicators can be represented by the weights assigned using AIM. For experiment 1, the weights for each indicator are 0.111. The sum is unity. For experiments 2, 3 and 4 the weights assigned to the most important indicators are each 0.167, and the weights for the other indicators are each 0.083. The allocation of weights that generates the least number of individuals with positive QOL scores is experiment 1 in which all indicators are equally important. However, it could be argued that if resources are focuses on one of the three clusters that focus on being, becoming or belonging then many more individuals enjoy positive QOL scores. Experiment 3 is perhaps the preferred one in terms of generating the largest number of positive QOL scores, though individuals 1, 4 and 8 remain with low scores and probably deserve special attention.

In summary, AIM appears to be a useful multi-criteria technique to classify individuals in terms of scores for independent indicators relating to QOL. A particularly interesting feature of AIM that makes it useful concerns the ability of the user to assign aspiration levels for each indicator, and hence avoid the difficulties of defining explicit weights of importance for each indicator. By conducting a series of experiments with AIM using different aspiration levels to represent alternate planning policies then the effects on the rankings of the individuals using QOL scores can be examined. From a planning perspective it is important to link the descriptive aspects of multi-criteria analysis to prescriptive approaches that help to use public resources effectively.

To complement the analysis using AIM another multi-criteria technique will be used to analyze the data in Table 12. This technique is DEFINITE.

4.3. Analysis of QOL data using DEFINITE

DEFINITE is a multi-criteria computer program that was developed in the Institute for Environmental Studies at the Free University of Amsterdam. The software was released in 2001. Details are available from definite@ivm.vu.nl. The technique contains two basic procedures (multi-criteria analysis (MCA) and cost–benefit analysis (CBA)) to evaluate a set of options using scores for a set of indicators to search for a preferred option. The procedures can be applied to the generic QOL classification problem stated earlier in which, rather than search for the person or place with the highest QOL, a ranking of the people or places is provided, from best to worst. The data in Table 12 were analyzed using the MCA in DEFINITE and the associated sensitivity tests. The MCA that is used in DEFINITE is essentially a SAW procedure. DEFINITE not only uses scores for each indicator to calculate an overall QOL score for each individual, but it also allows a series of sensitivity tests to be run as part of the analysis. This is an important part of tackling the generic QOL classification problem as clearly the scores assigned to each indicator can be treated as estimates or probability scores, and so we should examine the rankings under

different scenarios regarding the estimates of the scores for the indicators. If we find that under a variety of sensitivity tests the rankings are unchanged then we can conclude the order is a stable one, however, this may not always be the case and we need to know this as part of the information to keep in mind when preparing a planning report.

There are five different methods for entering the weights for the indicators into the MCA. Two methods will be used in this analysis. First, the 'direct assessment method', in which explicit weights are entered for each indicator. Second, the 'expected value method', which first asks the user to stipulate the indicators that have the same level of importance, and then those indicators that have a 'lower level' of importance. Once the information has been entered into DEFINITE it is incorporated into the SAW technique to derive an overall QOL score for each individual, and a ranking of individuals is produced. The results for the analysis of the data in Table 12 for each of the four experiments, using the two methods for entering the weights, are given in Table 13. A summary of the details of the experiments is given in Table 14.

There is a very high correlation among the rankings for all the experiments. When the Spearman rank correlation coefficient is calculated the lowest value is 0.91, most of the values are 0.98 or 0.99. This clearly indicates that the ranking of individuals is stable, no matter which method is used to introduce the weights to measure the importance of the indicators. Also when the scores for the indicators are treated as probability values with 10 or 20% variation consistent results are generated.

If we compare the results shown in Fig. 6 which were produced using AIM with those shown in Table 13 that were produced using DEFINITE, then for experiments 2, 3 and 4 there are very strong similarities among the rankings. The Spearman rank correlation coefficient is consistently very high: the lowest value is 0.92 with most values being close to 0.98. We can conclude that if either AIM or DEFINITE is used to produce a ranking of individuals for this set of data, when we place emphasis on one of the sets of indicators relating to being, belonging or becoming, by assigning this set high importance, then the overall ranking is stable. For example, for experiment 2, which places high importance on the indicators relating to being, it is individuals 4, 5, 6, 1 and 7 which enjoy positive QOL compared to individuals 2, 10, 3 and 8 which fall into the negative category, below the marker individual (11). For experiment 3, which places high importance on belonging, the individuals that have positive QOL are 3, 2, 6, 10 and 7. For experiment 4 which emphasize becoming it is individuals 9, 6, 2, 7, 10, 3 and 4 that tend to have positive QOL scores.

With respect to experiment 1 the correlation between the results from AIM and DEFINITE yield Spearman coefficients that range between 0.74 and 0.83. While these are high values it is worth noting that AIM suggests that few individuals enjoy positive QOL scores, while DEFINITE places the marker individual lower in the ranking and thus more individuals appear to have positive QOL scores, albeit with overall similar rankings of the individuals.

In summary it appears useful to tackle the QOL classification problem using different multi-criteria techniques, and methods for introducing weights for the importance for the indicators. Also to examine the effects of using probability estimates for the scores for the indicators in order to evaluate the credibility of the overall ranking of individuals. If different techniques yield different rankings when the same data set is analyzed then we should be wary of accepting the results as part of a planning exercise. Similarly if

Table 13
Results for the analysis of data in Table 12 using DEFINITE

	Experiments																							
	A_1	B_1	C_1	D_1	E_1	F_1	A_2	B_2	C_2	D_2	E_2	F_2	A_3	B_3	C_3	D_3	E_3	F_3	A_4	B_4	C_4	D_4	E_4	F_4
Best	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	6	6	6	6	6	6	4	4	4	6	6	6	3	3	3	6	6	6	6	6	6	6	6	6
	2	2	2	2	2	2	5	5	5	4	4	4	2	2	2	2	2	2	2	2	2	2	2	2
	7	7	7	7	7	7	6	6	6	5	5	5	6	6	6	3	3	3	10	10	10	7	7	7
	10	10	10	10	10	10	1	1	1	7	7	7	10	10	10	10	10	10	7	7	7	10	10	10
	11	11	4	11	11	4	7	7	7	2	2	2	7	7	7	7	7	7	11	4	3	3	3	3
	3	3	3	3	3	3	11	11	11	1	1	1	11	5	5	11	5	5	3	3	4	4	4	4
	4	5	5	4	5	5	2	2	2	11	11	11	5	11	11	5	11	11	4	11	11	11	11	11
	5	4	11	5	4	11	10	10	10	10	10	10	1	1	1	4	4	4	1	1	1	1	1	1
	1	1	1	1	1	1	3	3	3	3	3	3	4	4	4	1	1	1	5	5	5	5	5	5
Worst	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8

Table 14
Details of experiments: DEFINITE

Experiment	Weight of indicators	Weighting method
A_1	All equally important	Expected value method
B_1		
C_1		
D_1		Direct assessment method
E_1		
F_1		
A_2	F_1, F_2, F_3 (being) weighted very important. Others weighted less important.	Expected value method
B_2		
C_2		
D_2		Direct assessment method (0.167:0.083)
E_2		
F_2		
A_3	F_4, F_5, F_6 (belonging) weighted very important. Others weighted less important.	Expected value method
B_3		
C_3		
D_3		Direct assessment method (0.167:0.083)
E_3		
F_3		
A_4	F_7, F_8, F_9 (becoming) weighted very important. Others weighted less important.	Expected value method
B_4		
C_4		
D_4		Direct assessment method (0.167:0.083)
E_4		
F_4		

variations in the ranking occur when the scores for the indicators are treated as probability estimates, then we should pay careful attention to the procedures used to collect the initial scores in the study to ensure they are accurate reflections of the feelings of the individuals. The results of the analysis presented in this section strongly suggest that AIM and DEFINITE produce consistent results which could potentially assist planning to improve the QOL of individuals. However, further research on the use of other multi-criteria techniques for tackling the QOL classification problem is called for.

4.4. The QOL in three towns in Mexico.

In this part of the chapter the focus will be on the analysis of empirical data for three towns in the state of Jalisco, Mexico. The data will be used to derive a QOL for each individual we interviewed in each town, and a QOL score for each town. Jalisco, with a total population of over 6 million, is an important international tourist destination that is currently in a period of major expansion. Puerto Vallarta is the fifth largest city in the state of Jalisco and the second most visited destination in Mexico (*Property Journal*, December 8, 2000). The locations of Puerto Vallarta and the three study towns are shown in Fig. 7. Initial fieldwork and some data collection were undertaken in February 2000 with the bulk of the data being collected in December 2000.

Tourism has been critical to the growth of the Vallarta region. Despite the increase in tourism, population increase has been (until recently) quite slow. From 12 500 in 1964, by 1970 the population of the settlement had risen to only 24 115. However, by the mid-1990s the population of Puerto Vallarta had grown to 162 000 and that of the Jalisco coast, which can be viewed as 'greater Vallarta' now has an estimated population of over 350 000. Two-thirds of this number is found within the urbanized area centered on PV (Martínez and de Alfonso, 1998; www.pvconnect.com/map.html). The region is currently estimated to have at least 15 000 hotel rooms (www.allaboutpuertovallarta.com/), and receives 2 million visitors annually. Puerto Vallarta now receives about 30% of the
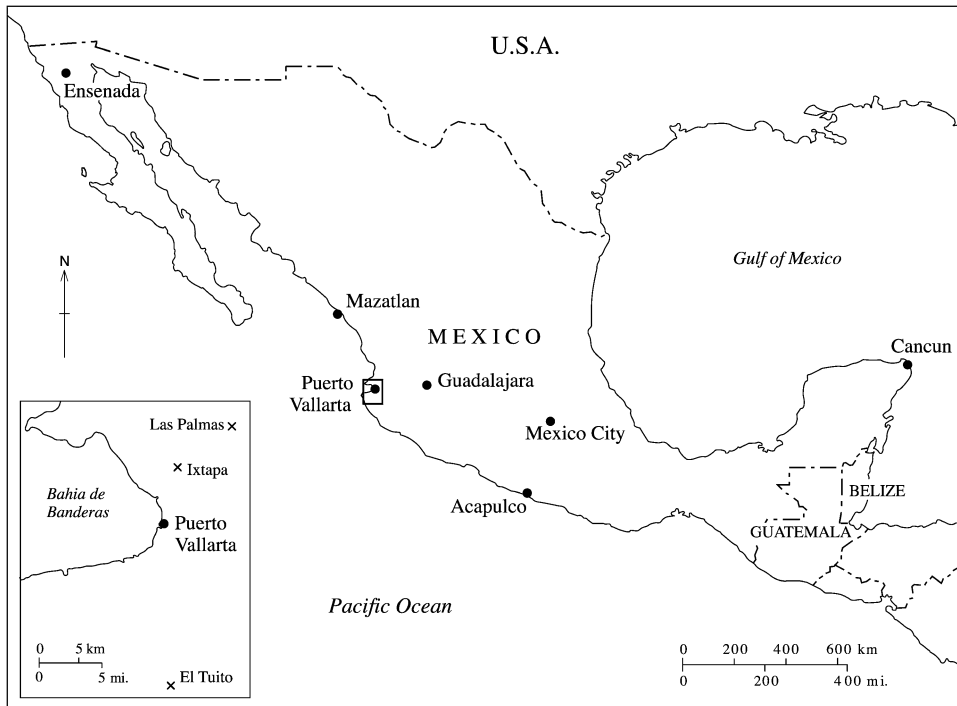
Fig. 7. Map of Mexico showing study towns.

total tourism of Jalisco State. Between 1970 and 1990 the tertiary sector of the economy has increased in value from 59 to 82%, with the primary sector dropping from 10 to 2%, and the secondary sector from 24 to 16% (Martínez and de Alfonso, 1998). Despite these factors, and although the coastal areas and the immediate hinterland of Vallarta have been dramatically affected by tourism in recent years, settlements inland have been affected to a lesser extent. However, it seems probable that influences upon the more distant hinterland of Vallarta are going to increase in the future. This is particularly likely as the thrust of tourist growth moves from one solely concerned with 'sun, sand, and sea' to one that is more concerned with sustainable practices and ecotourism. The 'Alliance for Change' between the Green Ecologist Party and the newly elected Mexican President's National Action Party (PAN) is likely to influence environmental policy, and the thrust of Mexican tourism (Diebel, 2000).

The Section 4.4.1 will describe the three towns that were used as test locations for data collection. This will be followed in Section 4.4.2 by a discussion of the procedures used to analyze some of the numerical data we collected in the questionnaire. As mentioned at the beginning of this chapter Renwick and Brown (1996) used the terms 'importance' and 'satisfaction' in discussing the indicators that contribute to QOL. In this study I will use importance to refer to the opinion each individual expresses with respect to the significance of an indicator as contributing to overall QOL. I use achievement to replace the term satisfaction as the preferred word for an individual to use to express an opinion about how successful they are at achieving a high level for each indicator. These terms were discussed in Chapter 3. Using information on importance and achievement for indicators an overall score for QOL for each of the three towns is calculated. A multi-criteria algorithm will be used to classify and rank individuals in each town in terms of their personal QOL. Section 4.4.3 will offer some empirical results and preliminary interpretations, and Section 4.4.4 will include comments on the relationship between QOL and tourism in the three study towns, the use of questionnaire surveys for tracking this kind of information and future work to be undertaken.

Renwick and Brown (1996) suggest that QOL means, simply, how good one's life is for an individual, and Clark (2000: 700) notes "…that quality of life for an individual is affected significantly by his or her social environment." The "economy and the quality of life" is an area of concern for the recently elected Mexican President and constitute one arena where proactive policy making is likely by the federal and state governments in the near future as related to the growing tourist sector of the economy (Diebel, 2000). A considerable body of literature has been built up on the impact of tourism, and it has been suggested by Peace (1995: 171) that this is "…perhaps the most widely studied aspect of tourism."

4.4.1. Three towns in Jalisco

Although Jalisco has several large cities it also contains many smaller towns. Three of these smaller centers that lie within the hinterland of Puerto Vallarta, Ixtapa, Las Palmas, and El Tuito, are the subjects of the present study.

Ixtapa (population ca. 15 000) is a well established central place that lies about 20 km northeast of Vallarta. It may once have been of greater numerical significance that PV itself, but has now become dependent upon Vallarta for much of its economic viability

(Everitt *et al.*, 2002). In the past few years Ixtapa has been re-invigorated by the tourist trade. Although only marginally a tourist destination itself, it has become a dormitory exurb for Vallarta, with people commuting the few minutes to their jobs on the coast on a daily basis. A considerable amount of new housing (rental and owner-occupied) has been built to serve in-migrants from the hinterland of Vallarta, and also to serve an overspill population from PV which has been pushed out of that city by an increase in the tourist landscape (Everitt *et al.*, 2002).

Las Palmas (population ca. 4000) is an agriculturally based mountain town in the north east of the Municipio of Puerto Vallarta about 35 km away from the city. Although currently somewhat isolated along mountain roads of indifferent quality, it is connected by regular bus service to Vallarta, and a projected inland road from PV to Guadalajara might one day put Las Palmas in a much more valuable (and vulnerable) position to become involved in the tourist trade. Some tourists do venture to this town using the local inter-city bus services, or by rental vehicle, but it is at present little affected by outside tourist-based operations.

El Tuito (population ca. 3000) is another agricultural town nearly 50 km to the south east of Vallarta. It is accessible via route 200 that runs through Mismaloya to Barra de Navidad. In guidebooks it is characterized as a tourist resort that has typical adobe housing with tiled roofs, although it currently appears to be more of a stopping point for tourists on the way to other places, and for those interested in ecotourism. There are some tourist-oriented services along the main highway (motel, restaurant, gas station, etc.) but not within the town proper. There are petroglyphs within 10 km of El Tuito, and the town affords access to some of the coastal settlements on the Bay of Flags to the southwest of Mismaloya and thus it is an area where future tourist development is likely.

4.4.2. Procedures for calculating QOL scores

Two formal procedures will be used to calculate QOL scores. The first procedure will employ a three-step process to calculate a single score for the QOL in each town. This score will be derived from the empirical data collected from the sample of respondents in Las Palmas, Ixtapa and El Tuito. Each respondent provided scores for the importance and achievement for each indicator. A 5-point scale was used. Our initial objective was to collect data for three points in time, relating to the perceptions of respondents on the current situation, the last 5 years and the next 5 years. Hence for each town three QOL scores could have been calculated, and trends may be evident. However, the data collection exercise, given the resources available for this preliminary study, did not allow us sufficient time in each place to collect a full set of data for the three points in time. In summary only in the case of Ixtapa were we able to collect a full set of data (28 respondents): in the case of El Tuito there were 24 respondents and we collected data for the current situation and with respect to the last 5 years. For the town of Las Palmas there were 23 respondents and the data only refer to the current situation.

For the survey of the perceptions of 15 indicators we used a questionnaire that was developed and tested in Puerto Vallarta in February 2000 (Everitt *et al.*, 2002). The first set of nine questions solicits basic information about each respondent. The answers to question 10 provide the raw data about the indicators that are used to calculate QOL scores. Questions 11–17 require each respondent to give information about their perceptions of

Table 15
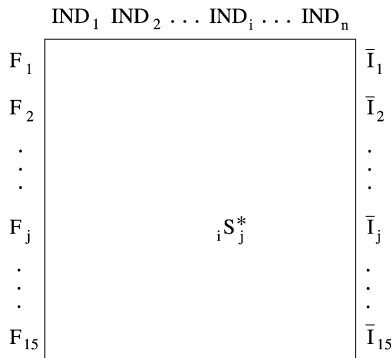Indicators used in the analysis: importance scores

Indicators	Towns		
	Ixtapa	El Tuito	Las Palmas
(1) Health	5	5	5
(2) Cost of living	4	4	4
(3) Work opportunities	5	3	4
(4) Housing	4	4	4
(5) Family	5	5	5
(6) Friends	4	4	5
(7) Tourism	4	4	4
(8) Shopping	3	4	4
(9) Transportation	4	5	4
(10) Holidays	3	4	4
(11) Water	5	5	5
(12) Air	5	4	5
(13) Noise	4	4	4
(14) Peace and tranquility	5	4	5
(15) Education	4	4	4

QOL. While most respondents quite readily provided answers to questions 1–9 they had more difficulty in interpreting and answering questions 11–17.

The selection of the 15 indicators in question 10 was determined after a review of web sites and surveys on QOL, the field testing in February 2000 and using the advice of colleagues from the Universidad de Guadalajara, Centro Universitario de la Costa, Campus Puerto Vallarta. The list of factors and average importance scores is shown in Table 15.

The first procedure follows the approach developed by Renwick and Brown (1996). The sequence of three steps we used to convert the raw empirical data into a single aggregate-level QOL score for each town is shown in Fig. 8. Basically the first step uses replies to Question 10 to calculate an average score for the perceived importance attached to each of the 15 indicators. If the average score is 5 then each respondent rated the indicator as having extremely high importance. However, if the average value is 1 then each respondent rated the indicator as extremely unimportant. The next step is to use the data from Question 10 to calculate an average score for the perceived level of achievement for each indicator. An average value of 5 indicates an extremely high level of achievement, whereas a value of 1 indicates an extremely poor level of achievement. The final step is to combine the two sets of average scores for importance and achievement from Fig. 8. The conversion chart is shown in Table 11. For example, if an indicator has a score of 5 for importance and 5 for achievement then the QOL score is +10. If the combination of scores is 5 for importance, and 1 for achievement then the QOL score is −10. Given we have 15 indicators the final QOL score is the sum of 15 individual QOL scores divided by 15. This final score is the aggregate overall QOL score for the current situation in the study town. The scores in Table 11 assume that values for importance and achievement are expressed as integers—1, 2, 3, 4 or 5. However, for our study the values for each indicator as shown

STEP 1

$IND_1 \ IND_2 \ \dots \ IND_i \ \dots \ IND_n$

F_1 $\bar{I}_1$

F_2 $\bar{I}_2$

. . .

F_j $_iS_j^*$ $\bar{I}_j$

. . .

F_{15} $\bar{I}_{15}$

STEP 2

$IND_1 \ IND_2 \ \dots \ IND_i \ \dots \ IND_n$

F_1 $\bar{A}_1$

F_2 $\bar{A}_2$

. . .

F_j $_iS_j$ $\bar{A}_j$

. . .

F_{15} $\bar{A}_{15}$
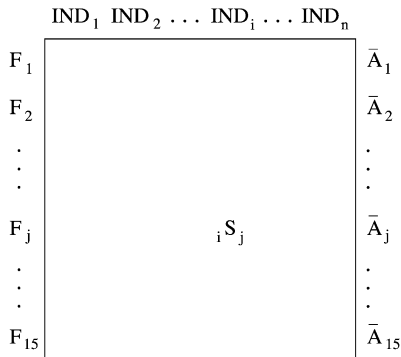
STEP 3   Use conversion table shown in Table 11 to combine importance and achievement ratings to calculate QOL score

$F_1 - F_{15}$	indicators	$_iS_j$	achievement rating for IND_i for indicator j
$IND_1 - IND_n$	set of individuals in town	$\bar{I}_j$	average rating of importance for indicator j
$_iS_j^*$	importance rating for IND_i for indicator j	$\bar{A}_j$	average rating of achievement for indicator j

Fig. 8. Steps to convert importance and achievement ratings into a QOL score.

by the average values are not always integers. Hence in the determination of a QOL score using non-integers for importance and achievement scores we have estimated an appropriate value for QOL using Table 4 as the basic classification. The empirical results for the three towns are given in Section 4.5. Guidelines for interpreting the QOL scores are shown in Table 16.

The second procedure we use to generate QOL scores is a multi-criteria classification method. Specifically for each study town we create a matrix of the style shown in Fig. 9. The data shown in the matrix can be treated as the input to a multi-criteria classification algorithm. The particular algorithm used in this project is based on the work of Hwang and Yoon (1981). A discussion of the algorithm is given in Massam (1993). The method, as used in this study, considers the achievement score for each indicator assigned by an

Table 16
Interpreting QOL scores (Source: Brown *et al.* (1998: 15))

Interpreting scores

Quality of life scores above 0 reflect positive quality of life and those below 0 represent negative quality of life. Items rated as especially importance produce especially high QOL scores for items where high enjoyment is indicated. Similarly, items rated as especially important produce especially low quality of life scores where lack of enjoyment is indicated.

To illustrate, an individual who describes an item as very important (4) and reports being very satisfied (4) receives a score of 4. An individual who rates an item as not very important (2) and reports being not very satisfied (2) receives a score of −2. Items rated as being less important produce more moderate quality of life scores.

Overall, a quality of life score of 4.5 or higher is considered excellent and scores of 1.5–4.5 indicate a very acceptable situation. Scores of −1.5 to +1.5 indicate an adequate situation, scores of −1.5 to −4.5 are problematic, and scores less than −4.5 are very problematic.

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individual and the importance attached to each indicator. This latter set of scores is the average scores shown in Fig. 8. If an individual perceives the achievement level for each indicator to be extremely high then a score of 5 is assigned to each indicator. And if all indicators are considered to be extremely important by all individuals then a score of 5 is assigned as the importance score to each indicator. Overall we would expect this individual to exhibit a very high overall QOL score and rank highly. However, if an individual perceived a low level of achievement on each indicator and hence assigns scores of 1 to each indicator then the overall QOL is probably going to be low and the individual will

$F_1 - F_{15}$ indicators

$\bar{I}_1 - \bar{I}_{15}$ average values for importance of each indicator

$IND_1 - IND_n$ set of individuals in town

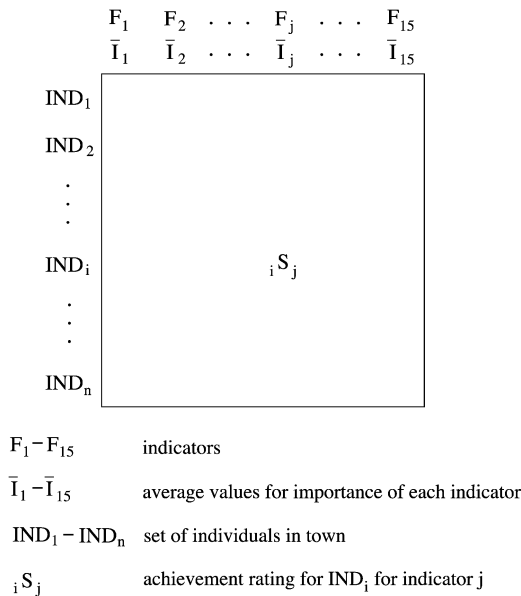$_iS_j$ achievement rating for IND_i for indicator j

Fig. 9. Data matrix for classification of individuals.

rank at the low end in terms of QOL. The algorithm generates a ranking of individuals with respect to QOL. The results for each town are given in Section 4.5.

The classification of individuals as a ranking can be examined in the light of responses to the first set of questions on the questionnaire, and tentative hypotheses can be formulated and tested. For example, in the next stage of the project we will look for patterns in each town with respect to gender, age, employment, and length of residency.

4.4.3. Results and preliminary interpretations

In Ixtapa, 28 people were interviewed (11 males and 17 females) with roughly an even number in each age group. Seventy-eight percent owned their own home and the balance rented. This was a much higher percentage of renters than in the other two study sites, reflecting the different functional base of the town, and the larger amount of available rental accommodation. Under one-third of the sample had been born in Ixtapa, although most of the rest came from other parts of Jalisco. Some had, however, moved from greater distances, such as Durango, Acapulco, and Mexico City. These in-migrants had been entering Ixtapa over a fairly long time period, although the majority had moved over the last decade. Most of the respondents worked in traditional village roles such as commerce and construction, and there was little evidence of a tourist impact upon job types. But this almost certainly reflected our sampling process, which involved interviewing during daytime hours when workers employed outside of Ixtapa were absent. However, our February 2000 survey of workers in the tourist industry indicated that many lived in Ixtapa, commuting to the coast for employment in hotels and related activities (Everitt *et al.*, 2002). In fact at least one hotel company operates a bus to transport its workers from Ixtapa to its hotels.

In Las Palmas, 23 people were interviewed (7 males and 16 females); there were an even number in each age group. Eighty-seven percent owned their home (a characteristic of most such settlements in Mexico) and two borrowed dwellings from friends (a typical behavior pattern). Over 60% of the respondents had been born in Las Palmas, with most of the rest coming from other parts of Jalisco in general, and several moving in from smaller settlements around Las Palmas. Once again, all of the respondents worked in traditional village roles such as commerce and construction, and there was little other evidence of a direct tourist impact upon most peoples' lifestyles.

In El Tuito, 24 people were interviewed (11 males and 13 females) with an even number in each age group. Over 80% owned their home. Two respondents rented, and two borrowed dwellings from a friend. Just under half of the respondents had been born in El Tuito, with most of the rest coming from other parts of Jalisco in general, and the hinterland of El Tuito in particular. All of the respondents worked in traditional village roles such as commerce and construction. Although a few of the shopkeepers catered in part to tourists, there was little other evidence of a major tourist impact upon most peoples' lifestyles. QOL scores were determined for 15 indicators. Individual QOL scores were then calculated for each respondent. These data suggested that men believe that they have a better QOL than women, and that the women also believe this. There was no evidence of age variations.

As indicated above, the respondents were asked to score 15 QOL indicators on a scale of 1–5. These scores were then averaged and ranked for each settlement in order to gauge

their importance to the people in each place. In each town 'family' was ranked as a most important indicator. In addition 'health', 'water', 'air', and 'peace and tranquility' were ranked as the other four most important indicators—although the exact ranking varied from town to town. 'Work opportunities' were ranked quite highly (sixth place) in Ixtapa, the 'dormitory town'.

There was also a large degree of consistency with respect to the least important factors. The 'cost of living' was cited by all three groups as a low-ranked indicator. 'Level of education' and 'work opportunities' were ranked in the bottom five in Las Palmas and El Tuito. 'Noise' was ranked in the bottom five for Ixtapa, and 'tourism' was not seen as very important for the QOL in Las Palmas and El Tuito—not surprisingly as it is not a significant activity, yet, in either settlement. Interestingly, however, tourism was only the eighth most important indicator in Ixtapa! 'Friends' and 'vacations' were ranked low in the exurb of Ixtapa, but higher in the other two more-traditional centers. Shopping and housing were not seen as important QOL factors in El Tuito, perhaps because its greater distance from Vallarta has insulated it in some way from the potential problems associated with these activities. Conversely shopping was not seen as a QOL problem in Ixtapa, perhaps because Puerto Vallarta is so close, and shopping opportunities so available!

The respondents were also asked to score their achievement with respect to each of the 15 indicators, as a measure of the significance of these indicators to them. Similar rankings resulted in those of 'importance', with 'family', 'air', and an 'atmosphere of peace and tranquility' being perceived as receiving high levels of achievement by respondents of each town. Water was in the top five for Las Palmas and El Tuito, health in Ixtapa and El Tuito.

'Friends' were ranked high in Las Palmas and 'transportation' in Ixtapa. All three groups of respondents said that they were not very satisfied (i.e. achievement was low) with the 'cost of living'. 'Shopping' was ranked low by those in Ixtapa and El Tuito; the 'level of schooling' and 'work opportunities' were ranked low in El Tuito and Las Palmas. 'Housing' was ranked low in Las Palmas, 'tourism' in El Tuito, and 'noise', 'friends' and 'vacations' in Ixtapa. However, when these two scores (importance and achievement) are combined into an overall QOL index, a number of observations can be made. A summary of the results is given in Table 17.

First, on average, all the scores are high for each settlement, but highest for Ixtapa where economic development has had the greatest effect in the recent past, and lowest for Las Palmas, where development has had a lesser impact. The Ixtapa data indicate that QOL was lower in the past, has increased to the present, and is projected to increase into the future. Although some individuals had low scores, the average QOL scores were all quite

Table 17
Summary QOL scores for Ixtapa, Las Palmas and El Tuito

Town	Before	Now	Future
Ixtapa	3.2	4.4	4.6
Las Palmas	–	3.2	–
El Tuito	2.1	4.0	4.6

high. Consequently when we talk about a lower QOL in these towns it has to be seen in a relative sense. Some indicators were not seen as bad, so much as not as good as other ones. Thus in Ixtapa the QOL score for 'family' scored was 10 out of a possible 10, with 'health', 'transportation', 'air' and 'an atmosphere of peace and tranquility' being close behind. Although 'cost of living' (+4) and 'schooling' (+4) scored much lower, they still fell within the adequate category. Friends (0), vacations (+3), and shopping (+3) rank the lowest, but still have respectable QOL scores when viewed on the overall scale. In El Tuito, 'family' also scored a perfect 10, with 'health', 'friends', 'transportation', 'water', 'air', 'noise', and 'peace and tranquility' close behind. The lowest scores in this town (for 'cost of living', 'work opportunities', 'housing', 'tourism', 'shopping', 'vacations', and 'level of schooling' all scored +4. In Las Palmas scores were also relatively high. 'Family' again scored 10 out of 10, with 'health', 'transportation', 'air', and 'an atmosphere of peace and tranquility' following closely behind. All other indicators scored 4 or 5, except 'friends' that scored 0, as in Ixtapa.

In addition to measuring QOL at one point in time ('now'), the respondents were asked to try to rank what their satisfaction/achievement was with the 15 indicators before tourism began in their community. The data here are more questionable as they rely on memory, and on the respondents having been around in pretourism times. But once again some illumination can be obtained from the results, particularly when they are combined with information gained from another question that asked respondents to project their patterns of satisfaction into the future. It is thus possible to get some indication of past, present, and future perceptions.

In El Tuito, 'family', 'water', 'air', 'atmosphere', and 'schooling' were seen as significant in the past. In the present, 'family', 'water', 'air', and 'atmosphere' have remained at the top of the list, but 'friends' have replaced 'schooling'. 'Vacations', 'shopping', 'tourism', 'work opportunities', and 'noise' were the least significant indicators before tourism. In the contemporary situation 'tourism', 'shopping', and 'work opportunities' are still ranked near the bottom, but have been joined by 'cost of living' and 'housing', as 'vacations' and 'noise' risen up the table of significance. It appears that an increase in tourism in the region has not given this indicator more significance in terms of QOL for people in El Tuito, but individual vacations have become more significant as a QOL indicator to our respondents.

In Ixtapa, the most significant indicators before tourism were 'family', 'air', 'atmosphere', 'water', 'health' and 'housing'. These can be seen as reflective of quite traditional values, as can those indicators ranked for the present. Currently the indicators with the highest ranks are 'family', 'air', 'atmosphere', 'water', and 'friends'. However, future projections suggest that 'family' and 'water' will remain significant, but that 'tourism', 'vacations', and 'air' will become more significant. These developments reflect QOL changes that are clearly closely connected to urban growth and a change in lifestyles that is connected to the increased impact of tourism on this fast-growing settlement.

For Ixtapans, the indicators with least significance in the past were 'shopping', 'friends', 'transportation', 'cost of living', and 'work opportunities'. Currently the lowest ranked indicators are similar: 'shopping and vacations' (tied ranks), 'work opportunities', 'transportation', 'schooling', and 'cost of living'. In the future they project that the least significant indicators will be 'friends', 'shopping', 'schooling', 'cost of living', and an 'atmosphere of peace and tranquility'.

Without having data on a complete time budget for each individual, it is difficult to fully interpret these data, as clearly there must be some activity losses to offset the increases in time spent on those indicated. One reasonable interpretation is, however, that more time and effort is likely to be spent on major participant activities in general, and that these increases are seen as positive both in terms of (medical) health and in terms of life satisfaction. As all three towns are being subjected to similar stresses as a result of the changes resulting from tourism and other lifestyle alterations, it is not surprising that there were similar responses to some of these questions. It is interesting that despite the importance attributed to family in earlier questions, that there was a recognition that changes in time budgets are likely to come, and that family interactions may suffer as a result. There was also an acknowledgement that this loss, when combined with the other changes suggested, will still lead to an overall increase in the QOL.

4.4.4. The relationship between QOL and tourism

It is clear from the literature that there is a close relationship between tourism, community and economic development, and the QOL, and our field research has reinforced the importance of this association. Tourism undoubtedly leads to economic, social and change in an area, and this change can be seen in both positive and negative lights—each of which illuminates the concept of the QOL in different ways.

On the positive side, tourism can lead to an increase in job opportunities in an area. Although these might not all be of a universally desirable nature they can lead to improvements in other services, including medical, educational, and recreational. If these changes take place in the context that is envisioned by the Mexican government, it is likely that negative spin offs of tourism can be kept to a minimum. However, there will still be changes that are going to be seen as negative by some segments of the population. For instance, both El Tuito and Las Palmas are prized by their inhabitants for their 'peace and tranquility'. Although a positive social environment can be maintained when tourism increases, it is likely that the present situation will change for these towns and their inhabitants. In addition a number of our informants suggested that other negative effects, such as environmental deterioration, and drug use amongst youth which can be seen to be increasing, and which are directly related to tourism and other outside influences. While we generally support the use of formal methods to calculate QOL scores we add the caveat that they be used with caution in the development of policies to ameliorate conditions for citizens.

4.5. Summary remarks

Multi-criteria analysis can be used to tackle the QOL classification problem but it is clear that if the results are to be used to help improve the QOL of people or places then it is necessary to ensure that the analysis be incorporated into a planning process which empowers all stakeholders to be actively involved in the data collection, analysis and interpretation of the results. The empirical studies on QOL in Canada that will be discussed in Chapter 5 stress these principles to help ensure that studies of QOL will be incorporated into the life of a state and not sit in reports gathering dust!

CHAPTER 5

Quality of life studies in Canada

5.1. The context for QOL studies in Canada

There have been many studies in Canada that have collected data from citizens on their QOL. Peters (1995) has undertaken an ambitious project to synthesize data on opinions of Canadians regarding values, QOL and well-being. Two related sets of data were used: first an analysis of 18 opinion polls between 1980 and 1995; second, data drawn from 25 discussion groups held in eight cities across Canada, which involved 276 participants. A summary of the format and organization of these group discussions is given in Fig. 10. The long-established values of 'self-reliance', 'compassion leading to collective respon-sibility', and 'investment in children as the future generation' continue to be cherished. However, the conversion of these values that clearly do contribute to QOL, into explicit policies that require public planning actions is the cause for continuing debate among interest groups in Canada.

The changing character of Canadians is the focus of detailed survey research and formal quantitative analysis by Adams (1997: 2000). He uses polling data. Basically Adams argues, as George Gallup did earlier in the last century in his book with Rae (Gallup and Rae, 1940): The Rise of Democracy, that polling advances the cause of democracy by informing citizens of their individual lives, and the lives of others. "Know better your neighbour and you will better know yourself" (Adams, 1997: 2). This assertion leaves hanging the problem for planners and others of suggesting planning projects and public efforts to improve life chances for individuals, and the QOL of people and places. Descrip-tive work of the sort promoted by Adams does offer typologies, classifications and char-acterizations of clusters of individuals with shared feelings and attributes, but does such work contribute to public policy-making? Clearly demography is not destiny, however, if planners wish to influence QOL then awareness of the values and changes to the values will play a role in determining the context for public planning. If one major trend can be identified in Canada over the last 20 years it is the shift from what Adams calls 'traditional communities, institutions and social status' toward 'personal autonomy and self-fulfillment.' It is within this broad setting of Canadian values that the six studies of QOL discussed later in this chapter will be situated. While to a large extent these studies are descriptive they do seek to involve citizens in taking responsibility for contributing to public planning, and also the studies make contributions to the public assessment of policies and practices currently in place. The proponents of the studies typically refer to the claim that their study will inform and empower citizens, assist decision-makers use public funds appropriately, and contribute to legitimacy and accountability of govern-ments at national, provincial and local levels. The work of Donald (2001) in Canada on economic competitiveness and QOL draws on the important work of Florida (2000a,b) that uses both objective and subjective 'quality of place' criteria to assess the competi-tiveness of city regions in the United States. The search is to understand why talented individuals move to certain places and the consequences on QOL. From a public planning perspective this work informs the efforts of the Canadian National Round Table on the

There were two streams of discussion groups: those consisting of randomly selected participants and those with participants recruited through social agencies. While these groups overall shared similar values, they differed in some priorities; recipients of service were more interested in ensuring that services are comprehensive and coordinated: they also felt greater vulnerability about loss of programmes. Randomly recruited groups expressed the importance of collective responsibility, but would draw the line of need differently, with less appreciation of vulnerability.

Groups were asked to state what they cared about most in Canada, what they would most like to change. They were also asked to consider slightly conflicting value statements and to imagine themselves as a citizen's committee required to make choices about social programmes in a context of greatly decreased funding. They were encouraged to listen carefully, both to one another and to internal value conflicts they might experience in the course of discussion. They discussed the following seven tradeoffs:

> Well-baby care **versus** intensive remediation for infants with special problems.

> One state-of-the-art provincial cancer center **versus** geographically dispersed routine clinics.

> Cuts to welfare rates for sole-support mothers **versus** reduced job-training for "willing and able-to-work" adults on social assistance.

> Heroic efforts on behalf of terminally ill patients **versus** job transition programmes for university students.

> Directly funded school-lunch programme, only for those children at highest risk, **versus** partnership development to create a programme that can reach more children.

> Raising the eligible age for social assistance to 18 **versus** continuing to allow applications from those over 14, with more stringent criteria.

> Leading-edge research on heart disease prevention **versus** expansion of heart-treatment clinics.

Source: Peters 1995, 2

Fig. 10. Format and organization of group discussions (Source: Peters (1995: 2)).

Environment and the Economy in its efforts to involve stakeholders from all sectors in Canada in the development of plans to promote QOL as sustainable development. Details are available on the web site www.nrtee-trnee.ca.

In the next sections a set of six Canadian case studies that explicitly focus on QOL will be reviewed. The full details of each one are available on web sites. The studies include:

- The Vital Signs project in Toronto, Ont. (www.torontovitalsigns.com)
- The QOL study of the Province of Ontario (www.qli-ont.org)
- The Federation of Canadian Municipalities QOL project (www.fcm.ca)

- Alberta Sustainability Trends 2000: the GPIs report 1961–1999 (www.pembina.org)
- The Canadian Policy Research Network QOL study (www.cprn.org)
- The proposed Canada Well-being Measurement Act (www.SustainWellBeing.net)

5.2. The Vital Signs project in Toronto

This project was officially launched in 2000. "The purpose of Vital Signs is to promote discussion, citizen engagement and change on issues that are important to the QOL and future vitality of the Greater Toronto Area. As a means to this end, an indicator project was developed which would identify a number of credible measures in areas where there was broad agreement about their importance. The results would be communicated as widely as possible on an annual basis" (www.torontovitalsigns.com, August 29, 2001). Three basic questions were posed at the launch of the project and these questions informed the definition of ten major areas of concern. The three questions are:

1. What makes Toronto work?
2. What must we maintain and enhance to keep Toronto a good place to live, work and visit?
3. What signs warn us of potential concerns or point out new directions?

The ten major areas of concern are:

1. Earning: successful cities generate wealth over the long term
2. Working: viable cities are able to meet peoples' basic needs through paid and unpaid work of their citizens
3. Participating: cities are created and maintained by people: the more that people are involved in civic life, the stronger the city will be
4. Living: city dwellers require a healthy environment in order to thrive
5. Relating: relationships among people and communities in the city create the climate for a harmonious, safe society
6. Learning: successful cities depend upon continuous learning of all their residents
7. Helping: inter-dependency is a fundamental aspect of urban life
8. Playing: successful cities offer opportunities for renewal through recreation, sports, leisure and cultural activities
9. Getting around: people need an efficient transportation system in order to maintain the relationships that make the city
10. Planning: cities must plan to use resources wisely, now and in the future.

A list of over 60 indicators was initially offered to the public with the request that those who completed the questionnaire select the 20 indicators that best reflect the QOL in the city. Also respondents were asked to suggest alternate indicators. This generated a revised list of over 90 indicators. The respondents were not asked to attach levels of importance to each indicator, nor were they asked to state their perceived or actual levels of achievement for each indicator on numerical scales. Hence, no attempt has been made to date to collect numerical data to be used to calculate an index or score for QOL. Rather the emphasis at this stage of the project is to identify meaningful indicators that reflect the QOL in the city

as perceived by a wide variety of stakeholders, to suggest the factors that influence the trends and identify the data limitations of each indicator.

After work of one year, it has been possible to identify four major groups of indicators that have been characterized under the following headings: working, living, learning and growing. A summary of the status of indicators under each of these heading is given in Table 18. On the web site each of the headings is elaborated with selected empirical data to capture the issue or problem. As the project continues from this initial phase the following guiding principles will be used:

1. Build the project around a strong core of reliable data and technical and analytical competence.
2. Use existing sources of reliable data.
3. Take a regional perspective—the Greater Toronto Area.
4. Results should tell us where there is a need for action.
5. Balanced approach.
6. Consult broadly: a community development approach.
7. Foster civic engagement.
8. Project friendly.

Overall the project seeks to use data and actions of citizens to ensure a sustainable future for Toronto that protects and enhances QOL.

5.3. The QOL study of the province of Ontario

The Ontario Social Development Council and the Social Planning Network of Ontario have undertaken a 10-year study of QOL in the province of Ontario, Canada. They have developed a QOL index that is a single numerical score that relates to a benchmark value of 100 that was established in 1990. The details for calculating the index are shown in Table 19. Four categories of indicators are used—social, economic, health and environmental. Within each category three indicators are measured. All the indicators are considered to be equally important. No sensitivity tests are conducted and no explicit consideration is given to considering the effects on the QOL index of possible weightings for the indicators that reflect the opinions of the public. However, the authors of the project note that "The Project Working Group has concluded that the weighting on indicators adds complexity to the process, without necessarily adding meaning to the Quality of Life index. Members concluded that the…approach demonstrates successfully the usefulness of weighting all indicators equally" (QOLIP: Methodology Report, July 1997, www.qli-ont.org). As of spring 2000 the QOL index stood at 97.7 and that while this did show some improvement over the recent past the index is still below the 1990 benchmark. It is suggested that "…the lagging social indicators—the social deficit—continue to undermine progress in other sectors. The environmental indicators have led the upward trend, though air quality has been declining since 1998. The growing gap between the economic and social indicators shows that the pursuit of economic growth doesn't yield the dividends it once did. A rising tide no longer lifts all boats" (QOL in Ontario: Spring 2000, www.qli-ont.org).

Table 18

Status of indicators: Toronto Vital Signs project[1] (Source: www.torontovitalsigns.com, Vital signs, the vitality of the Greater Toronto Area, 2001)

		Trend	Scale
Working	Jobs; how has Toronto recovered?	+	G
	Capital investment	+	G
	Income distribution; is the middle class disappearing?	−	G
Living	Health; will we have access to the care that we need?	−	G
	Drinking water; is our supply safe?	+	G
	Surface waters; what conditions are they in?	−	G
	Beach closings; can we enjoying the waterfront?	−	G
	Water consumption; do we value our resource?	−	G
	Waste: are we losing the waste war?	−	G
	Air quality: is the air we breathe healthy?	−	G
	Arts funding: are the arts important?	−	T
	Parks; do we have enough open space?	+	G
	Crime + safety; is our community safe?	+	T
	Poverty; are children at risk?	−	G
	Homelessness; do we provide assistance for the people who need it most?	−	G
Learning	Library use; are libraries still important?	N	G
	Educational level; are workers well prepared?	+	T
	Voting; do we exercise our right to vote?	−	G
	Volunteerism; do we give of our time?	N	T
	Giving; do we share our good fortune with others?	−	T
Growing	Immigration; how will we grow?	+	G
	Housing starts; where will people live?	+	G
	Rental housing; can we find places to live?	−	G
	Industrial + commercial building permit values; what are we building?	+	G
	Brownfield development; how will we fill in empty spaces?	+	T
	Vehicle kilometers traveled; how far is too far?	−	G
	Modal split; how do we travel?	−	G

[1] (+) positive mend; (−) negative mend; (N) neutral; (G) about the GTA; (T) about Toronto.

In numerical terms the trends over the period 1990–2000 of the QOL index, and the trends of the four components are shown in Fig. 11. Data for a set of 12 communities in Ontario are also presented.

5.4. The Federation of Canadian municipalities QOL project

In March 2001, the Federation of Canadian Municipalities (FCM) released their second report on the QOL in Canadian municipalities. The report is available on their web site. The FCM's mission statement is to 'improve the quality of life in all communities by promoting strong, effective and accountable municipal government'. The Quality of Life Reporting System (QOLRS) developed the measures, monitors and reports on QOL in selected Canadian communities. The major incentive for this project was the concern

Table 19
Calculating the quality of life index, Ontario (Source: www.qli-ont.org)

Indicators	Base year	Base rate per 10 000	Base QLI value	Current year	Current rate per 10 000	% Change	QLI impact	QLI spring 2000
Social indicators								
(1) Social assistance Ben.	1990	799.9	8.3	2000	693.0	−11.1	POS	9.2
(2) Admissions to CAS care	1992	8.4	8.3	1999	10.0	19.0	NEG	6.7
(3) Ontario housing W. lists	1990	43.1	8.3	1999	82.4	91.2	NEG	0.7
Social composite			25					16.7
Economic indicators								
(4) Labor force working	1990	4991.5	8.3	2000	4832.1	−3.2	NEG	8.0
(5) Labor force unemployed	1990	295.5	8.3	2000	306.7	3.8	NEG	8.0
(6) No. of bankruptcies	1990	19.1	8.3	1999	22.7	18.8	NEG	6.7
Economic composite			25					22.8
Health indicators								
(7) No. of new cancer cases	1990	38.6	8.3	2000	42.1	9.1	NEG	7.5
(8) Long term care W. lists	1996	13.2	8.3	1999	14.8	12.1	NEG	7.3
(9) Low birth weight babies	1990	8.1	8.3	1999	5.9	−27.2	POS	10.6
Health compostie			25					25.4
Environment indicators								
(10) Hours poor/mod air quality	1990	5.7	8.3	1998	6.6	15.8	NEG	7.0
(11) Spills reported	1990	5.5	8.3	1999	3.1	−43.6	POS	11.9
(12) Tonnes div. to blue boxes	1992	340.0	8.3	1998	569.2	67.4	POS	13.9
Environment composite			25					32.8
QLI composite index			100					97.7

expressed by many city officials that the funding structure of transfer payments from the federal government to the provinces does, in their opinion, have negative consequences on QOL in cities. The lack of data on this topic limited constructive debate. However, the recent report provides clear, well-documented evidence for a set of social and economic
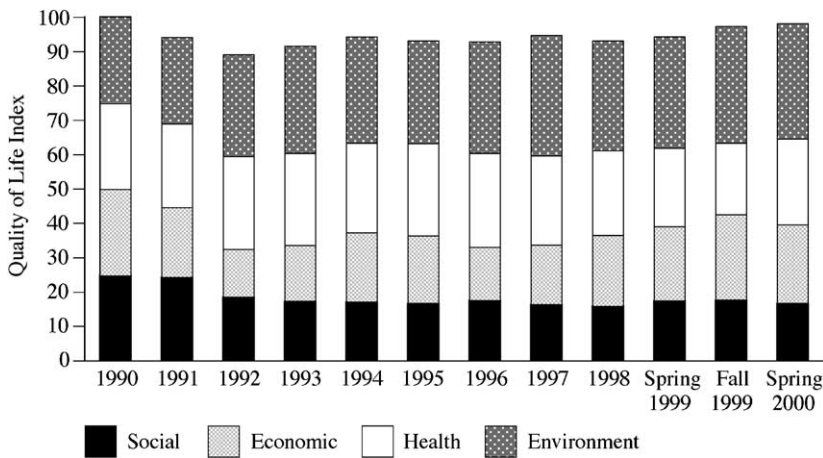

Fig. 11. Trends in the quality of life index 1999–2000, Ontario (Source: www.qli-ont.org).

indicators relating to QOL that show that income disparities in Canada's urban communities were larger than provincial and national averages. The gap between the rich and the poor is growing.

Data for 18 municipalities for a set of eight general measures for the period 1991–1998 are presented in the report. The measures are:

1. Population resources measure.
2. Community affordability measure.
3. Quality of employment measure.
4. Quality of housing measure.
5. Community stress measure.
6. Health of community measure.
7. Community safety measure.
8. Community participation measure.

Each of these measures comprises a small set of indicators, for example, for the quality of housing measure, indicators of affordability to rent (relative to prevailing incomes), percentage of homes in need of repair, vacancy rates and housing starts are used. Two other measures—quality of environment and social infrastructure—are under development.

A Sustainability Community Indicator Program (SCIP) has been developed to complement the FCM project to help communities develop their own indicators and track progress towards sustainability. The software package is available from the web site www.ec.gc.ca/scip_pidd. It should be noted that no attempt is made to use empirical information from the tables of data for each municipality for each indicator under each measure to calculate a summary numerical index. Rather, brief commentary is provided as interpretations of trends among the 18 municipalities and comparisons with Canada—wide patterns are offered. By providing the raw data in simple easy-to-read tables, as well as the interpretations and highlights of the trends, the FCM hopes that awareness of citizens will be enhanced and this will be transformed via the democratic political process into public planning to improve QOL of all in Canada. The release of the second report provided John Barber, one of Canada's foremost commentators on the urban scene, to note that "…the story of Canadian cities as told in the latest FCM study is damning… In essence, it proves what so many have surmised for so long that the worst place to be poor in Canada is in its most thriving cities, where by far the lion's share of its best jobs are located. Despite needs that are demonstrably more urgent in virtually every field where government are active, from housing to health care or education, you will get less help—strikingly less when compared to the rest of the country as a whole, scandalously so when compared to traditional have-not regions" (Barber, 2001).

The transfer of wealth from cities is having serious consequences on QOL. Barber argues that "Most modern governments have at least become aware of the problem and are trying to address it. By contrast, the debate is painfully immature in Canada." It is to be hoped that the efforts of the FCM will go some way to rectify this.

5.5. Alberta sustainability trends

The GDP of the province of Alberta, Canada has grown over 400% in the last 40 years. The report by the Pembina Institute (2001) on sustainability trends notes that "More growth is assumed to imply a better life. But, as Robert Kennedy observed, 'The GDP measures everything except that which makes life worthwhile.' While common measures of wealth and prosperity, like the GDP or stock indices, suggest we are better off, a closer look at the condition of the things that make life worthwhile provides a much more holistic picture of our well-being and quality of life" (Pembina, 2001: vii). An alternative approach to the study of wealth, well-being and QOL is offered by the use of the GPI that was mentioned in Chapter 2 and discussed on the web site www.rprogress.org. The GPI is used in the Pembina study in Alberta. The accounting system promoted by the GPI attempts to measure the condition of all living and produced capital, not just the conditions of economic assets. Living capital includes human, social and natural capital. Promoters of the GPI argue that it offers an approach to economics that measures well-being, real progress and stewardship of the environment, the care of health, families and social fabric. In the case study a set of 51 indicators of QOL were examined for a period of approximately 40 years (1961–1999). Table 20 lists the indicators under three headings: economic, personal–societal and environmental. Scores for standardized values for each indicator "…were aggregated using an equal weighting formula for the economy, society

Table 20
The Alberta GPI indicators for economic, personal–societal and environmental well-being (Source: Pembina (2001: 4, Table 1))

| Economic growth	Personal–societal	Environmental
Economic growth	Poverty	Oil and gas reserve life
Economic diversity	Income distribution	Oilsands reserve life
Trade	Unemployment	Energy use
Disposable income	Underemployment	Agriculture sustainability
Weekly wage rate	Paid work	Timber sustainability
Personal expenditures	Household work	Forest fragmentation
Taxes	Parenting and eldercare	Fish and wildlife
Savings	Free time	Parks and wilderness
Household debt	Volunteering	Wetland
Public infrastructure	Commuting	Peatland
Household infrastructure	Life expectancy	Water quality
	Premature mortality	Air quality-related emissions
	Infant mortality	Greenhouse gas emissions
	Obesity	Carbon budget deficit
	Suicide	Hazardous wastes
	Drug use	Landfill waste
	Auto crashes	Ecological footprint
	Divorce (family breakdown)	
	Crime	
	Problem gambling	
	Voter participation	
	Education attainment	
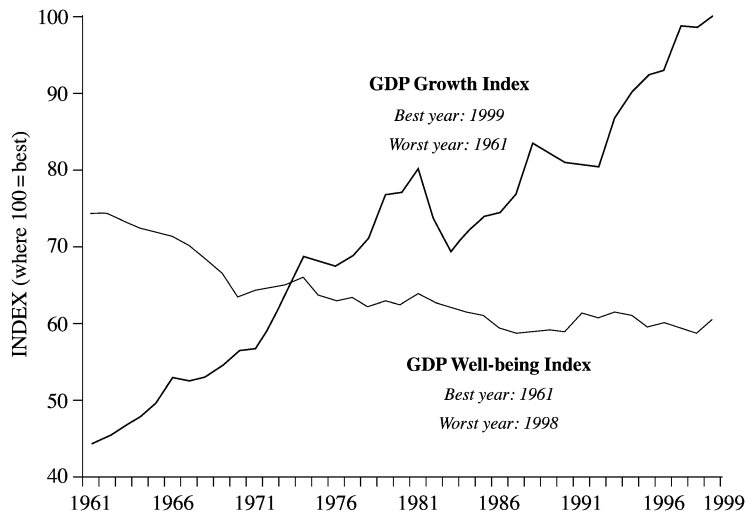
Fig. 12. The Alberta GPI well-being index versus Alberta GDP index: 1961–99 (Source: Pembina (2001: 6)).

and environmental indicators whose indices could then be compared directly with the GDP and other monetary measures of economic progress, such as stock market indices. Individual GPI can also be compared directly with trends in the GDP, which may provide important visual and statistical correlations between economic growth and changes in the conditions of personal well-being, societal and environmental conditions" (Pembina, 2001: 7).

The results of the project are summarized in Fig. 12 and it is clear that the gap between the GDP and the GPI is growing. An elaboration of life in Alberta over the 40-year period is offered as textual commentary and via statistics. For example, one-third of the population is overweight, an increase from 14% in 1985, and that if everyone in the world had as great an environmental impact as Albertans, another five planets would be needed just to supply the land and resources. The average ecological footprint of Albertans—the amount of land and resources needed to meet lifestyles—is 10.7 ha; this makes it the fourth largest in the world, clearly a situation that is hardly sustainable. However, Alberta does well in terms of life expectancy and educational attainment, but real disposable income and real weekly wages have remained stagnant in Alberta since their peak in 1982.

Whether this kind of report on QOL and sustainability will in fact be used to develop plans that citizens and governments will accept to curb excessive uses of land and resources only time will tell. Finally the report stresses that "The Alberta GPI Accounts (1961–1999) suggest that while more money has changed hands, the price in this growth in GDP has been an erosion in the condition of many forms of living capital… With better information, people would be empowered to participate more fully in the democratic process of shaping their future… GPI accounts are a powerful tool for public policy development, strategic planning and budgeting. They allow decision makers to compare many different measures of sustainability and well-being using a common measuring system… GPI accounts can be used for non-partisan reporting to citizens on their overall

'state of well-being' in accordance with their quality of life values. It is the ideal 21st century navigational tool for charting a sustainable future—one in which stewardship of real wealth takes priority over making money" (Pembina, 2001: 32).

5.6. The Canada Policy Research Network project on QOL

Mendelsohn (2000) has examined four types of questions used in various policy initiatives in Canada over the last decade that asked citizens first, about their satisfaction with their QOL second, their satisfaction with a number of aspects of their lives deemed important to QOL (e.g. their personal financial situation) third, how 'the system' was performing on a number of areas relating to QOL (e.g. the health care system) and finally, which indicators are important to a good QOL. In summary, he argues that due to data weaknesses it is not possible to describe with accuracy and precision Canadian's attitudes toward their QOL. The Canadian Policy Research Network (CPRN) sponsored the work of Mendelsohn and they suggest that there is a pressing need to undertake a national survey on QOL that explicitly seeks input from citizens across Canada. Such an initiative could complement surveys at other scales and data sets that compile objective scores for a range of indicators of QOL.

In April 2001, the CPRN published the report: Indicators of QOL in Canada, a citizens' prototype (www.cprn.org). A set of nine themes, each with a number of indicators was identified. The themes are:

1. Political rights and general values: two indicators.
2. Health: four indicators.
3. Education: seven indicators.
4. Environment: five indicators.
5. Social programs/conditions: six indicators.
6. Personal well-being: three indicators.
7. Community: four indicators.
8. Economy and employment: six indicators.
9. Government: three indicators.

Data collection for the prototype began in 2001 and CPRN argue that when this report card becomes widely available citizens will be in a stronger position to hold their political leaders accountable for policies and programs that may have an impact on QOL in Canada. The initial survey of opinions of Canadians involved a set of 40 dialogue discussions conducted in nine provinces across Canada in October 2000. Five different clusters of groups were identified as participants including quasi-random samples of urban and rural dwellers and purposive samples consisting of urban and rural participants, 'influencers', hard-to-reach individuals and youth groups. CPRN note 'The participants, while not always optimistic that the process would yield tangible results, were nevertheless energized by their participation in the process' (CPRN April 2000, Asking Citizens what Matters for QOL in Canada, p. vi (www.cprn.org)). CPRN suggest that the results of this initial work should be used to encourage wide-scale discussions on QOL among

Canadians, and to inform debate about Canada's future goals, as well as providing information so that achievement levels can be monitored.

5.7. Proposed Canada Well-being Measurement Act

On May 25, 2001, the Canadian Minister of Finance delivered a speech at a meeting organized by the National Round Table on the Environment and the Economy. He noted that "A country is not a balance sheet. Citizens are not just shareholders in a giant corporation called Canada. They must also share in a sense of belonging, a sense of participation in the decisions that affect them. They need to know that we are prepared to turn conventional wisdom on its head: to try new ideas and test old assumptions… indicators will help us to measure our progress in a way that engages the constituency that matters most—the public at large. As a long-term goal, developing a broader set of social indicators is an objective that we should certainly work toward. And there are several groups in Canada that are taking on this challenge."

In 1998 a group of citizens, working with some politicians, formulated a proposal for a new piece of federal legislation that was presented to the Canadian parliament in 2000. This Bill (C-469) was entitled The Canada Well-being Measurement Act: an Act to develop and provide for the publication of measures to inform Canadians about the health and well-being of people, communities and ecosystems in Canada. The first reading as a private member's bill was received on April 5, 2000. The Bill died when the government called an election later in 2000. Early in 2001 plans were being made to re-introduce the Bill, however, the Minister of Finance appeared to support the efforts of the national Round Table on the Environment and the Economy (NRTEE) and the Environmental and Sustainable Development Indicators Initiative (ESDII) of NRTEE as sufficient to cover the concerns raised by the supports of the new Bill. The challenge now facing the proponents of the proposed Bill is to ensure that the measurement of genuine progress includes all aspects of capital that contributes to well-being and QOL, and that information on genuine progress be made widely available to the public to ensure that data on social, economic and environmental indicators that influence QOL are included. The NRTEE now embraces a 3-year initiative (2001–2004): the Environment and Sustainable Development Indicators (ESDI) initiative. This project is "…aimed at developing a set of nationally, well-accepted indicators, which will promote the integration of environmental considerations into economic decisions" (NRTEE Progress Bulletin #1, June 2001; www.nrtee-trnee.ca/indicators).

The Canada Well-being Measurement web site is an important initiative to promote exchange of ideas on the definition and measurement of indicators of QOL, and to provide groups in Canada with arguments to lobby the government to embrace a broad range of indicators in the assessment of the impacts of legislation on the QOL of all Canadians now and into the future.

5.8. Successful QOL studies

The six case studies discussed above are each work in progress, and only time will tell if they make significant contributions to improving the sustainability and QOL of people and places. However, I will close this chapter with brief remarks on successful QOL studies,

and specifically I will mention the community of Ouje Bougoumou in the north of the province of Quebec, Canada. This is a long-settled Cree community that has a history of resource exploitation and clashes of cultures between the occupants of the community and the 'outsiders'. In brief, the clashes lead directly to a decline in QOL of the people and the place. So bad was the situation that by the 1980s it was clear that only a radical change in direction of planning in the community could possibly reverse the downward trends in QOL. In the 1980s there was a change in planning and community involvement, and the physical design of the settlement, and the results have proven startling and very positive. The QOL has improved so significantly that Ouje Bougoumou has been awarded recognition by the UN as a model community of successful planning that enhances QOL and ensures sustainability. In 1995 the United Nations selected Ouje Bougoumou to receive the 'We the peoples' award. The community has also received recognition from other agencies, for example, Habitat II Best Practices Award, Expo 2000, the Canada Mortgage and Housing Award and Global Citizen Award. Details are on the web site (www.ouje.ca). What happened in Ouje Bougoumou to reverse the trends? While there is no single determining factor, clearly the role of community leaders and all members of the community as concerned and involved citizens had considerable positive effects. The local Cree managed to wrest control over the resources and their future from 'outsiders' and to be responsible for their future. This assertion of responsibility was hard won; the involvement of community leaders and members has seen dramatic improvements. There is a lesson to be learned: namely, involvement of responsible citizens and leaders in a community can make a difference to planning for sustainability and QOL. Elaboration of the story of Ouje Bougoumou is given on their web site. The community can be proud of its success.

One of the agencies of the United Nations has developed a web site (www.bestpractices. org) that gives details of success stories concerning sustainability and QOL in many cities in the world. Specifically a database has been established that "…contains over 1100 proven solutions from more than 120 countries to the common social, economic and environmental problems of an urbanizing world. It demonstrates the practical ways in which communities, governments and the private sector are working to improve governance, eradicate poverty, provide access to shelter, land and basic services, protect the environment and support economic development" (www.bestpractices.org, August 29, 2001).

While it is interesting to examine the nature of actual case studies of QOL it is necessary for planners and others to stand back and judge the effects of the studies on policy making and planning activities. In so many cases, the case studies enjoy a life that seems to be separate from the real world of planning, politics and behavior of individuals.

CHAPTER 6

An epilogue on QOL

This final section does not offer formal conclusions and recommendations, rather it is a brief reminder of the purpose of the monograph, and a statement of the need for planners to be attentive to the topic of the QOL.

At the end of the 20th century the geographer Harvey (2000: 257) took a walk through the streets of Baltimore and he observed the QOL. He was "…appalled…at the lack of justice, unity and friendliness…now the inequalities are so striking, so blatantly unnecessary, so against any kind of reason, and so accepted as part of some immutable 'natural order of things' that I can scarcely contain my outrage and frustration." Harvey tells us that he was reminded of the walk taken by Ebenezer Howard through London in the 1888s shortly after Howard had read Bellamy's utopian novel Looking Backwards, that tells of a world of justice, unity and friendliness. Harvey records Howard's walk:

> (I)…went into some of the crowded parts of London, and as I passed through the narrow dark streets, saw the wretched dwellings in which the majority of the people lived, observed on every hand the manifestations of a self-seeking order of society and reflected on the absolute unsoundness of our economic system, there came to me an overpowering sense of the temporary nature of all I saw, and of its entire unsuitability for the working life of the new order—the order of justice, unity and friendliness (Harvey, 2000: 257).

Garden Cities of Tomorrow, published in 1898 was Howard's attempt to plan a better social order that would address planning and the QOL for people and of places, and issues of justice, unity and friendliness. The search for the plan that achieves these fine goals that contribute so significantly to a good QOL continues, and now we must add in concerns about ways to reconcile the three major imperatives of a sustainable world: the economic imperative to provide decent living conditions for all, the environmental imperative to live within our means regarding resources, and the socio-political imperative to ensure all citizens rights to participate in governance and stable civic life. The reconciliation is challenged by a world of mass communication in which distance is modified by technology, and the state has assumed new roles in control and regulation of the lives of citizens, and transnational corporations are larger and more powerful than ever.

As this monograph has tried to make clear there are many ongoing projects relating to QOL, and considerable effort and energy is being focused on the development of procedures to define QOL, collect meaningful data on the indicators of QOL and most of all to involve citizens in the whole enterprise. Nevertheless, we must record that much planning still occurs without explicit direct reference to the systematic consideration of the impacts of projects on QOL, and especially the impacts on QOL as the public good and sustainability. There is a gap between rhetoric and practice regarding the importance of including QOL statements in planning practices and procedures. This monograph hopes to contribute to the discussions among planners and others on the feasibility and necessity to bridge this gap.

Acknowledgements

References

Adams, M., 1997. Sex in the Snow: Canadian Social Values at the End of the Millenium. Viking, Toronto.

Anderson, B., 1983. Imagined Communities. Verso, London.

Andrews, F.M., Withey, S.B., 1976. Social Indicators of Well-Being: Americans' Perceptions of Life Quality. Plenum Press, New York.

Barber, J., 2001. You'll end up poorer in the cities. *The Globe and Mail*, March 28th, p. A-19.

Barlow, M., Clarke, T., 2001. Global Showdown. Stoddart, Toronto.

Bateson, G., 1972. Steps to an Ecology of Mind. Chandler Publishing, San Francisco.

Beesley, K.B., Russwurm, L.H., 1989. Social Indicators and quality of life research: towards synthesis. Environments 20 (1), 22–39.

Bellah, R.N., Madsen, R., Sullivan, W.M., Swidler, A., Tipton, S.M., 1992. The Good Society. Vintage Books, New York.

Bennett, W.J., 1994. The Index of Leading Cultural Indicators. Simon and Schuster, New York.

Blair, T., 1998. The Third Way: New Politics for the New Century Fabian Pamphlet 588. Fabian Society, London.

Boyer, R., Savageau, D., 1981. Places Rated Almanac. Rand McNally, New York.

Boyer, R., Savageau, D., 2000. Places Rated Almanac. Rand McNally, New York.

Bradburn, N.M., 1969. The Structure of Psychological Well-Being. Aldine, Chicago.

Brown, D., 1997. *Residential Management Strategies in Formal and Informal Settlements, A Case Study from Trinidad and Tobago*. Unpublished PhD Dissertation, The University of Sheffield, England.

Brown, I., Raphael, D., Renwick, R., 1998. Quality of life profile. Item #2, Quality of Life Research Unit, Center for Health Promotion, University of Toronto.

Burgess, A., 1972. Malayan Trilogy. Penguin, Harmondsworth.

Campbell, A., 1981. The Sense of Well-Being in America. McGraw-Hill, New York.

Campbell, A., Converse, P.E., Rodgers, W.L., 1976. The Quality of American Life: Perceptions, Evaluations and Satisfactions. Russell Sage Foundation, New York.

Caplow, T., Hick, L., Wattenberg, B.J., 2001. The First Measured Century. The AEI Press, Washington, DC.

Carey, J. (Ed.), 1999. The Faber Book of Utopias. Faber and Faber, London.

Chadwick, G., 1971. A Systems View of Planning. Pergamon Press, Oxford.

Chamberlain, K., 1988. On the Structure of subjective well-being. Social Indicators Research 20, 581–604.

Chen, D.T., 2000. Smart growth. Scientific American December, 85–91.

Choldin, H., 1978. Urban density and pathology. Annual Review of Sociology 4, 91–113.

Clark, N.M., 2000. Understanding individual and collective capacity to enhance quality of life. Health Education and Behavior 27 (6), 669–707.

Cutter, S.L., 1985. *Rating places: a geographer's view on quality of life*. Resource Publications in Geography, the Association of American Geographers.

Dahrendorf, R., 1958. Out of utopia: toward a reorientation of sociological analysis. American Journal of Sociology 64, 115–127.

Davidson, W.B., Cotter, P.R., 1991. The relationship between sense of community and subjective well-being: a first look. Journal of Community Psychology 19, 246–253.

Dear, M.J., 1974. A paradigm for public facility location theory. Antipode 6 (1), 46–50.

De Beauvoir, S., 1975. All said and done. Penguin, Harmondsworth.

Dempster, M., Donnelly, M., 2000. How well do elderly people complete individualized quality of life measures: an exploratory study. Quality of Life Research 9, 369–375.

Diebel, L., 2000. Mexico's high hopes pose challenge for Fox. *The Toronto Star*, 29 November, p. A22.

Diener, E., Suh, E., 1997. Measuring quality of life: economic, social, and subjective indicators. Social Indicators Research 40, 189–216.

Dissart, J.C., Deller, S.C., 2000. Quality of life in the planning literature. Journal of Planning Literature 15 (1), 135–161.

Donald, B., 2001. Economic competitiveness and quality of life in city regions: a review of the literature. Paper Commissioned by Human Resources Development Canada, February 2001.

Evans, D.R., 1994. Enhancing quality of life in the population at large. Social Indicators Research 33, 47–88.

Everitt, J.C., Chavez-Dagostino, R.M., Cortes, L.C., Cupul-Magana, A., Rodrigo Espinosa, S., Gonzalez-Guevara, L.F., Garcia De Quevedo-Machain, R., Raymundo-Huizar, A.R., 2002. Viva Vallarta! Impacts of the re-definition of a tourist resort in Jalisco/Nayarit, Mexico. Prairie Perspective: Geographical Essay 4, 186–204.

Fischer, C., 1973. Urban malaise. Social Problems 52, 221–235.

Florida, R., 2000a. Competing in the age of talent: quality of place and the new economy. Report prepared for the R.K. Mellon Foundation, Heinz Endowments, and Sustainable Pittsburgh, January.

Florida, R., 2000b. The geography of talent. Working Paper, Carnegie Mellon University, September.

Friedman, M.I., 1997. Improving the Quality of Life: A Holistic Scientific Strategy. Praeger Publishers, Westport.

Friedmann, J., 1987. Planning in the Public Domain: From Knowledge to Action. Princeton University Press, Princeton.

Galbraith, J.K., 1996. The Good Society. Houghton Mifflin, New York.

Galbraith, J.K., 1998. The Socially Concerned Today. University of Toronto, Toronto.

Gallup, G., Rae, S., 1940. The Pulse of Democracy. Simon and Schuster, New York.

Gardner, M., 1975. On the paradoxical situation that arise from nontransitive relations. Mathematical games. Scientific American, 120–125.

Gee, E.M., 2000. Living arrangements and quality of life among Chinese Canadian elders. Social Indicators Research 51, 309–329.

Giddens, A., 1998. The Third Way. Polity, London.

Gill, T.M., Feinstein, A.R., 1994. A critical appraisal of the quality of quality-of-life measurements. Journal of the American Medical Association 272, 619–626.

Goar, C., 1997. Kids' advocates struggle to turn hope into reality. *Toronto Star*, November 1.

Grayson, L., Young, K., 1994. Quality of Life in Cities: An Overview and Guide to the Literature. The British Library, London.

Griffiths, F., 1996. Strong and Free. Stoddart, Toronto.

Gwyn, R., 1995. Nationalism Without Walls: The Unbearable Lightness of Being. McClelland and Stewart, Toronto.

Hacking, I., 1990. The Taming of Chance. Cambridge University Press, Cambridge.

Hall, P., 1996. Cities of Tomorrow. Blackwell, Oxford.

Hall, P., 1998. Cities in Civilization. Weidenfeld and Nicolson, London.

Hancock, T., Labonte, R., Edwards, R., 1999. Indicators that count! Measuring population health at the community level. Canadian Journal of Public Health 20, 22–26.

Harvey, D., 2000. Spaces of Hope. University of California Press, Berkeley, CA.

Healthy City Toronto, 1993. Toronto's first state of the city report. Healthy City Project, Toronto.

Helburn, N., 1982. Geography and the quality of life. Annals of the Association of American Geographers 72 (4), 445–456.

Herr, S.S., Weber, G. (Eds.), 1999. Aging, Rights and Quality of Life: Prospects for Older People with Developmental Disabilities Paul H. Brooks Publishers, Baltimore.

Heywood, P., 1997. The emerging social metropolis: successful planning initiatives in five new world metropolitan regions. Progress in Planning 47 (Part 3), 159–250.

Hollis, M., 1998. Trust within Reason. Cambridge University Press, Cambridge.

Homer-Dixon, T.F., Boutwell, J.H., Rathjens, G.W., 1993. Environmental change and violent conflict. Scientific American February, 38–45.

Hutton, W., 1995. The State We're In. Jonathan Cape, London.

Hwang, C.L., Yoon, K., 1981. MultiAttribute Decision Making. Springer, New York.

Ignagieff, M., 1998. A Life: Isaiah Berlin. Viking, Toronto.

Ignatieff, M., 2000. The Rights Revolution. Anansi, Toronto.

Jones, A., Kirby, A., 1982. Provision and wellbeing: an agenda for public resource research. Environment and Planning A 14, 197–310.

Kent, T. (Ed.), 1997. In Pursuit of the Public Good. McGill Queen's, Montreal.

Kingwell, M., 1998. Better Living: In Pursuit of Happiness from Plato to Prozac. Viking, Toronto.

Kingwell, M., 2000. The World We Want. Viking, Toronto.

Lai, D.W., MacDonald, J.R., 1995. Life satisfaction of Chinese elderly immigrants in Calgary. Canadian Journal on Aging 14 (3), 536–552.

Lasswell, H.D., 1958. Politics: Who Gets What When How. World Publishing, Cleveland.

Laurence, B., 1999. Smug economic consensus has fractured. *Guardian Weekly*. 14 February, p. 14.

Ley, D., Murphy, P., 2001. Immigration in gateway cities: Sydney and Vancouver in comparative perspective. Progress in Planning 55 (3), 119–194.

Lippman, W., 1937. The Good Society. Little Brown, Boston.

Little, B., 2001. Poverty data send message to policy makers. *The Globe and Mail*, July 16, p. 16.

Liu, B.C., 1976. Quality of Life Indicators in U.S. Metropolitan Areas: A Statistical Analysis. Praeger Publishers, New York.

Lo, C.P., 1997. Application of Landsat TM data for quality of life assessment in an urban environment. Computers, Environment, and Urban System 21 (3–4), 259–276.

Locke, J., 1954. In: Leyden, W.V. (Ed.). Essays on the Laws of Nature. Clarendon Press, Oxford.

Loo, C.M., 1998. Chinese America: Mental Health and Quality of Life in the Inner City. Sage Publications, California.

Maclaren, V.W., 1996. Developing Indicators of Urban Sustainability: A Focus on the Canadian Experience (Report prepared for State of the Environment Directorate, Environment Canada, Canadian Mortgage and Housing Corporation, Intergovernmental Committee on Urban and Regional Research). ICURR Press, Toronto.

Marlin, J.T., 1992. The Livable Cities Almanac. Harper Collins, New York.

Martinez, J., de Alfonso, J., 1998. Desarrollo Turistico y Sustentabilidad: E1 Caso de Mexico. Edotorial Miguel Angel Porrua. Amargura, 4, San Angel, Alvaro Obregon, C.P.01000, Mexico D.F.

Massam, B.H., 1993. The Right Place: Shared Responsibility and the Location of Public Facilities. Longman, London.

Massam, B.H., 1999. Geographical perspectives on the public good, past president's address. The Canadian Geographer 43 (4), 346–362.

Massam, B.H., 2000. Conditions of the Civic State. Magnes Press/Hebrew University, Jerusalem.

Massam, B.H., Everitt, J., 2001. What the people say: a study of quality of life in three towns in Jalisco, Mexico. Canadian Journal of Urban Research, 10, 293–316.

Massam, B.H., Prenzel, B.G., Thomas, V.A., Treitz, P.M., 2000. Quality of life surfaces: an application of two techniques. Journal of Geographic Information and Decision Analysis 4 (2), 12–26.

McCall, S., 1975. Quality of life. Social Indicators Research 2, 229–248.

Mendelsohn, M., 2000. Review of Canadian quality of life survey data. Canadian Policy Research Networks Backround Paper (www.cprn.org).

Miller, D., 2001. Forget the Olympics. *The Globe and Mail*, July 17.

Miringoff, M.L., 1995. Index of Social Health. Institute for Innovation in Social Policy, Fordham University, Tarrytown, New York.

Mui, A., 1998. Living alone and depression among older Chinese immigrants. Journal of Gerontological Social Work 30 (3), 147–166.

Mumford, L., 1922. The Story of Utopias. Viking, New York.

Murdie, R.A., Rhyne, D., Bates, J., 1992. Modeling Quality of Life Indicators in Canada: A Feasibility Analysis. Institute of Social Research, York University, Toronto.

Murphy, B., 1999. The Ugly Canadian: The Rise and Fall of a Caring Society. Shillingford Publishers, Toronto.

Myers, D., 1987. Community-relevant measurement of quality of life: a focus on local trends. Urban Affairs Quarterly 23 (1), 108–125.

Myers, D., 1988. Building knowledge about quality of life for urban planning. Journal of the American Associa-
    tion of Planners 54, 347–358.

Myrdal, G., 1960. Beyond the Welfare State. Yale University Press, New Haven.

Neugarten, B.L., Harighurst, R.J., Tobin, S.S., 1961. The measurement of life satisfaction. Journal of Georontol-
    ogy 16, 134–143.

Newman, O., 1973. Defensible Space. Collier Books, New York.

Nussbaum, M., Sen, A., 1993. The Quality of Life. Clarendon Press, Oxford.

O'Brien, D.J., Ayidiya, S., 1991. Neighborhood community and life satisfaction. Journal of the Community
    Development Society 22 (1), 20–37.

O'Neill, J., 1994. The Missing Child in Liberal Theory: Towards a Covenant Theory of Family, Community,
    Welfare and the Civic State. University of Toronto Press, Toronto.

O'Neill, M., Cardinal, L., 1992. Des indicateurs pour evaluer les projets Quebecois de villes et villages en sante,
    Quebec, University of Laval.

O'Riordan, T., Kemp, R., Purdue, M., 1988. Sizewell B: An Anatomy of the Inquiry. MacMillan, London.

Park, R.E., 1925. The City. University of Chicago Press, Chicago.

Peace, D., 1995. Tourism Today: A Geographical Analysis. Second ed. Longman Scientific, Harlow, Essex,
    England.

Pembina, 2001. Alberta Sustainability Trends 2000: The Genuine Progress Indicators Report 1961 to 1999.
    Pembina Institute, Dayton Valley, Alberta.

Peters, S., 1995. Exploring Canadian Values: A Synthesis Report. Canadian Policy Research Networks, Ottawa.

Pierce, J.T., 1992. Progress and the biosphere: the dialectics of sustainable development. The Canadian Geo-
    grapher 36 (4), 306–320.

Pinch, S., 1985. Cities and Services: The Geography of Collective Consumption. Routledge/Kegan Paul, London.

Putnam, R.D., 2000. Bowling Alone. Simon and Schuster, New York.

Renwick, R., Brown, I., 1996. The center for health promotion's conceptual approach to quality of life: being,
    belonging and becoming. In: Renwick, R., Brown, I., Nagler, M. (Eds.). Quality of Life in Health Promotion
    and Rehabilitation. Sage, Thousand Oaks, CA, pp. 75–88.

Riesman, D., 1954. Some observations on community plans and Utopia. Individualism Reconsidered. Free Press,
    New York.

Rivlin, A.M., 1971. Systematic Thinking for Social Action. Brookings Institute, Washington, DC.

Robertson, A.F., 1984. People and the State: An Anthropology of Planned Development. Cambridge University
    Press, Cambridge.

Rogerson, R.J., 1995. Environmental and Health-Related Quality of Life: Conceptual and Methodological Simi-
    larities. Social Science and Medicine 41 (10), 1373–1382.

Rogerson, R.J., 1997. Quality of Life in Britain. University of Strathclyde, Glasgow.

Rogerson, R.J., 1999. Quality of life and city competitiveness. Urban Studies 36 (5–6), 969–985.

Rogerson, R.J., Findlay, A.M., Morris, A.S., Coombes, M.G., 1989. Indicators of Quality of Life: Some
    Methodological Issues. Pion Publication, Great Britain.

Rogerson, R.J., Findlay, A.M., Paddison, R., Morris, A.S. (Eds.), 1996. Class, consumption and quality of life,
    Progress in Planning 45 (1), 1–66.

Romney, D.M., Brown, R.I., Fry, P.S., 1994. Improving the quality of life: prescriptions for changes. Social
    Indicators Research 33, 237–272.

Rosenbaum, S.P. (Ed.), 1975. The Bloomsbury Group University of Toronto Press, Toronto.

Rosenberg, M., Everitt, J., 2002. Planning for aging populations. Progress in Planning 56, 119–168.

Rosser, R., Kind, P., 1978. A scale of valuations of states of illness: is there a social consensus? International
    Journal of Epidemiology 7 (4), 347–358.

Rossi, R.J., Gilmartin, K.J., 1980. The Handbook of Social Indicators: Sources, Characteristics and Analysis.
    Garland STPM Press, New York.

Rowe, M.D., Pierce, B.L., 1982. Some tests of analytical multi-objective decision-methods. Socio-Economic
    Planning Sciences 16 (3), 133–140.

Samuelson, P.A., 1973. Economics. McGraw-Hill, New York.

Saul, J.R., 1995. The Unconscious Civilization. Anansi, Toronto.

Saul, J.R., 1997. Reflections of a Siamese Twin: Canada at the End of the Twentieth Century. Viking, Toronto.

Schmandt, H., Bloomberg, W., 1969. The Quality of Urban Life. Sage, Beverly Hills, CA.

Schneider, M., 1976. The quality of life and social indicators. Public Administration Review May–June.

Schwab, W.A., 1992. The Sociology of Cities. Prentice Hall, Englewood Cliffs, NJ.

Sen, A., 1993. The economics of life and death. Scientific American May, 40–47.

Sen, A., 1999. Development as Freedom. Knopf, New York.

Sewell, J., 1995. The Shape of the City. University of Toronto Press, Toronto.

Sharpe, A., 2000. A Survey of indicators of economic and social well-being. Background Paper prepared for Canadian Policy Research Networks (www.cprn.org).

Slottje, D.J., Scully, G.W., Hirschberg, J.G., Hayes, K.J., 1991. Measuring Quality of Life Across Countries. Westview Press, Boulder, CO.

Smith, D.M., 1972. The Geography of Social Well-Being. McGraw-Hill, New York.

Smith, D.M., 1973. An introduction to welfare geography. Occasional Paper II, Department of Geography and Environmental Studies, University of the Witwatersrand.

Smith, D.M., 1974. Who gets what, where and how: a welfare focus for human geography. Geography 59, 289–297.

Solomon, B.D., Haynes, K.E., 1984. A survey and critique of multi-objective power plant siting decision rules. Socio-Economic Planning Sciences 18 (1), 71–79.

Spinner, J., 1994. The Boundaries of Citizenship: Race, Ethnicity, and Nationality in the Liberal State. Johns Hopkins University, Baltimore.

Stackhouse, J., 2001. Out of Poverty. Vintage Canada, Toronto.

Stanford, J., 1996. *Letter to Globe and Mail*. January 26.

Stover, M.E., Leven, C.L., 1992. Methodological issues in the determination of quality of life in urban areas. Urban Studies 29 (5), 737–754.

Strange, S., 1996. The Retreat of the State. Cambridge University Press, Cambridge.

Strong, T.B. (Ed.), 1992. The Self and the Political Order Blackwell, Oxford.

Szalai, A., Andrews, F.M. (eds.), 1980. *The quality of life: comparative studies*. SAGE Studies in International Sociology, sponsored by the International Sociological Association/ISA.

Teitz, M., 1968. Towards a theory of urban public facility location. Papers and Proceedings of the Regional Science Association 31, 35–44.

Theobald, R., 1997. Reworking Success: New Communities at the Millennium. New Society Publishers, Gabriola Island, BC.

Townshend, I.J., 2001. Structural Differences in the Contribution of Community to Well-Being in Urban Social Areas. Canadian Association of Geographers, Annual Meeting, Montreal.

Tuan, Y., 1974. Topophilia. Prentice Hall, Englewood Cliffs, NJ.

Turksever, A.N., Atalik, G., 2001. Possibilities and limitations for the measurement of the quality of life in urban areas. Social Indicators Research 53, 163–187.

Valpy, M., 1997. You can't eat their words. *The Globe and Mail*, October 10.

Watson, P., 1998. Forget your trouble. C'mon get happy. *The Globe and Mail*, 18 April, p. E1.

Wheeler, R., 1991. The theoretical and empirical structure of general well-being. Social Indicators Research 24, 71–79.

Whitfield, D., 1992. The Welfare State. Pluto Press, London.

Williams, A.M., Randall, J.E., Holden, B., Labonte, R., Muhajarine, N., Abonyi, S., Klein, G., Carr, T., 2001. Quality of Life in Saskatoon: Achieving a Healthy, Sustainable Community. Canadian Association of Geographers, Annual Meeting, Montreal.

Wirth, L., 1938. Urbanism as a way of life. American Journal of Sociology 44, 1–24.

Wish, N.B., 1986. Are we really measuring the quality of life? American Journal of Economic and Sociology 45 (1), 93–99.

Wittgenstein, L., 1922. Tractatus Logico-Philosophicus 1961. Routledge, London Transl. by Pears, D.F., McGuinness, F.F..

Wood, L.A., Johnson, J., 1989. Life satisfaction among the rural elderly: what do the numbers mean? Social Indicators Research 21, 379–408.

Yuan, L.L., Yuen, B., Low, C. (Eds.), 1999. Urban Quality of Life: Critical Issues and Options School of Building and Real Estate, University of Singapore, Singapore.

Zapf, W., 2000. Social reporting in the 1970s and in the 1990s. Social Indicators Research 51, 1–15.