

USING DECISION ANALYSIS TO IDENTIFY GOOD INSTITUTIONAL
ARRANGEMENTS FOR LOCAL PLANNING

by

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ABSTRACT

This paper addresses a complex policy problem: "What are good institutional arrangements for local or neighbourhood planning in Vancouver?" The question has been the subject of analysis, debate and planning in a number of different forums over the past two decades and more, most recently in CityPlan, a large-scale participatory planning exercise. The study described here approached this issue as a decision analysis problem. *Decision analysis* is a set of analysis procedures that has been used successfully to incorporate public and multiple-stakeholder input into complex decision making, in resource management issues for example. This analysis approach focusses on systematic identification and structuring of objectives that are correlated to values of stakeholders. It is used to analyze how alternatives perform from the point of view of different stakeholders who weight objectives (and predict impacts) differently from each other. Case studies suggest that this analysis framework has heuristic power and is capable of identifying and structuring good-fit solutions for conflicting interests. The key question addressed in this paper is whether this analysis approach can be used to advantage in an urban planning setting where there is citizen participation in complex policy questions. The analysis process described here was undertaken with the participation of 30 individuals from a range of stakeholder types, including citizens, developers, city staff, and city council. It completed three steps of decision analysis: identifying and structuring objectives; identifying and structuring alternatives; and predicting the impacts of alternatives on objectives. The results permit some initial judgements about the acceptability and potential productivity of this analysis approach in the study setting.

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1. CHAPTER I: INTRODUCTION

1.1. CONTEXT

The decision problems that confront urban planners and urban groups involved in planning are characterized by a need to balance conflicting objectives and values, and reflect the views and interests of several or many stakeholder groups. Objectives, interests and uncertainties about consequences can be numerous and make systematic structuring of problems difficult. Concerns about processes taking too long or not reaching any resolution are commonplace. Citizens and private-interest groups complain that their interests are not consistently recognized in planning decisions. Professional planners say they would like planning in the public arena to be more analytical. A decision-making approach is called for that engages all interested parties in a process of systematic analysis.

Decision analysis and its variations (multiple-objective decision analysis; multiple attribute utility theory) are frameworks for making complex decisions. They have worked well at finding broadly acceptable solutions to complex policy problems. They have not been widely used in urban planning, but have been tested in resource-use and infrastructure decisions where there are a number of different stakeholders and broad public input.

Elements of decision analysis are applicable in any complex decision process, especially its identification, structuring, and consistent application of strategic objectives. It is true that most analysts using this approach follow relatively straightforward identification of objectives and alternatives with quantitative weighting procedures that appear complex and thus may be

unsuitable for a public process . However, such quantifying steps can be foregone without losing the value of the decision analysis framework. This was done in the study described here.

Conversations with City of Vancouver Planning staff, citizens involved in planning, and business-people with a stake in planning, showed receptivity to the idea of testing a multiple objective decision analysis framework that might clarify the views and interests of different groups. It was decided to conduct a test study on a complex policy question that had previously been tackled in Vancouver's CityPlan¹ public planning process and would be dealt with again in a second phase of CityPlan.

1.2. PROBLEM STATEMENT

The study described here addresses the following question:

Can a decision analysis framework be useful in identifying good arrangements for local planning in Vancouver?

This question suggests two more specific questions

- 1. How will participants accustomed to planning methods currently in use respond to the tasks required by a decision analysis framework?***
- 2. What approach should be taken in introducing decision analysis methods in this public planning setting?***

It was not expected that these questions could be fully answered with the available time and resources. The analysis was a preliminary study and not a complete planning process. It was assumed that at the least this study would give useful indications as to how acceptable and workable a decision analysis approach would be in this planning context, for the different stakeholders involved.

1.3. STUDY CASE

The test study for the method is similar to a question addressed in the recently-completed CityPlan process: how best to do local planning in Vancouver, or more precisely, to identify, structure and evaluate good institutional arrangements² for planning in Vancouver at the neighbourhood or local area level. This is a policy question that has been addressed repeatedly in different forums over the last two decades. The question is about roles, powers and resources of different participants in local planning processes: council, city departments, citizens (as representatives of groups or as individuals) and private interests (landowners, developers). CityPlan recently dealt with this issue in its "Making Decisions" theme, and the city is required under the terms of CityPlan to deal with aspects of this question once again in planning for *neighbourhood vision plans*. Earlier, this question was repeatedly addressed in the context of experimentation with approaches and arrangements for *local area planning*³.

For the test study, thirty individuals from across a fairly complete range of stakeholder categories (with council and staff defined as stakeholders for this particular policy question) were identified and their participation was solicited. Attention was given to including a range of perspectives within each identified group, and to seeking out individuals who were knowledgeable about the question. The problem of representation and criteria for deciding who participates would be critical in a full-scale analysis, but for the purposes of this study, the assumption was simply that a range of stakeholder types would be involved. Chapter 5 discusses how the question of representation might be played out in a full-scale analysis of the study problem.

Interviews and workshops were conducted over a three-month period in the summer of 1995. Three stages of the policy analysis (identification and structuring of objectives; identification and structuring of alternatives; and evaluation of the impacts of alternatives on objectives) were undertaken and completed.

The scale of the exercise was determined by the practical circumstances. Advice from city staff was that no-one was likely to give much more than an hour of their time to such a project.; this turned out to be true for many of the participants, and only a few of them were involved in more than one stage of the analysis. This limited participation has been taken into account here in evaluating the outcomes of the study.

The scope of the planning processes to be addressed also had to be well thought out; Planning staff felt that different institutional arrangements would be required for three different kinds of plans: multi-issue or comprehensive neighbourhood planning; planning for a sub-area smaller than a neighbourhood, and where only one or a few issues were involved; and single issue plans that would affect all or many areas of the city, but were local in effect (Forbes-Roberts; Thomsett). The study addresses the first type, multi-issue neighbourhood or local area⁴ plans. It is reasonable to assume that principles and arrangements established for this type will be in some degree transferable to the other types.

1.4. SUITABILITY OF THE STUDY CASE

A number of features of the study problem suggested its suitability as a case study. This existing policy problem was on a city-wide scale, and a small parallel study could be undertaken without muddying the waters of an ongoing process. At the same time the issue was a live one, with current interest from a large number of individuals, so it was not difficult to get participation. This was a complex problem with tradeoffs between conflicting objectives, and uncertainty about the impacts of different alternatives. As well, debates and planning exercises on this issue had been hampered by rigid positioning. It appeared that a decision analysis might reconfigure alternatives usefully, identify new ones, or lead to a re-evaluation by stakeholders of existing alternatives. In other words, this was the kind of tough problem where decision analysis techniques could profitably be brought to bear.

There were apparent risks and drawbacks as well. The problem might defeat the analysis procedure given the limited resources available for the study. As well, the amount of time required for the analyst to become familiar with the history and present context of the question was considerable, and it was critical to be able to speak the language of the participants, some of whom had been engaged with this complex question for two decades. However, the problem was one that the researcher found interesting and which seemed to provide a good test of the acceptability of the important first steps of the method and of their probable ease of use.

1.5. TERMS OF REFERENCE AND ASSUMPTIONS ABOUT THE ROLE OF THE ANALYST

The researcher was acting in the role of an analyst structuring and animating the process. In an institutionally-supported analysis, this role in a fully-supported process could fall to an outside consultant, or to planning staff, or to any party agreed by the stakeholders. There are obvious problems if the analyst has an interest in a particular policy outcome, either the preferred outcome of his or her own department, group, or employer, or the preferred outcome of the client. A capable consultant for managing the analysis would of course be paid, and then the existence of a paying client would have to be assumed. If the funding client in any way directed the analyst to an outcome (which is difficult to avoid, even with conscious effort), the analysis would be compromised and could lose its potential to deliver broadly acceptable solutions. It was decided that for the purposes of the study all the stakeholders would be treated as clients and as equals as far as possible. If Council or staff had been retaining an analyst, they could in fact have directed him or her to treat all stakeholders equally as clients. This kind of commitment to evenhandedness could be reinforced by making the selection of the analyst subject to stakeholder approval.

Terms of reference are not so simple in reality, however. Council is likely to impose limits on what alternatives can be included in the decision frame. A neutral consultant might have to negotiate with groups and suggest they drop alternatives outside the parameters set by Council, if their inclusion bogged down the analysis and lost advantages that could come from

getting a workable solution within the approved decision frame. This was a serious problem in the study, as is described in Chapters 4 and 5. .

1.6. EXPECTED RESULTS AND ACTUAL RESULTS

The following outcomes were expected:

- Identification and structuring of objectives, identification and structuring of alternatives, and evaluation of the likely impacts of alternatives on objectives, would be completed. The products of these stages of analysis would be substantial, would represent progress toward a solution of the decision problem, and would serve as reference points in later processes addressing the same issues.
- Participants would become familiar with the assumptions and conventions of the first, critical steps in multiple objective decision analysis.
- Participation formats for the three stages of analysis undertaken would be tried and revised, and some conclusions would be able to be drawn as to what formats would work well with different stakeholders.

The actual outcomes are as follows:

- the objectives stage proceeded relatively smoothly, but structuring alternatives and evaluating impacts were more complex and time-consuming than expected;
- the generated set of objectives seems useful as a base, alternatives and results from evaluation of impacts also appear useful but clearly require reworking;
- participants were not able to get a clear understanding of the analysis approach within the time frame of their participation, as the focus shifted early on to using the analysis framework without lengthy orientations in order to get results in the brief time-span allotted; and
- insights were gained as to how participants would react to the analysis approach, and what participation formats might function well for each stage of analysis.

Judgement suggests that some elements of decision analysis will be useful in this context. Insights gained from the study process can serve to make succeeding trials more productive.

1.7. ORGANIZATION OF THESIS:

Chapter 2 describes and explains the decision-making framework used in the study, and cites case studies that demonstrate how this approach has been used in other contexts. Chapter 3 describes and analyzes community planning programs conducted in the past that constitute a methodological context for the study: CityPlan, Local Area Planning, and other local planning programs. These have undoubtedly conditioned not only reactions to the analysis, but also expectations about the scope of the alternatives for the test study. Chapter 4 presents the test study as actually conducted, focussing on reactions and assumptions of participants. Chapter 5 presents a plan for a fully-supported study which builds on the test study results. This chapter also draws conclusions about the potential usefulness of decision analysis methods in urban planning, and discusses how such methods can be introduced.

1.8. NOTES FOR CHAPTER 1.

¹A very large-scale public exercise to develop development strategies for the City of Vancouver. See Chapter 3 for a discussion of CityPlan.

² the defined roles, functions and powers shared among the institutions, departments, groups and parties involved in carrying out a public function.

³ Comprehensive planning programs conducted continuously through the 1970s and 1980s in "local areas" of Vancouver, 23 areas of approximately equal population size, originally designated as administrative Unified Service Areas in the late 1960s.

⁴ See note above. These 'local areas' have been the locus for a large number of planning processes, and many City functions and local community functions are organized at this level. New neighbourhoods identified and developed after CityPlan could supersede or be overlaid on these older divisions, though this has never been clarified by council or staff.

2. CHAPTER II. METHODOLOGY: DECISION ANALYSIS AS A FRAMEWORK FOR STRUCTURING PUBLIC DECISION PROCESSES

The analysis method tested here is adapted from a number of complex decision making approaches which are related to decision analysis¹: *value-focussed thinking*² (Keeney 1992); *multiple attribute utility theory* or *MAUT* as described by Raiffa (1982) and Edwards and von Winterfeldt (1986,1987); *multiple-objective decision analysis* (McDaniels 1992, 1994); and multi-criteria analysis (Marttunen and Hamalainen 1995). Each of these analysis frameworks comprises a series of steps similar to that shown in the chart below. For the sake of simplicity these approaches are treated here as being essentially the same, and will be referred to for the purposes of this paper as multiple objective decision analysis or just decision analysis.

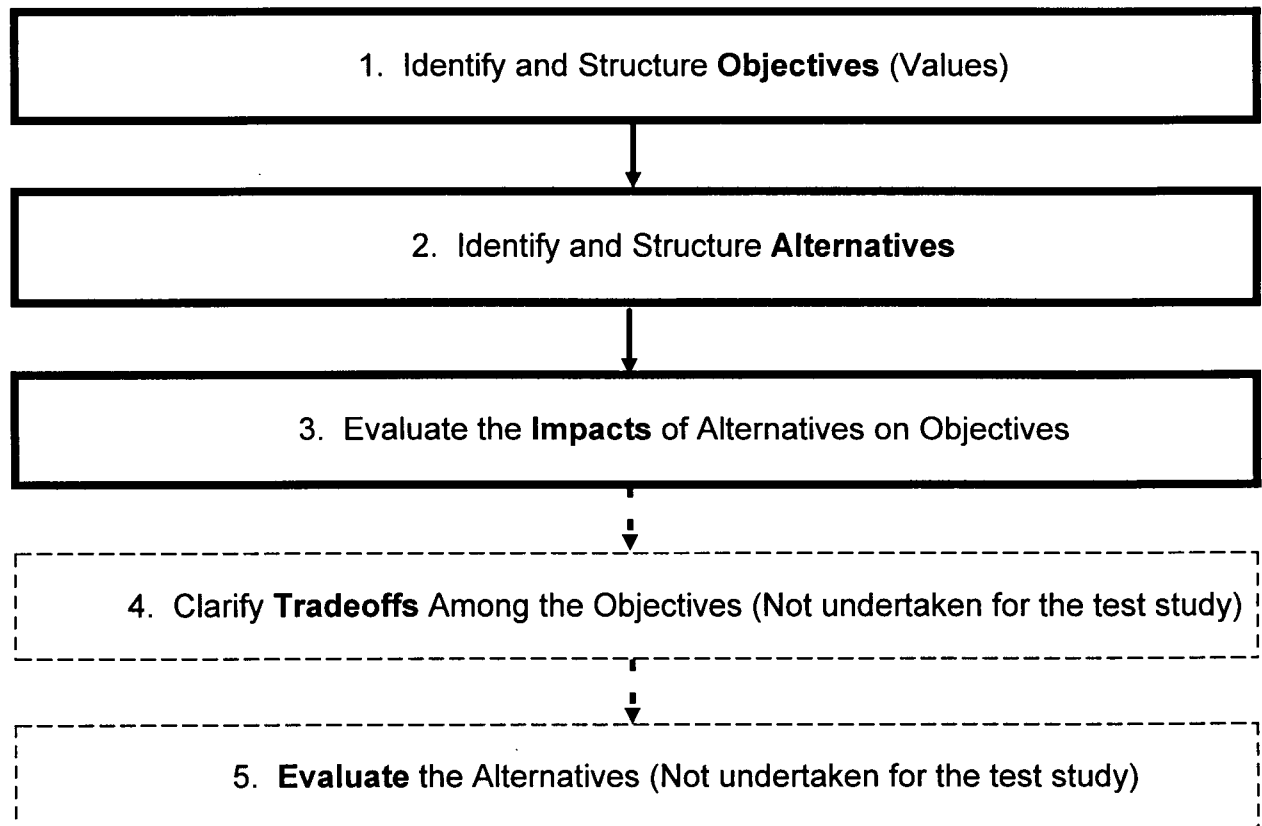


Figure 2-1: Steps in decision analysis (based on McDaniels 1992, p. 3).

It was assumed that steps 1 to 3 would provide significant gains without undertaking steps 4 and 5. (Steps 4 and 5 conventionally require assigning numerical weights to objectives, expressing performance of alternatives as numerical values, and then developing from these a quantitative performance index for each alternative. There were doubts as to how these procedures would be received by participants, and difficulties were foreseen in defining and measuring quantitative *attributes*³ that would convincingly describe performance of alternatives on objectives.) An analysis undertaking only steps 1 to 3 would still have analytical value, would assist the decision, and would serve as a good introduction to the basic approach for participants. As McDaniels has said, if these steps are completed well (making a good identification of objectives and structuring them well, making a good identification of alternatives and structuring them to meet objectives, and making a careful prediction of the impacts of each alternative on each objective) they represent real progress in any decision making process (1994b). Quantifying steps may be of interest in this case and others in this planning context if they are carefully presented to participants; their possible application to the study case is discussed in Chapter 5.

The basic analysis framework described here is not prescriptive or rigid. Textbook descriptions of variants on decision analysis tend to present a well-integrated and relatively seamless process. Case studies suggest a more untidy process, but one in which the results from each step of analysis may be useful aids to judgement in themselves. The approach can be used with any group of participants, from broad stakeholder participation to a single executive decision-maker. Its various stages have been conducted as interviews with individuals or as

questionnaires (Marttunen et al 1995), as workshops or panels with varying scales of participation (McDaniels 1992), as multiple-stakeholder workshops or as separate stakeholder group workshops (Edwards and von Winterfeldt 1987; Brown 1984), and even with randomly-chosen citizen panels (Renn et al 1993). It was important in the case study to be able to adapt the analysis framework and the way it was handled to the particular circumstances; to the configuration of stakeholders and decision-makers, to the expectations of participants, and to the time and other resources available. It was essential to make it acceptable and comprehensible to participants.

No correlation is made here between the scale or type of problem and choice of this method. Keeney demonstrates the use of decision analysis techniques to attack problems ranging from transportation of radioactive materials to personal decisions like choices between job offers (1992, 4).

2.1.1. Stakeholders: identification and basis for participation

The role of stakeholders in the analysis and the way they are identified is critical. This is a problem that has been addressed quite differently by a number of analysts using multiple objective decision analysis. The approach taken here is similar to that of Marttunen et al in a 1991 analysis where they attempted to “find a balanced and representative set of persons so that the interviews would cover all the different opinions. The persons were selected by the steering group and not nominated directly by the interest groups.” They chose “persons who were active in the related organizations and tried to cover all the important interest groups which were

directly or indirectly affected by the project” (4). There are obvious pros and cons to this. Other approaches are discussed in Chapter 5. This problem needs to be addressed well but the scope of the test study precluded doing so.

2.2. STEP 1: IDENTIFYING AND STRUCTURING OBJECTIVES

2.2.1. What are objectives in this context?

Identifying and structuring objectives or values well is the key to decision analysis: Keeney’s (1992) and McDaniels’ (1992) procedures and frameworks for doing this are the basis for this step in this study. *Objectives* in this context are not quantified goals; McDaniels explains objectives simply as “things that we care about” in the decision context (1994b). In some analysis frameworks they are referred to as *values*⁴. Keeney defines an objective as “something that one desires to achieve..... characterized by three features: a decision context, an object, and a direction” (of change) (1992:34). This last aspect, direction, will be more easily grasped if the reader refers to the Fundamental Objectives List in the following chapter, where arrows are used to show the preferred direction of change for the objective: less or more (all things being equal), maximizing or minimizing values but within a context of tradeoffs against other, conflicting objectives.

As Keeney states, even though the only reason for being interested in a decision is in order to achieve objectives, few analysts pay adequate attention to the articulation and

systematic structuring of objectives, despite the fact that they all include listing of objectives in analysis schemes (1992, 55).

2.2.2. Functions of objectives

Objectives framed for decision analysis have three primary functions:

1. a basis for evaluating the alternatives;
2. a basis for developing “innovative new strategies that are more attractive than the conventional alternatives” and
3. a way of identifying information and research needs for the analysis.

(McDaniels 1992, 4)

Structuring a comprehensive *hierarchy of fundamental objectives* (Keeney’s term) or *value tree* (numerous analysts) can enable stakeholders to gain insights into others’ interests. It can also lead to incorporation of objectives in their planning that they say they care about in principle but tend to neglect in the course of negotiation.

2.2.3. Distinguishing means objectives and fundamental objectives

It might be assumed that stakeholders would have clashing objectives and would not be able to agree on a common objectives hierarchy or value tree. This could occur if both *means* objectives and *fundamental* (strategic) objectives were considered. *Means objectives* are objectives that are important because they have “implications for the degree to which another (more fundamental) objective can be achieved”; a *fundamental objective* is an “essential reason for interest in the decision situation.” (Keeney 1992, 34). Stakeholders may conflict on

means objectives (e.g. “give maximal play to market forces” vs. “give maximal decision-making power to residents”) but in general these are negotiable means to realizing fundamental objectives which all stakeholders could agree on. Examples of such fundamental objectives in the study problem might include: ‘minimize costs of planning to private interests’ ‘increase the rate of public participation in local planning’, or ‘increase time efficiency of planning processes.’ Different stakeholders would weight these differently, but all or almost all would recognize them as being objectives. Means objectives can be represented in features of alternatives, rather than including them in value trees where they are likely to lead to conflict. Different stakeholders will prefer different means to achieve similar fundamental objectives.

2.2.4. Identifying values for a decision context

Decision analysis methodology does not tell us *who* should provide the objectives that are structured into value trees. The analyst alone may identify and structure them without broad consultation, but there are obvious liabilities to this approach. The most straightforward tactic is to identify all the stakeholders in the decision (those parties whose interests are affected by it), and elicit values (objectives) from them. In general it is efficient to identify persons who are knowledgeable about the decision problem. There is a tradeoff here between openness and efficiency.

The interview process is not straightforward, especially if interviewees are not familiar with the conventions of the analysis. McDaniels felt it necessary in the 1992 analysis cited to have participants work to carefully distinguish between ends and means objectives (5). The

study presented in this paper suggests that this may not be practical with participants unused to formal analysis procedures or where time is too short for a full discussion of the method and its steps. The analyst has the fall-back option of her- or himself structuring objectives hierarchies from relatively unstructured input.

Keeney lists many devices (1992, 57-65) that may be used to help participants to identify objectives. The number and variety of these devices suggests the difficulty of this task: they include wish lists, identifying bottom-lines, listing problems and shortcomings, talking about constraints and deadlines, imagining "perfect:" or "terrible" alternatives, and visualizing the problem from other stakeholders perspectives. Any of these may help in the identification of the operative set of objectives for the decision context.

2.2.5. Structuring fundamental objectives hierarchies

It is useful to display an aggregate list of fundamental objectives in table form (see test study objectives on page 49). In the first stage of the analysis objectives are not ranked in any order of preference, and this must be made clear to participants.

Objectives are *specified* or broken down into components for purposes of more accurate evaluation. For example, in the present exercise, the objective 'minimize financial costs of planning' may be broken down into costs to the City and costs to private interests (given that impacts of different options are differentiated among these sub-objectives) and this specification would permit a more accurate and thorough estimate of overall financial costs. Costs to private

interests, for example, could then be further subdivided into implementation costs for new arrangements and long term costs for new arrangements; long term costs could be specified as costs of attending meetings and costs of delays in applications for projects, etcetera. Any given level of specification may be useful if an alternative has a different impact on different sub-objectives, if specification makes a more detailed and accurate characterization of costs and benefits possible, or if participants in the analysis would weight sub-objectives differently.

The more we specify objectives, the more unwieldy our tree or hierarchy becomes as an evaluation instrument. If we imagine 6 or 7 objectives broken down in the same detail as is "financial costs" in the diagram above, we can see that specification to this level of detail would be a hindrance when working at the level of identifying broad strategies; it would, on the other hand, be useful when trying to make a close evaluation of performance of alternatives on objectives in steps 3 to 5 of the process. Specifying objectives in this way gives a quick indication of what data need to be assembled, and of where research is needed to make a reasonable prediction of performance of alternatives.

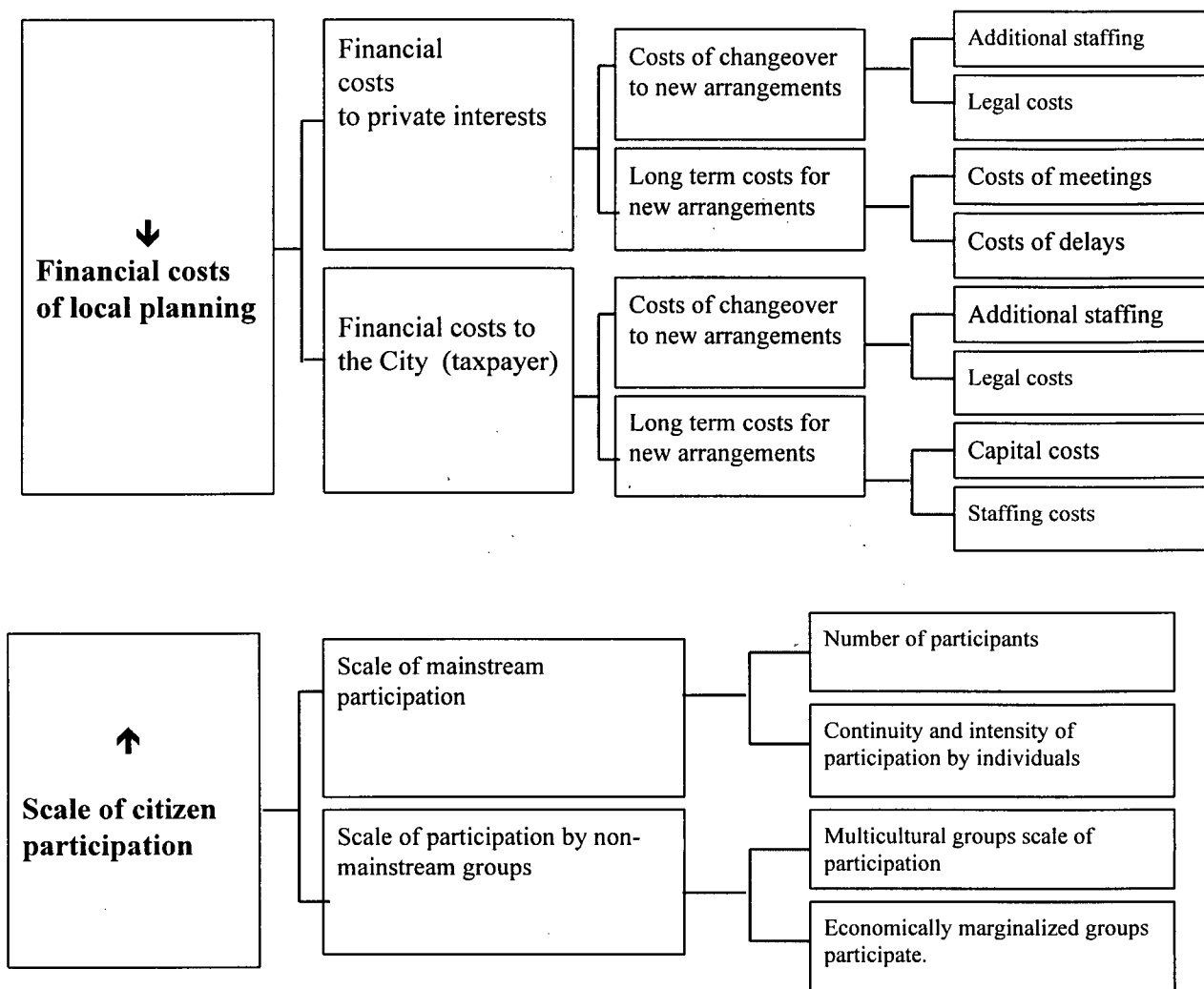


Figure 2-2: Specification of objectives “Financial costs of planning” and “Scale of citizen participation.”

Where analysis is undertaken as multi-stakeholder analysis, it is conventional to have each stakeholder group structure a value tree (or objectives hierarchy: see following section). (It is also common practice to aggregate compatible stakeholders [Brown 334; Edwards and von Winterfeldt 155] in order to reduce the number of value trees that need to be incorporated, and reduce the scale of the procedure in general). The analyst may next compose an aggregate value tree of unweighted objectives which are acceptable to all stakeholders

2.3. STEP 2: IDENTIFICATION OF ALTERNATIVES

When objectives are complete and well-structured, the next step is identification and structuring of alternatives. This is a key step: the limits of the decision frame need to be well-defined during this process. Generally alternatives of four types need to be considered: existing policy proposals; generic policy solutions; modified generic policy solutions; and custom-made solutions (Weimer and Vining 225). In the study case existing alternatives, custom-made solutions based on these, and generic alternatives were considered in the early stages of analysis.

It was also decided to include a 'momentum' or 'do-nothing' option as a kind of baseline, as some analysts recommend (Weimer and Vining 1992, 225) (see alternative 2 in Chapter 4), although Keeney warns that such a practice may anchor the analysis and focus participants on 'tweaking' the old alternatives rather than creating new ones(1992, 9). McDaniels has demonstrated that it may be useful to focus on a few generic alternatives which could be reconfigured in many different ways in a later phase in an extended analysis (1992). After locating existing and generic options, the analyst should then work from values and objectives to seek to structure new alternatives and restructure those already identified.

2.3.1. Working from objectives and from a calculation of tradeoffs

It is important to create alternatives that are acceptable to all the stakeholders (Fisher and Ury, 1981)(Keeney 237. Working from objectives could be a productive way of doing this,

perhaps not in the first but in some subsequent round of structuring alternatives. Keeney proposes that it is necessary, for the purpose of forming attractive alternatives, to structure the values of all the stakeholders completely (1992). He also suggests that it is desirable to specify tradeoffs between values when formulating alternatives. Logically this latter step can best be undertaken after calculating impacts of an initial set of alternatives. Identification of new alternatives, then, may be a recursive step after evaluation of impacts has been done on generic or existing alternatives. New alternatives might allow stakeholders to give up something relatively unimportant to themselves, but important to other stakeholders, in exchange for something relatively unimportant to other stakeholders, but important to themselves (Fisher and Ury 1991, 73-76). It is important to know the way other stakeholders structure fundamental values in order to be able to find alternatives with optimal tradeoffs.

2.3.2. Working from strategy tables

Where there is a large number of possible alternatives because there are a large number of component decisions to be made, and a number of alternatives to each decision, even very involved participants may find it difficult to construct overall strategies that are internally consistent, and sufficiently detailed that useful predictions may be made about their impacts on objectives. *Strategy tables* are a useful device to decompose alternatives into a large number of sub-alternatives, and then recompose a large array of decisions into coherent strategies. McNamee and Celona describe strategy tables as a “surprisingly effective way to apply intuition and experience to a highly complex situation.” (145). Strategy tables break down complex bundles of decisions into simpler decisions on policy variables. McDaniels, Healey and Paisley

used a simple strategy table to identify a range of options for institutional arrangements for co-operative fisheries management⁵(2122). They first listed policy variables under the control of the decision maker and then established a range of options on each variable. Strategies were identified by looking at combinations of values for the whole range of policy variables that could be controlled in the decision frame. This makes sense for the test study problem, which undertakes a somewhat similar task.

2.3.3. Establishing limits to the range of alternatives

Theorists are divided over whether to limit the range of options to those that seem implementable. Some analysts prefer to eliminate, for efficiency's sake, alternatives that seem far-fetched or unlikely to gain support from decision-makers. However, to eliminate such options may mean risking losing the participation of some stakeholder groups. Edwards and von Winterfeldt have stated that, "One or more options.....must embody all the values and concerns or each relevant stakeholder group" (142-3). For the study described here, it seemed preferable to accommodate a range of strategies that included the 'bottom lines' of all substantial stakeholders, even though some of these positions were outside the decision context that Council could be expected to approve. Keeney has proposed asking stakeholders to suggest alternatives, and working with individual stakeholders to structure additional alternatives based on their values (233). This was productive in the present study, though it caused some problems in the third stage of the analysis. Weimer and Vining emphasize that alternatives ought to be consistent with "available resources, jurisdictional authority and controllable variables" (227-8).

Having stakeholders structure their own alternatives may conflict with this principle of policy analysis.

Problems in the alternatives phase of the study provide useful lessons for application of the analysis framework in the study setting, and raise questions about the strategic role of the analyst, as chapters 4 and 5 explain.

2.4. STEP 3: EVALUATION OF IMPACTS

Once an initial set of alternatives has been identified and structured, decision analysis requires a prediction of the impact or consequence of each alternative for each objective in the fundamental objective hierarchy. This evaluating step is typically organized by using an *alternatives by objectives matrix*. In each cell is recorded a predicted consequence of the alternative for the objective on that row; see the matrix for the test case on page 61.

Analysts using or describing this analysis approach generally stipulate that each impact be expressed as a quantitative measure or *attribute*. This quantification is most readily done if the identification and specification of objectives are geared toward doing so. Use of attributes permits a seemingly clear-cut quantitative comparison of options, but the realism of limiting objectives to those which can be expressed in numerical terms, or trying to devise quantitative measures for each important impact, has been cast in doubt by some analysts (Fischhoff 1991, and Vatn and Bromley 1994). Keeney believes that fundamental objectives chosen should be measurable and operational (82), but it was hard to see how this could be respected in the test study. Von Winterfeldt and Edwards point out that dimensions of values, for example

aesthetics, are not always measurable, and believe that the goal of structuring value trees is “faithful representation of an inherently subjective value structure, not objectivity” (41).

McDaniels describes an approach in which “impacts are simply described and displayed in a matrix.....decision-makers are expected to implicitly judge tradeoffs among accounts” (1992: 43). This approach was preferred for the test analysis, where some impacts may be readily quantified (specified financial costs to the city and to private interests; participation rates) but most may not (“technical quality and competence of local planning”). The question of *who* ought to make judgements about impacts is a critical one. In other settings, like resource use decisions for example, these predictions may be made by technical experts and research consultants. In an Arizona water management analysis documented by Brown, impacts calculated by consultants were apparently accepted by stakeholders, and stakeholders’ principal input was weighting objectives. In a Finnish flood protection study described by Marttunen et al, on the other hand, it was assumed that stakeholders should also make judgements on the magnitude and direction of the impacts. (In Marttunen’s study, as in the study presented here, different stakeholders predicted different and even opposite impacts [9]). Incorporating stakeholder participants’ judgements on impacts seemed necessary in our test study on local planning arrangements, since it would scarcely have been possible to cast experts on these issues as impartial or as having knowledge different in kind from those of informed participants.

2.5. SUMMARY

The analysis framework used here focuses on values. Participants are drawn from as complete a range of stakeholders as possible. A well structured set of agreed objectives,

reflecting the values of all participants, anchors the study at each stage of analysis. Participants are expected to have input in the identification and structuring of alternatives, and to make judgements about the performance of alternatives relative to each of the objectives.

Quantification of performance of objectives, and numerical weighting of objectives, are foregone. One goal of the study is to demonstrate that decision analysis has considerable heuristic power despite omission of quantifying steps.

2.6. NOTES FOR CHAPTER 2

¹ Raiffa describes decision analysis as “decisions under uncertainty in non-interactive, non-competitive decisions” (1995, 2) but the term seems to have taken on much broader scope, so that what Marttunen et al describe as decision analysis includes multi-stakeholder negotiation, and incorporates interaction between competing interests in the analysis process. .

² Keeney does not name his model, but simply describes its features. The term value-focussed thinking is one he uses to describe his approach, but it may not be correct to construe it as his name for the analysis model he uses.

³ Attributes are consequences of alternatives expressed as a quantity.

⁴ For the purposes of this paper, objectives and values are highly correlated terms. Where Keeney and McDaniel's talk about structuring *objectives*, Edwards and von Winterfeldt refer to structuring *values* (1987), but fundamental objectives hierarchies developed by the former two analysts and value trees developed by the second, are similar in structure and function.

⁵ The decision problem discussed in McDaniel's has some striking similarities to the one addressed in this paper: it considers different institutional arrangements that vary on types and degree of co-management and on delegation of decision power.

3. CHAPTER III: BACKGROUND: LOCAL PLANNING PROGRAMS

What characterizes good institutional arrangements for local planning? This question has been debated by the public and by City staff in a number of forums over a period of 20 years and more. Most recently, alternative planning arrangements have been identified, critiqued and voted on in CityPlan, whose framework for participatory policy analysis is discussed in section 3.1. Staff have also experimented with alternatives for local planning arrangements in many local planning programs. Evaluations and recommendations for *local area planning* have been undertaken in a number of internal reviews (City of Vancouver Planning Department 1973, 1980, 1989, 1990 and City of Vancouver Manager's Report 1977) and public forums (City of Vancouver Planning Department 1976). Section 3.2 presents a discussion of local planning experience and reviews, which are important for the identification of objectives, features of alternatives and data on performance of different institutional arrangements.

3.1. CITYPLAN AND POLICY ANALYSIS

CityPlan is a recently-completed comprehensive planning exercise with very large-scale public participation¹, whose stated intent was to "develop a shared vision for the future of Vancouver based upon ideas and advice from citizens" (City of Vancouver Planning Department Spring 1995). CityPlan comprises a policy planning process that will be compared briefly here to the decision analysis process conducted in this study. The CityPlan exercise attempted to identify and quantify citizen preferences on a wide spectrum of strategic planning issues or themes.

One of the CityPlan themes, *Making Decisions*, was similar to the study question addressed in this paper: identification of desirable institutional arrangements for local planning. The treatment of this theme in CityPlan and in the test study can be usefully compared. The resulting alternatives look somewhat similar, and both processes reached about the same stage of analysis. A point-by-point discussion of the CityPlan process on the decision-making theme suggests that decision analysis principles could have been usefully incorporated in the process. The overall approach of CityPlan is an interesting one, but so comprehensive, with such a large array of implied objectives and with so many policy decisions to be bundled together, that it may be seen as a unique “one-off” kind of endeavour. However, the approach used to treat individual *themes* within CityPlan can be fairly compared to decision analysis processes as described in Chapter 2.

3.1.1. Participation and representation in CityPlan

Decision analysis practitioners have approached stakeholder participation from many different angles. Some have considered it essential to identify and invite stakeholders, and to require that participants formally represent groups. CityPlan did not take this approach. Participants were formally considered to be acting as individuals and only representing themselves (McAfee), though many participated in *City Circles*² “comprised of members of existing organizations”, and staff took pains to make certain that multicultural and youth groups were well represented (City of Vancouver Planning Department Spring 1995, 3). It is possible, given the assumption that participants were not representatives of stakeholder groups, that a number of public participants did not feel they had a stake in the process and its outcomes.

There was substantial turnover between the different steps of the process³, to the point that it 'wasn't the same people' who participated in each stage (Forbes-Roberts).

The decision that participants from the public were acting on their own behalf and not as representatives is an important one. It probably hampered systematic identification of different stakeholder interests. It reflects a judgement that claims to being representative are often not well-founded, and that the interests of many individuals are not well-represented by existing groups. It may also reflect a concern on the part of staff that identification of stakeholders will lead to competitive positioning of stakeholder groups in the early stages of planning. These judgements and concerns are not dismissed here; they need to be addressed no matter what approach is followed.

3.1.2. Problem definition

CityPlan did not start with a well-defined problem for analysis, but rather with a call for ideas concerning the future development of the city. City Circle representatives developed 12 themes to organize a very large number of specific and general ideas on issues ranging from financial management to development character to safety and security. This wide-open and comprehensive approach may have led to problems with framing questions as manageable policy decisions.

The policy questions and alternatives addressed in the *Making Decisions* theme were identified by citizens in an *Ideas Forum*, with staff apparently not arguing for any limits on the decision frame. This carte blanche approach had its risks. Council found themselves sponsoring an exercise whose terms of reference they could not wholly endorse. Even though CityPlan program principles stated that Council's task would be to "make the final decisions on Vancouver's CityPlan, having received advice from citizens" (City of Vancouver Planning Department Spring 1995, 1), the program had the appearance of a consensual popular decision-making process. Council would be under some pressure to approve its principal findings.

The problem statement for the *Making Decisions* theme identified within CityPlan was "to determine how everyone with a legitimate interest can best participate or be represented in decision making" (City of Vancouver Planning Department [no date indicated] *Making Choices questionnaire*). This is similar to the test study question, "*What are good institutional arrangements for local planning?*," though it has a bigger scope, presumably covering all decision-making and not just local community or neighbourhood decision-making. As will be seen, responses to these two questions were similar, and the same key issues were identified.

3.1.3. Treatment of objectives

Objectives in the sense used in decision analysis are not identified in any of the CityPlan documentation made available for the test study. CityPlan documentation does not discuss

anywhere the use of objectives as guideposts for the development of policy choices or for the evaluation of impacts of alternatives.

3.1.4. Treatment of alternatives

Alternatives for each theme were identified in the one-day Ideas Forum and were assembled and detailed by staff. It seems likely that staff were trying to include a range of alternatives that would satisfy the whole range of participants; no attempt appears to have been made to exclude alternatives on the grounds that they were outside the jurisdiction of council, or that they were not realistically implementable. Staff were "directed to assemble information on the key choices and their consequences for consideration by the public" (City of Vancouver, Spring 1995, 4).

The background paper prepared by staff for the Making Decisions portion of the Making Choices exercise characterizes probable impacts of different alternatives. No quantitative data or analyses of actual performance of arrangements in the past or in other settings are provided. The four alternatives identified are titled "Minimal City Government" (reduced public involvement), "Open City Government" (a status quo option), "The Networked City" (deconcentration of services) and "Participatory Neighbourhoods" (decentralization and delegation to some neighbourhood body of administrative functions and decision powers in matters that primarily affect the neighbourhood).

Descriptions of these alternatives in the Making Choices Workbook and All Choices book are very brief, each comprising 5 or 6 broadly-sketched features (City of Vancouver, April 1994: 12.3-12.6). This brevity is understandable given the daunting number of issues and choices in the Making Choices questionnaire ("workbook"). This was only one of twelve themes, some of which were divided into several subthemes. Be that as it may, there was not enough concrete operational detail or background information to enable participants to make a reasoned choice between different arrangements for *Making Decisions*. This lack of sufficient detail may say more about problems with the huge scale and scope of the CityPlan project than about the way the process was structured at this stage. (The background paper for Making Decisions [City of Vancouver Planning Department, March 25, 1994] recognizes many questions as to the real performance of each alternative, and suggests that research be undertaken to create a rational basis for a decision.)

3.1.5. Evaluation of impacts

Citizens did not participate systematically in predicting impacts of alternatives. The background paper encourages participants to explore, and raises useful questions about each of the alternatives, but on the whole citizens do not appear to have been engaged in a detailed evaluation of the options.

3.1.6. Constructing and selecting "futures" alternatives

Voting by self-selected participants was the selection method⁴ for both Making Choices and Futures. Participants voted among two to four choices on each of 16 themes and subthemes in the Making Choices questionnaire. Making Choices questionnaire results for the Making

Decisions theme are shown in the graph on the following page. As can be seen, for this theme, results were not decisively in favour of any one alternative.

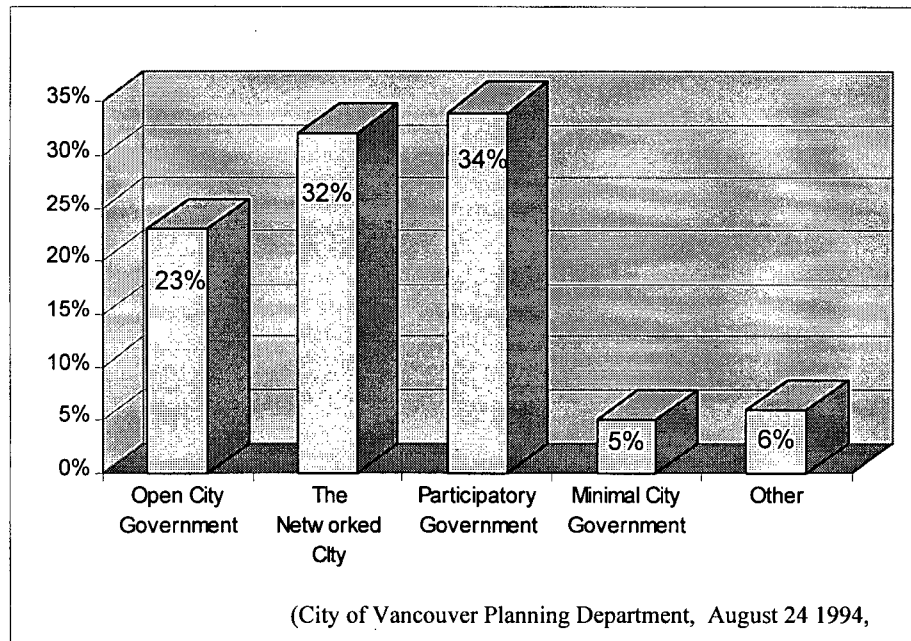


Figure 3-1: Making Decisions: Results from Making Choices Questionnaire

For 5 of the themes, results were judged to be sufficiently strongly in favour of one option. that the option could be included in all of the scenarios developed for future directions for the city. Alternatives from the 7 themes where no option clearly dominated, as in Making Decisions, were bundled together by staff in the 4 'futures' scenarios (City of Vancouver Planning Department , Sept. 1994: 3).

Looking at this through a decision analysis lens, it seems that each of the themes requires a different decision frame. Bundles which include variables from the 7 themes where no alternative dominated (variables for which cluster analysis and multiple regression analysis by a consultant could find no significant association⁵) look too complex for a manageable decision

analysis. Inconclusive results for a large number of Making Choices themes suggest a need for research and for ongoing analysis, but these were precluded after variables were bundled together to form 'futures' scenarios.

3.2. LOCAL AREA PLANNING ARRANGEMENTS AND THE TEST STUDY

Local area planning in Vancouver was more or less comprehensive planning, with intensive citizen participation, in the "twenty-two local areas defined in the late 1960's by United Community Services " which "have acquired a certain acceptance over the years" (City of Vancouver Electoral Boundaries Commission 1988: 4). Started in 1972, local area planning or LAP was originally intended to become continuous planning organized at a neighbourhood level. Most local areas did get planning programs at some point, but continuity was never realized; programs were awarded more on a crisis basis, and costs were an important limiting factor, especially after the termination of federal NIP⁶ grants for neighbourhoods in the late 1970s. The term *local area planning* has almost disappeared from use after 1990. Disuse of the term may indicate that Council and staff are backing away from arrangements that have been seen as expensive and unproductive, or it may reflect an expectation that principles of LAP will be reworked in new neighbourhood planning arrangements arising out of CityPlan. Whatever the case, local area planning constitutes an important collective resource of experience in participatory community planning, and has been an important testing ground for arrangements for local-level planning.

The discussion of local area planning here is cursory; the analyst's task was not to master all the background details for the decision problem, or to become an expert on institutional arrangements for local planning, but rather to assist knowledgeable participants to tackle the question by demonstrating an efficient analysis framework capable of giving insights into complex problems. In this study, participants were providing less input than would be expected in a fully supported analysis, but still it seemed unwise for the analyst to try to take on the role of providing content for the analysis as opposed to designing and guiding the procedures. Broad coverage of issues in local planning was sufficient to identify research needs for a second iteration of identifying and evaluating alternatives, for example. Participants collectively had many years of experience in local planning; the analyst could not hope to master the relevant literature in the short time-frame defined for the study. The criterion that determined the extent of preparatory research was being able to talk the language of participants; the analyst was advised by staff to undertake this background research for the sake of credibility. The treatment of local planning and of CityPlan outlined above was enough to initiate the exercise and to complete a single iteration of the first three steps.

A background literature review on the treatment of local planning in the past, and background interviews with 15 individuals knowledgeable about the problem, permitted the analyst to make a reasonably thorough identification of broad strategic concerns.

3.2.1. Reviews of Local Area Planning

Reviews and reports on LAP are a useful source of identified objectives (concerns, problems, values) and features of alternatives for structuring local planning arrangements; they were used to confirm and supplement what participants identified and structured in the study analysis process. A listing of principal studies follows.

In 1973, with Local Area Planning just getting off the ground, a Planning Department report ("Local Area Planning: Implementation and Recommendation") defined LAP as "a comprehensive, all-encompassing planning process" (6). It stated that "local area planning examines a specific geographic area in a comprehensive manner: the process allows integrated social and physical plans to be related to local goals and objectives"(1). LAP was viewed as "not merely....producing a plan for the whole area, but....an ongoing process responding to the issues of the local community" (10). The report laid out four 'models' for citizen involvement: "Citizen Control;" "Citizen Forum;" "Citizen Advisors;" and "Citizen Spokesmen" (16-21). These identify many key policy variables (participation requirements, decision-making authority, centralization/concentration of planning services, continuity of local planning, requirements for information, management of the planning process) and lay out a range of alternatives that roughly corresponds to the range identified for the Making Decisions theme by CityPlan participants, from a professional-dominated where citizens only vet plans produced by staff, to a that delegates legal decision-making power to neighbourhood councils..

Criticisms and concerns were raised as the first LAP programs began to show results. In a 1976 report on a workshop on Local Area Planning (City of Vancouver Planning Department,

May 14, 1976: 1-2), Council was quoted as saying that local planning appeared to take too long without producing concrete results; local area offices (site offices) cost too much; participating citizens seemed to represent narrow interests, and LAP was felt by aldermen to be linked to a 'ward' approach to government⁷. A warning was raised that conducting LAP without funding for improvements would lead only to frustration. These concerns suggest objectives for the present study.

A review of LAP completed by Planning in 1977 was criticized by the Director of Finance as an "advocacy report" which "does not examine alternatives for accomplishing the same objectives" (City of Vancouver Manager's Report Sept. 1977: 1)⁸. This kind of concern, that local area planning was promoted without being subjected to careful scrutiny regarding its productivity or cost-effectiveness, surfaced repeatedly over the years. It suggests a need for application of a rigorous analysis framework to the problem of how local planning gets done.

In 1980 a report entitled "Local Area Planning Priorities for the Eighties" presented a Planning Department analysis of performance of local area planning in a variety of programs, listing positive results and problems (4-8). Recommendations suggest a movement toward something like co-management arrangements, with citizen-initiated planning on an equal footing with City-initiated planning. In general this report made claims for the efficacy and efficiency of Local Area Planning but did not present any supporting data; again it could be seen as an "advocacy report" and not an analysis.

1989-90 saw an extensive review and recommendations for Local Area Planning. The *Report of the Study Team on Local Area Planning* (1990) asked for a corporate commitment to LAP, and made a number of recommendations for changes. Some of these could stand as objectives in an analysis (“reflect a balance of city-wide and neighbourhood perspectives” [2]); some are suggestions for procedural changes (“LAP committees should be limited to a maximum of 50 people” [4], “Provide for LAP implementation through Capital Plan funding” [6]); and some ask for changes in institutional arrangements (“The roles of Council, City staff and the citizens’ committee need to be clarified and reinforced” [2], “...consider providing LAP communities with intervenor funding [5]). Important concerns were raised. Stated objectives included means and ends objectives. Problems and objectives identified in this and other studies and reports cited above are incorporated in the objectives and features of the alternatives for the analysis exercise in Chapter 4; they confirm the concerns identified by participants. If the study presented here were to be carried on to further steps, research should include a thorough analysis of LAP arrangements and outcomes, in Vancouver and in other cities. Note that there appears never to have been a systematic comparison of actual performance or predicted performance based on research for different alternative arrangements for local planning. A systematic comparison of probable financial costs, for example, is lacking. To some extent, these could be constructed from available documentation.

As an example of the kinds of information and ideas that can be gleaned from LAP reviews, consider the variations of the basis for participation in processes that have been tried in LAP and post-LAP processes. In the earliest programs in Kitsilano, Fairview Slopes and Cedar

Cottage, Council selected citizen advisors from "lists of volunteers or nominees." (Buholzer 5). When citizens in Grandview-Woodland asked for an election process they had worked out themselves, with representatives elected from seven neighbourhoods they defined themselves, this was allowed (Buholzer 5). This arrangement apparently worked well in Grandview-Woodland, but election of representatives in the Kitsilano local area led to problems with lack of community support. In response, staff developed an "open membership" citizen planning committee in Kitsilano in the late 1970's which allowed "any person living or owning a business or property in the area to join the committee" (City of Vancouver Planning Department March 28, 1989: 2), and also unsuccessfully tried running a West End program with no citizens' planning committee in the hopes of reducing the length of the program (4). These kind of experiments and experiences have conditioned people's views of what will work well in local planning. If thoroughly documented and analyzed, they can provide elements for study and for possible incorporation in alternative local planning structures.

3.3. PLANNING FOR NEIGHBOURHOOD VISION PLANS

Planning for Neighbourhood Vision Plans is a condition of the approved CityPlan ("Vancouver should.....create better processes to involve residents in addressing major change in their neighbourhoods")(City of Vancouver, June 1995: 38). This process has obvious relevance to the study presented in this thesis, and planning for it has been underway since July of 1995, but it is a moving target at the time this is being written, and it is not discussed here.

3.4. POST-LAP LOCAL PLANNING PROGRAMS

Local Area Planning is in a hiatus, perhaps waiting to be reborn in *Neighbourhood Vision Planning* after CityPlan implementation. In the meantime, several large-scale multiple-issue local planning programs have been carried on, which have not been referred to as LAP programs. Some experimentation has occurred in the context of these plans which is relevant to the present analysis and which no doubt influenced the views and expectations of participants in the study analysis. Each of these programs was largely about accepting and managing growth; this makes them interesting as references for post-CityPlan neighbourhood planning programs.

3.4.1.1. *Arbutus Industrial Area*

This program concerned redevelopment of a 'let-go' industrial area⁹ in Vancouver's West Side. Planning staff treated this a multi-stakeholder process. Stakeholders were encouraged to develop their own alternatives at the outset; this led to early positioning and polarization, in the view of some planners {Forbes-Roberts). This program was 'debriefed' by a consultant who elicited critiques and recommendations from residents, landowners, Councillors and staff (Fogel 1992). The debriefing report provided useful checks for identification of objectives for this study, as well as elements of procedures and arrangements. The report effectively draws out and contrasts the perspectives of key stakeholder groups.

3.4.1.2. *Joyce-Vaness*

This program involved a very large-scale residential development. Negotiations were initially undertaken and a deal structured by residents and the developer before city staff came on

board. The apparent success of this program suggests that it should be analyzed carefully with regard to the configuration of roles of participating interests.¹⁰

3.4.1.3. Oakridge-Langara

The Oakridge-Langara program looked like a LAP program. It tackled comprehensive planning for a large South Vancouver area. However, planning apparently proceeded on a consultation rather than a partnership basis. There was no citizens' planning committee, though there was a working group meeting throughout the process (City of Vancouver Planning Department May 1995: 1), and the process did not take place within the boundaries of an existing Local Area, but simply grouped a number of areas where development was proposed and which were in enough proximity to treat as one area (Wayne). The process seems to have been efficiently managed and produced substantial draft recommendations in a little over a year. Staff met with hostility from some local groups (Bula B1, and Blore 11). Hostility towards development plans that would add thousands of multiple-dwelling units could be expected from some single-family homeowners in any case, but it is likely that some of the bitterness can be ascribed to institutional arrangements that participating residents felt gave them little clout. Senior planning staff stated that the hurried quality of the program was due to time pressure from development applications (McAfee, in Bula B4) which gave little time to develop a "vision of the community," and implied that this would be the exception when post-CityPlan planning for neighbourhood centres was implemented. In the context of an extended analysis of institutional arrangements for local planning, this program could profitably be studied and 'debriefed' in much the same manner as the Arbutus Industrial Area.

3.5. INSTITUTIONAL ARRANGEMENTS FOR LOCAL PLANNING IN OTHER CITIES

Examining the way local planning is structured in other cities in Canada, the United States and Europe can offer insights and suggest possibilities for institutional arrangements in Vancouver. This is an obvious approach to identifying and evaluating policy variables that can be incorporated into alternatives. Preliminary research on other cities' arrangements was cursory here, since the analyst intended to use participant input as the taking-off point for identifying and structuring alternatives, leaving the main part of research tasks until after the initial evaluation of impacts of alternatives in the third step of the analysis. Chapter 5 cites studies and proposes research on performance of institutional arrangements for local planning in these cities and others.

Gauging how much research to carry out before starting the analysis process was difficult; literature relevant to the question is extensive and many participants had long experience with the problem of structuring local planning. On the other hand, the analysis steps could be expected to raise most of the concerns and identify most of the variables documented in the literature, and hopefully some that were not. As well, a number of participants turned out to be skeptical of imported solutions, and tended to think of their city as unique. In any case, it was assumed that a rough-cut identification of alternatives, and consideration of the likely impacts of alternatives, would lead to a thorough and useful identification of useful research tasks. That is to say, pinpointing research needs and doing focussed research would take place in a succeeding phase (in a full-scale analysis).

3.6. NOTES FOR CHAPTER 3

¹ Participants numbered about 3,000 in City Circles and 10,000 in the Ideas Fair; 1,784 filled out the Making Choices questionnaire; 15,000 visited 'futures' displays; 1,864 returned the Futures questionnaire; and 1,500 were randomly selected and participated surveyed in a telephone survey. Total costs were estimated at about 1,500,000 dollars Cdn. by Spring 1995 (City of Vancouver Planning Department *Report # 1: Description of the CityPlan Process* Spring 1995)

² Groups (250 of them) that worked to put forward submissions in the first few months of CityPlan

³ 80% of the people who responded to the Futures Questionnaire, it seems, had not previously participated in CityPlan (City of Vancouver Planning Department Spring 1995, Step 3-3).

⁴ These questionnaire results were not considered a sufficient basis for a recommendation by staff. A telephone survey of 1500 randomly-selected Vancouver residents was conducted to discover approval ratings on each of the 12 thematic elements incorporated in the chosen future scenario. This in my view does not constitute any kind of meaningful test, since respondents were not required to learn about the issues, and were not faced with the same choices that participants who completed the Making Choices and Futures questionnaires were. "Opposed" responses on each of the 12 components were very low, with average disapprovals of 8.5%; this suggests some kind of response bias.

⁵ Interview with CityPlan Division Planner Paul Nowlan, August 11, 1995.

⁶ NIP or Neighbourhood Improvement Program was a program of grants for development of rundown areas of cities. Funding was 50% federal, 25% provincial and 25% municipal (Cornejo 1979, 7). Grants were substantial in size, to the point where NIP in the 1970's became "the most important function of the Area Planning Division" (Daneluzzi 54).

⁷ Also see remarks in Daneluzzi (123), and in Cornejo (1979:10), that LAP was connected to the ward issue in Aldermen's minds

⁸ Efforts to locate a copy of this review failed, although it is mentioned in other reports.

⁹ An industrial area allowed to be 'let go' for residential development

¹⁰ City staff felt they had to reopen the negotiations to get a better deal on amenities for the neighbourhood, but neither residents nor the developer seem to agree with this (McCauley and Taulu).

4. CHAPTER IV: THE STUDY ANALYSIS

4.1. STRUCTURE OF THE PROCESS AND SELECTION OF PARTICIPANTS

The analysis was structured as a three-step process: identifying and specifying objectives; identifying and structuring alternatives; and evaluating impacts of alternatives. Quantifying steps were not undertaken since a large proportion of objectives would clearly not lend themselves to quantification, and many participants could be predicted to react negatively to a 'number-crunching' approach or an appearance of being 'programmed'. It was assumed that useful results could still be obtained, and that the acceptability and adaptability of the method for participants unfamiliar with this kind of approach could be tested.

4.1.1. Selection of participants

Participants were chosen to represent a range of stakeholder categories, rather than existing defined groups. This was done in the interests of convenience and speed; Chapter 5 proposes a different approach for a fully supported study. In the analysis presented here, it was considered sufficient to discover and present a broad range of interests and views concerning the decision problem. Participants were selected who had experience and interest in local planning programs, and had knowledge of the issues. They were drawn from the following 'stakeholder' categories (staff groups are all City of Vancouver staff):

- citizens who have been active in community planning processes in Vancouver;
- Community Planning, CityPlan and Land Use Planning Divisions;
- Social Planning;
- Engineering and Parks;
- City Councillors; and
- development companies.

A few participants (a minority of those who were consulted) objected to the inclusion of some other stakeholder categories; one citizen, for example, felt that developers' interests in planning were of a different character than the others, that they were not responsible to the 'community' or were 'only interested in profits.' However, this seemed an arbitrary reason to exclude any group or individual from participation. If the approach were to be a multi-stakeholder approach, it would have been unacceptable to exclude parties who had interests in the policy in question. The particular nature of that interest was seen as irrelevant.

Groups were not viewed as having internally homogeneous views or interests. Efforts were made to select participants from within each stakeholder category who would represent a range of opinion and views within the group; as Raiffa states, diverse opinions within each party to negotiation tend to make it easier rather than harder to achieve agreement. (1982). Opinions and views in the study did in fact cross the boundaries between groups. It would have been difficult to characterize a common set of views for any of the participant categories. Participant responses largely had to be treated as the contributions of individuals, partly because the scale and time-frame did not permit organizing working groups with compatible views. No party was considered to be the principal client for the analysis; rather all participating stakeholders were taken as hypothetical clients. This is a reasonable, if unusual, arrangement for a policy analysis. In the case described here, this perspective gave the analyst a better chance of clarifying the interests of all groups well.

4.1.2. Identification of participants

In general participants were referred by others who were interested and engaged in local planning processes. Individuals listed as participants in previous reviews and studies were also contacted. Past participants in these processes are networked in many ways; care was taken not to select too many individuals on the basis of any individual's recommendations. Attention was given throughout the process to obtaining a range of opinion from within each participant category, and informants were explicitly asked to provide names of individuals who represented a wide range of positions on the issues.

4.1.3. Identification of citizens

Identification of citizen stakeholders presents contradictions. All citizens, not only those active in planning, have something at stake in planning processes. A number of participants, including some city staff, assumed that citizen participation in this study would be broad-based, and not limited to citizens who have taken active or leading roles in local planning. However, this was an analysis and not a polling exercise, and a large exercise or consultation with participants unfamiliar with key issues would not have been appropriate. An assumption was made that an adequate range of views and interests could be presented by a relatively small number of people who had been very active in planning processes. The interests of groups who have not participated much in the past, for example poor and ethnically different groups, could be represented not only by some of the citizen participants, but also by a number of city staff. In a full-scale exercise, participation of other city and provincial organizations and institutions, apart from city staff, would be important.

It seemed important for participants to understand that they were not engaged in a consensus process, nor a voting process. This was rather a structuring exercise intended to assist all parties in understanding how the others saw their own interests, and in identifying alternatives that could offer as good a fit as possible to the needs of all involved groups. The intent was to construct a set of objectives (based closely on values) which all participants could agree on; to identify and detail a set of 'rough-cut' alternatives that represented well the range of alternatives that people had in mind, and to discover how participants predicted the impacts of various alternatives on the agreed objectives.

4.2. STEP I: IDENTIFICATION AND STRUCTURING OF OBJECTIVES

4.2.1. Interviews on objectives

Nine interviews were conducted covering all the categories of participants listed above. Interviews were informal sessions lasting about one hour in most instances, and were done at the interviewee's workplace in all cases. Participants were asked to develop a comprehensive list of objectives to be considered when structuring institutional arrangements for local planning. They were asked to pay some attention to the interests and values of other stakeholders, but to focus primarily on their own values and interests so that these would be well-represented in the final comprehensive list of objectives.

The line of questioning was roughly based on devices used by Keeney for eliciting objectives for an analysis, as described in Chapter 2. The questions used to start interviews were these: *What are the important things we ought to pay attention to when we think about the way we do local planning? What are the things that we care about in this context? What are the values that are most important to think about when we're evaluating different ways of doing local planning?*

Further questions like the following were asked where necessary to orient participants to the task or to help them over mental blocks:

- *If you had no limitations, what kind of arrangements would you put in place? What would be the advantage of these arrangements?*
- *What major problems have you confronted or observed in community planning processes?*

Answers to these questions suggested objectives to the interviewer, and participants were asked whether these were objectives for them: “Is _____ an objective in your view?”

4.2.2. Participant response in the *objectives* phase

Respondents found the operational definition of *objectives* confusing, and it took time to clarify this. Two respondents did not grasp the task, and spoke anecdotally about their experiences rather than about objectives. Their comments about problems or successes in the

past suggested objectives (things they would rather see more of or less of) that were important to them, and their input was of use. Nevertheless, their off-track responses suggest a need for a different orientation to the task for some participants.

It was originally assumed that the division of objective types into *fundamental* and *means objectives* would be undertaken by participants and the analyst working together. The test to distinguish these two types is simply to ask about each suggested objective, "Why is this important?" Fundamental objectives are those which seem important for their own sake, and means objectives those which enable some other, more basic objective to be met (see 2.2.3 above). This is a critical distinction in this analysis approach, but simply asking the question "Why is this important?" as a test is not workable in a one-hour interview; it may be irritating to a participant who does not have a clear understanding of how objectives are structured for decision analysis. Here it largely fell to the analyst to differentiate and structure the objectives that individuals put forward, separating means objectives from fundamental ones. This was efficient.

4.2.3. Treatment of each participant's input

Each participants' objectives were first treated separately. Objectives underwent a sorting process, to distinguish ends from means objectives. The example below shows a small part of the objectives put forward by one participant.

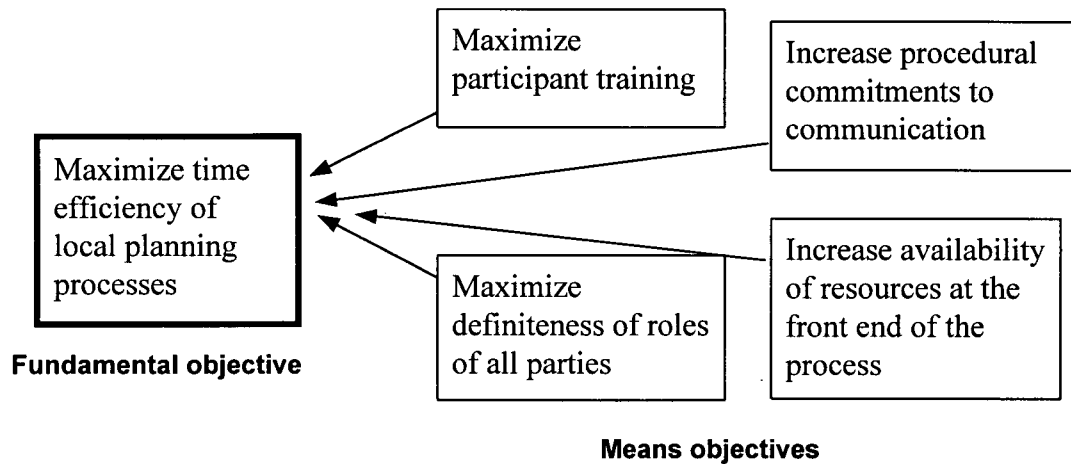


Figure 4-1: Distinguishing means objectives from fundamental objectives

In the example in Figure 4-1, all the objectives were considered means objectives except “maximize time efficiency of local planning processes,” which seems important for its own sake, and is incorporated in the final aggregate list of objectives..

Incorporation of all stakeholders' fundamental objectives into a common list required painstaking attention to wording. It was considered important that all the objectives on the list be acceptable as criteria for evaluation to all participants, in order to get a good 'buy-in' to the process. Thus, “leaving technical issues to professionals trained to handle them” could not be an objective, as only some stakeholder groups would agree with this perspective, and some would strongly oppose it. However, all groups could agree on an objective like number 4 below:

“(Increase, all things being equal), the technical quality and competence of local planning processes.” Different groups disagreed on how this might best be achieved, and it was obvious that they would weight this objective differently, but none argued about including it as an objective.

We did not limit objectives to those identified by present participants. Earlier reviews and reports on local area planning identified a range of problems and values. These were checked and compared to those identified by interviewees in the study. The majority of points made in earlier documents corresponded to concerns of respondents in the present analysis.

Two respondents in a later phase of the analysis complained that the list of fundamental objectives which was generated at this step was bland or consisted of ‘motherhood’ statements. Any appearance of blandness may have resulted from avoidance of items that might be alienating or unacceptable to any of the groups consulted. This would enable the list to be used by all stakeholders as a basis for evaluating performance of alternatives. If some objectives on the list seem self-evident, this does not mean that they are always well-served in this kind of process. The list serves as a means of reminding participants of values which they say they support, which are important to others, but to which they may pay insufficient attention when negotiating policy. The place for means objectives that are contentious is not in this list; they are incorporated as features of competing alternatives constructed in the second phase. As a general observation, the participants in phases two and three who took time to evaluate the objectives

systematically were enthusiastic about the list and its potential usefulness for evaluating alternatives.

The list of fundamental objectives follows; *this list is not weighted in any way and does not follow any order of precedence*. It is not highly specified; further specification of some objectives could be usefully carried out in a later stage of analysis for the purpose of capturing detailed impacts of alternatives on those objectives, but the level of specification here was considered adequate for the task at hand.

The tables and instruments illustrated in this thesis went through several revisions in response to information and insights gained in the analysis process: none of them was fixed throughout the study. The overall purpose was to gain insights about the process and information that would help in addressing a subtle problem, and since there was no attempt to generate quantitative data about preferences, refining the various tables used was desirable and defensible. A key assumption for the analysis was that it should be recursive. Of course, reworking input from earlier steps could lead to dissatisfaction when different groups of participants work on different steps, if the output from one group is changed by a succeeding group without any consultation or forewarning that this might happen.

Table 4-1: Fundamental Objectives for Restructuring Local Planning Arrangements

Overall objective: Identify and structure good arrangements for local planning processes in Vancouver.	
<p>↑ = have more, all things being equal ↓ = have less, all things being equal</p>	
1. ↑ Efficiency of processes	
<p>1.1 ↓ time spent on planning processes (both accumulated hours and total time-span) 1.2 ↓ turnover of people and loss of information</p>	
2. ↓ Short-term and long-term financial costs of planning (costs of changing procedures and resources, and long-term running costs.)	
<p>2.1 ↓ costs to the City (to the taxpayer) 2.2 ↓ costs to private interests (landowners, developers)</p>	
3. ↑ Quality of public participation in local planning	
<p>3.1 ↑ scale of ongoing participation by citizens. 3.2 ↑ inclusivity: i.e. ease and attractiveness of participation for all groups and interests in the affected area, including marginalized groups. 3.3 ↑ participation of independent, spontaneous citizen organizations. 3.4 ↑ access to current information on planning issues, planning policy and perspectives.</p>	
4. ↑ Technical quality and competence of local planning processes	
<p>4.1 ↑ availability of needed skills, experience and knowledge to local planning. 4.2 ↑ quality of data on local conditions and interests</p>	
5. ↑ Integration among local planning processes in the city	
<p>5.1 ↑ city-wide co-ordination of local planning goals and processes. 5.2 ↑ fair allocation of planning resources to neighbourhoods or local areas.</p>	
6. ↑ Sustainability of local planning outcomes	
<p>6.1 ↑ local contribution toward regional environmental sustainability 6.2 ↑ local contribution toward regional economic sustainability</p>	

4.3. STEP 2: IDENTIFICATION AND STRUCTURING OF ALTERNATIVES

The next step in the decision analysis was to identify and structure alternatives. The goal for this phase was to identify and structure a series of alternatives that covered the full range of different kinds of arrangements that had credibility for respondents. The list of fundamental objectives provided a useful guideline for detailing these alternatives, but participants, and the analyst, still found identification and structuring of alternatives to be a difficult and complex task.

4.3.1. Design of alternatives workshops

A series of three workshops was scheduled, with three or four participants in each. All participants in any given workshop were drawn from different stakeholder categories. The task was to identify and structure alternative arrangements for local planning in Vancouver. Participants received a copy of the list of fundamental objectives structured in Step 1, and a description of the agenda for the workshop, about a week in advance of the workshop. A time limit of two hours was planned for the workshops.

The tasks for the workshops were conceived as follows: participants would first comment on and make adjustments to the hierarchy of fundamental objectives; they would then work together to identify existing alternatives for the study problem; and finally detail and negotiate changes to rough-cut alternatives. It was expected that participants would be familiar enough with past proposals, with preferred alternatives articulated by their own groups, and in some instances with existing arrangements in other cities, so that they would be able to identify

and structure such alternatives at least in a rough and ready manner within the allotted time-frame, and make some progress in identifying weak or contentious features of alternatives and negotiating better ones .

4.3.2. First alternatives workshop

The four participants in the first workshop were unable to make much headway on the tasks laid out for the session. None of the participants seemed to have read the briefing materials; again, busy schedules of participants and a relatively low level of commitment to the task were not unexpected, but their effect had been underestimated. Socializing was time-consuming, and in retrospect this too ought to have been anticipated. Reading through, understanding and approving the list of fundamental objectives took fully half the time allotted for the first workshop, and still the function of the objectives did not seem to be well understood. The terms 'maximize' and 'minimize,' commonly used by Keeney and by McDaniels in labelling objectives, had been used to indicate desired direction of objectives on the list prepared for the workshops. These terms were misunderstood by some participants as implying 'push this objective to its maximum (minimum) value, regardless of the circumstances', rather than simply as indicators of the desired direction for the objective, as was intended. It was difficult to get participants to understand the directional feature of objectives well without presenting a case study that would demonstrate the calculation of trade-offs, but this could not be done in the allowable time frame. This difficulty should not be seen as an inherent problem in the approach; it is rather the problem of a first-time exposure for participants. .

When the stage of discussing alternatives was reached, participants did not seem to have planning arrangements and strategies already formed in their minds, and were not willing to identify, even as simplistic labels, alternatives for local planning arrangements. To get the ball rolling, the analyst suggested generic and existing alternatives as examples, covering approximately the range of decentralization and citizen input options as the four 'models' proposed by Planning in 1973, or those laid out for the Making Decisions theme of CityPlan. This raised a very strong reaction from one participant, who was adamant that the whole exercise was unrealistic if alternatives were considered that required changes at a provincial government level, i.e. outside the jurisdiction of Council. In any event, it soon became clear that the workshop tasks were too complex and large in scale for the time allotted. The last hour of this workshop was spent brainstorming with participants other ways to approach the task of identifying alternatives.

4.3.3. Using strategy tables to structure alternatives

For the second workshop, a set of strategy tables was prepared which laid out a series of choices on different variables within institutional arrangements. Participants were asked to make choices on these variables and to try to group them into overall strategies that were internally consistent and logical. An example of several columns taken out of a much larger set of alternatives follows. Each column represents a decision on one variable. Circles indicate choices by a hypothetical respondent.

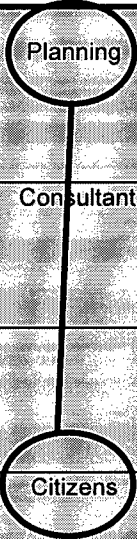
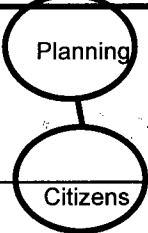
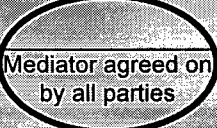
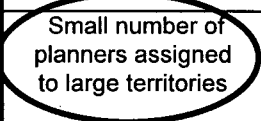

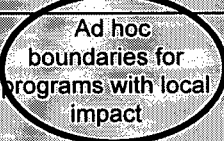
Co-ordination of planning programs	Outreach tasks	Facilitation of programs where there is intense conflict	Degree of centralization of City's planning function	Identification of neighbourhoods/ local areas
		Planning Other city staff e.g. social planning Neutral process-watcher (always assigned) 	No continuous local assignment of planning staff Substantial % of staff continuously locally assigned  Neighbourhoods get grants to hire own planners	 

Table 4-1: Sample entries from strategy tables

Participants in the second workshop were asked to work through and comment on prototype strategy tables but decided that this was too large a task to complete in the given time. They disliked the look of the task and felt it was like an examination or tax form. They agreed to work through the tables on their own time, and returned results about a week later, but found it difficult to make judgements on many of the choices presented. Two things became clear: first, using strategy tables with multi-stakeholder respondents would be more productive if guided by the analyst and conducted on a one-on-one basis, and second, respondents would need detailed

clarification of entries in the tables. It was apparent that the third workshop should not be carried on as planned; four individuals who had been scheduled for this workshop agreed to participate in one-on-one working sessions instead.

Interviews structured by working through strategy tables functioned moderately well in that they enabled participants to make choices and state preferences without having global strategies in mind. This is not a conventional way of using strategy tables: usually respondents would work through tables marking and grouping the logical choices under a given strategy (McNamee and Celona 1990). In the study case, they were asked to make choices on individual policy variables in isolation, and then the analyst attempted to identify and recompose alternatives that integrated these individual choices. The process generated information about participants' preferences for different details of arrangements for local planning, and also showed that many of these variables were not associated in respondents' minds in any way consistent across the group of respondents. This was a challenging task for both analyst and respondents. Most of the terms in the strategy tables needed to be discussed and clarified. Participants challenged the realism of some of the choices offered; planners especially wanted detailed explanations of the operational implications of different options. Running through this task took two to three hours.

Defining the elements for inclusion in the strategy tables directed attention to the scope of the decision frame. Election of councillors by wards, for example, though requested as a choice by some participants, was not included among other options. This is because election by wards

could operate in any of the constructed alternatives (it operates in almost every city government in North America, regardless of institutional arrangements for local planning). Presumably, the effect of ward implementation on local planning arrangements would be indirect. In retrospect it might have been advisable to carry the process of reducing the decision frame much further; this is discussed in Chapter 5.

4.3.4. Identifying existing and generic alternatives

In the end alternatives had to be mainly structured by the analyst, based on existing and generic alternatives. It appeared to have been unrealistic to ask participants to identify and construct, in this limited time-frame, overall institutional arrangements for planning. There is also, as suggested above, a risk in allowing stakeholders to develop alternatives, namely that they will construct positions without sufficient knowledge of possible tradeoffs and interests of other stakeholders.

It seemed critical that alternatives span a wide enough range to provide an acceptable option for each stakeholder group. As Edwards and von Winterfeldt put it, "One or more options.....must embody all the values and concerns of each relevant stakeholder group. To achieve this goal, it is important not to constrain the option set too much initially, to stretch one's imagination, and to list even some extreme and unlikely suggestions for solutions." (142-3). Some of the 5 alternatives presented below seemed 'extreme and unlikely' to some participants. One felt strongly that options that could not be implemented without legal changes at the provincial level should be excluded. Yet changes to the Vancouver Charter have been

frequently made in the past, and this seemed at this time to be an unnecessary, as well as provocative, restriction. Likewise, some participants felt that alternatives that reduced City support for citizen participation were so unlikely to be favoured that they should not be included in the analysis. However, there seemed no obvious basis at this point for the analyst to conclude that this option was below some 'bottom line' for citizen participation. It was decided to include options that delegated power to local or neighbourhood bodies and one that reduced the role in planning of citizens from present levels. This position was reconsidered after the study; see Chapter 5 for references to restricting the set of options for this analysis.

The alternatives listed on the following page are short descriptions of more detailed scenarios prepared for use in the analysis. The complete description of each alternative, as presented to participants in the last step of the analysis, is attached in Appendix A.

Alternative #1, *Smaller-government approach*, is a generic alternative which could as well be called *Professional-dominated approach*; Alternative #2 is a status quo option which turned out to be a moving target; Alternative #3 is a *co-management* or *co-production* alternative; Alternative #4 is based on the analyst's understanding of COPE¹'s strategy for local planning; and Alternative #5, which proposes delegation of powers to *sub-municipal government*, has some custom features suggested by participants and some adapted from existing arrangements elsewhere.

Alternative # 1: Smaller-government approach
<i>No institutional support for active citizen participation in planning. Neighbourhood planning specified in CityPlan is only implemented in consultative fashion and where densification is desired by the City. Planning Department does not initiate or support formation of citizen planning committees. Areas for planning programs are generally defined by predicted impacts of development. Cutbacks in citizen-oriented information and communications resources for planning.</i>
Alternative # 2: Projection of present trends
<i>This approach assumes no broad institutional policy change for community planning strategies 4 or 5 years into the future. Citizen planning committees may or may not be formed. Citizen participation is defined as being on an individual and not a representative basis. Local planning projects generally tackle specific and limited issues approved by Council, and in some cases global area planning. No continuous assignment of staff to neighbourhoods, except for Integrated Service Teams².</i>
Alternative # 3: Expanded partnership
<i>This is like a co-management or 'co-production' strategy. Citizens have a greater role, greater resources, greater access to information, and greater responsibilities than at present. Neighbourhood Planning Committees informally represent all social and demographic groups present in the neighbourhood.. Office of Neighbourhoods links various Neighbourhood Planning Committees' planning activities and represents neighbourhoods before Council. Locally assigned Planning staff, perhaps hired by the neighbourhood, work on planning programs in their area. Increased communications resources available to Neighbourhood Planning Committees.</i>
Alternative # 4: Appointed neighbourhood planning councils
<i>Neighbourhood Planning Councils are appointed by Council from nominees put forward by community groups. These councils have approval powers on projects which clearly have local and not city-wide impact. Source of revenue is grants allocated by the City. Planning is largely decentralized, with a substantial number of existing staff assigned to or hired by neighbourhoods on a long-term basis.</i>
Alternative # 5: Elected neighbourhood government
<i>Neighbourhood Councils are elected to represent fixed, bounded neighbourhoods.. These councils have power both to regulate zoning and approve development permit applications, though only in cases where impacts are limited to the neighbourhood. Neighbourhood Councils operate on block grants from City revenues. These Councils administer some other functions in addition to localized land-use and social planning (E.g. cultural activities, community centres, traffic regulations)</i>

Table 4-2: Five strategies for institutional arrangements for local planning.

4.3.5. Rationale for level of detail in the alternatives

Full descriptions attached in Appendix A (the descriptions later used by participants in evaluating consequences of alternatives) may strike the reader as being too detailed at an early point in the analysis. Applying this level of detail made the evaluation instrument somewhat unwieldy, requiring considerable reading and visualization on the part of participants who had agreed to commit only an hour or two to the analysis. It risked rejection by participants where none of the alternatives corresponded closely to their favoured position or that of their group. On the other hand, it was necessary to provide enough concrete detail for alternatives that participants could make a reasoned, calculated judgement about their performance on objectives. If the alternatives differed in detail from preconceived arrangements, it was felt that this would encourage participants to try to accurately predict impacts, and not just state preferences based on earlier assumptions. In any case, it was always assumed that stakeholders would negotiate features of alternatives or even structure new ones at a later stage in analysis after more research results were available.

4.4. STEP 3: EVALUATING IMPACTS OF ALTERNATIVES ON OBJECTIVES

The final step undertaken in the analysis was prediction of the impacts of each of the alternatives on each of the fundamental objectives. As in phases 1 and 2, participants (8 in total) were selected to span the range of identified stakeholder categories. An evaluation instrument was constructed which included the list of fundamental objectives, the five detailed alternatives attached here as Appendix A, and the objectives by alternatives matrix shown below as Figure 4-5.

Elements of the objectives list and features of the alternatives are complex and open to interpretation. It was preferred that participants get some orientation to the components before writing their answers. One respondent was walked through the forms, in a session lasting about an hour, and later filled them in at his convenience, but others did not have time for this. A set of directions for self-administering the evaluation package, shown below as Figure 4-6, was added to the package. *Impacts* (predicted consequences of each alternative on each objective) were recorded as verbal descriptions; no quantification of impacts was undertaken for any objective, including financial costs.

Objective	Alternative 1 Smaller government approach	Alternative # 2: Present trends	Alternative # 3: Expanded partnership	Alternative # 4: Appointed neighbourhood planning	Alternative # 5: Elected neighbourhood councils
1. ↑ Efficiency of processes (time, continuity)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. ↓ Short-term and long-term financial costs of planning (costs of changes, long- term costs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. ↑ Quality of public participation (scale, inclusivity, spontaneity, information)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. ↑ Technical quality and competence of local planning processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. ↑ Integration among local planning processes in the city. (co-ordination, fair allocation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. ↑ Sustainability of local planning outcomes (Contribution to regional environmental and economic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Table 4-3: Objectives by alternatives matrix. The matrix used by respondents was scaled up to 11" by 17" to allow for detailed written responses.

Ranking and Evaluating Institutional Arrangements for Local Planning

1. Read the detailed list of Fundamental Objectives.
2. Read the description of each of the 5 Alternatives.
3. On the Evaluation sheet (the 11 x 17 grid) rank each of the alternatives against each objective. **A rank of 1 means the alternative performs best on this objective; a rank of 5 means the alternative performs worst on this objective.**
4. On the Evaluation sheet, make written comments about the impact of each alternative on each objective. Comments may be detailed in some squares, and brief in others.

Adjustments to the Alternatives

Alternatives are not fully detailed, and you may feel that some of them are missing important necessary checks and balances or features that are needed to make them function.

In such a case, please make a note in the 'Comments' box at the bottom of the page, detailing the changes that you feel would be needed to make the alternative operational.

When rating the alternative against each objective, consider your specified changes as part of the alternative.

In other words, **rate the alternative with the positive assumption that your adjustments to it would be made.**

Scale of "Neighbourhoods"

Scale will have important effects on operating costs, the scope of planning that can be handled at the neighbourhood level, and, presumably, the intensity of community involvement. It may be assumed that scale would be relatively small for Alternative #3 (5 to 15 thousand people per neighbourhood), relatively large for Alternative #5 (around 50,000 people per 'neighbourhood'), and something in between for Alternative #4³. Participants' comments on scale would be appreciated.

Notes on Implementation

The assumption here is that implementation for alternatives #3, #4 or #5 would not happen simultaneously in all neighbourhoods. Implementation would occur as neighbourhoods reached the necessary level of organization, or on the basis of need. Full implementation would occur over a period of years.

Table 4-4: Instructions for evaluation of impacts

4.4.1. Scale of the evaluating task

Several persons who were approached as potential participants balked at the size of this task, which contained more detail than the previous two tasks combined. To make a careful evaluation of impacts required that participants understand the objectives list thoroughly; and visualize well how each of the 5 alternatives would function, before making judgements. The analyst had two options: reconstruct a truncated and 'user-friendly' task, with fewer and simpler options, but with less useful, less informative results; or continue with a more challenging instrument that some participants would not complete, but that was more productive when participants committed the necessary time and effort. The second choice seemed to be preferable for several reasons. There had to be a full range of options in any case, or a number of stakeholders could have been alienated and might have refused to participate. Alternatives had to be detailed enough to enable participants to make reasoned judgements on performance. A simplified instrument would have led to vague results. The point here was to talk about reasonably concrete arrangements.

4.4.2. Responses to the evaluation task

Two respondents, though they had seemed committed to finishing the task, never returned any results; the other six returned forms with varying degrees of completion. All respondents ranked the alternatives from one to five as requested. Three returned forms with detailed comments in all cells; two returned comments in a small number of cells but included extensive accompanying notes suggesting that the alternatives be reframed and the scope of the

exercise altered; and one simply ranked the alternatives and made no comments in any of the cells.

Even with the small number of detailed returns, each alternative received both positive and negative predictions on several or most objectives. In some instances respondents recorded both positive and negative impacts in the same cell. It had been expected that responses would show fundamental disagreements about impacts. These disagreements appear to stem at least partly from difficult-to-test assumptions about the following variables:

- *the cost-effectiveness and staying power of citizen co-production in planning;*
- *general costs and benefits of institutional and governmental decentralization;*
- *the capacity of professionals and the capacity of citizens to understand, plan and manage local development;*
- *the likelihood that citizens will organize effectively to resist expert and/or market-oriented direction;*
- *the likelihood that proposed citizen planning bodies or local elected bodies would be dominated by narrow interests*
- *the costs of institutional and organizational change;*
- *the ability and will of citizen planning bodies to achieve and sustain inclusive representation of stakeholders in their areas;*
- *the effect on citizen participation if decision-making functions are localized*

Conflicting judgements on consequences had been expected. One important function envisioned for this stage of analysis was simply to identify and clarify important disagreements which pointed to specific research tasks that needed to be undertaken.

The fact that many cells were not filled may result from an error in task design: the task instructions appeared to emphasize ranking, whereas this had been conceived as secondary to visualization and written description of consequences. This seeming emphasis may have led some participants to treat the task in a relatively simplistic way. Ranking is faster than visualizing specific consequences on a whole range of objectives. It may allow or encourage participants to fall back on preconceptions. One participant, for example, ranked each alternative identically on each objective, giving Alternative #5 a rank of 1 on every objective, Alternative #4 a rank of 2, and so on; this suggests that the participant made an assumption that more localized control over planning is always better than less, on every objective (alternatives are arranged so that the level of citizen control is least for #1 and greatest for #5). Ranking may have enabled some respondents to participate who were not committed to doing analysis, but only wished to express support for a preferred option. This says something about the way participants were oriented to the analysis exercise, about the way the task was designed, and about polarization that existed before the analysis was undertaken.

The nature and quality of the results constitutes valuable information about the design and management of the analysis task. This is reflected in proposals for redesign in the next chapter.

4.5. NOTES FOR CHAPTER 4

¹ Committee of Progressive Electors, Vancouver's second civic party

² Integrated Service Teams for Local Areas include planners as well as social planners, engineering staff, etc., but these staff are not expected to be involved in planning programs that take place in the area; they are presently oriented to integrated service delivery.

³ Berry et al. discuss scale of neighbourhoods as a factor in the success of participatory government models in the U.S.; they have determined that in cities where such governments have succeeded, the scale of neighbourhoods "ranges widely", from 70 to 14,000 in Portland, for example, but typically across all cities within the range of 2,000 to 5,000.(1993, 49) This, and the comments made in Alexander, suggest that the scale proposed in the alternatives was too large. However, there are tradeoffs involved in scale. If neighbourhoods are small and numerous, it would not be practical for them to work directly with City Hall, and a second tier of organization would be needed (Berry et al.: 1993). St. Paul decided on districts averaging 16,000 to permit direct liaison with City Hall; Portland, Birmingham and Dayton opted for a second tier of organizations (Berry et al 1993, 49). For any continuation or reworking of this analysis, the question of scale needs to be clarified, and integrated as a feature of alternative arrangements.

5. CHAPTER V: ANALYSIS REDESIGN AND EVALUATION OF DECISION ANALYSIS APPROACH FOR THIS SETTING

The test study was not complete as a decision analysis, but it provides useful information and insights about the necessary conditions and tactics for a full-scale analysis process, and makes possible some generalizations about the potential value and acceptability of the proposed analysis approach in this planning context.

Decision analysis contexts where there is multi-stakeholder input from existing groups seem likely to be politically complex and multi-layered, and analysts need to be ready for processes that are messy and involve considerable trial-and-error. Case studies in the decision analysis literature do an adequate job of describing what has worked, but do not highlight lessons from procedural errors and dead-end steps in processes; this is unfortunate. In the test study, false steps and problems were unavoidable, and these are considered here to be invaluable for defining the conditions under which a decision analysis framework may successfully be introduced and employed.

Section 5.1 below discusses reworking each step of the analysis in light of the study experiences and results, given a mandate to work to fully develop implementable policy. Section 5.2 evaluates the potential usefulness and acceptability of the analysis approach both in the decision problem at hand and for wider application in planning processes in Vancouver.

5.1. PROPOSAL FOR REWORKING THE ANALYSIS

Several important potential benefits were not realized from the study. Participants did not get an overview or understanding of the analysis method; they did not get access to research data that would help them improve their understanding of performance of different alternatives, and they did not get insights into the way the interests and values of other groups shaped their preferences. These shortcomings can be rectified given time, funding, an adequate mandate (so that participants would feel there was something real at stake for them), and a sufficient number of stakeholder representatives who had been exposed to and understood the analysis approach. The sections that follow propose reworking each of the steps in analysis, clarifying and improving features that were problematic in the present study, and responding to observations and suggestions of participants.

5.1.1. Structuring stakeholder representation

Participation in this study was by invitation and based on referrals from knowledgeable individuals who represented a wide range of views and interests. Representation, though broad, was somewhat haphazard. The issue of who ought to participate in analysis and on what basis was not clarified in the study; this imprecision was acceptable to most participants because they could see that the study focussed on generating information and alternatives, had no power to make a decision, and was an informal process in which people engaged out of interest. From the analyst's point of view, the task of systematically structuring participation would have been disproportionately large for the scale of the study. However, in a full-scale analysis, it would

be essential that this politically-important step be handled well and to the satisfaction of participating stakeholders.

In recent years, Council and staff have avoided representation from existing groups as a basis for citizen participation in planning processes, as was pointed out in Chapter 3. Participants in Vancouver planning processes are seen as individuals representing only themselves, and any individual can participate on a self-selected basis if he or she meets minimal criteria (e.g. having residence, business or property in the area affected by planning). This has some advantages and can be rationalized in terms of past problems (inadequate representation for marginalized groups, over-representation of politically adept groups). On the other hand, observation makes it clear that able and committed participants in civic processes tend to be highly involved in groups and to see themselves as representatives of groups, no matter how their role is formally defined. Processes that define participants as individuals may be viewed as undercutting the authority of groups and questioning their legitimacy. Approaches like the use of randomly-selected citizen panels (Renn et al 1991) or selection of representatives only from certain large stakeholders (Renn et al 1991 and 1993) seem unlikely to get acceptance in this planning context, where people expect some form of relatively direct representation or direct participation. Careful treatment of representation from existing groups may offer an acceptable and productive solution.

Formal representation of existing groups (*organizations*) would entail identification of all the existing groups that have interests in the policy problem. Edwards and von Winterfeldt describe procedures for resource use planning in Southern California and Arizona, where a large

number of stakeholder groups of different kinds were identified and invited to send representatives to participate in policy analysis.

This approach would raise some objections and might need to be negotiated with stakeholders. The advantages would be that the number of participants in the process could be relatively small compared to those where anyone might participate on an individual basis, and stipulations could be made that *participants must be willing to commit enough time to stay with the policy process from start to finish*. Time commitments should be larger than those in CityPlan, for example, where a large number of participants only took part in one stage of the process. As well, broad and balanced representation should be systematically obtained, and the interests of marginalized groups who themselves are unlikely to participate in planning processes should be represented by existing organizations. The following three objections will be raised:

1. that some interests would be over-represented,
2. that individuals who would like to participate but belong to no groups would have no input, and
3. that the restrictions on numbers would rob the community of opportunities to participate.

The first objection, that some interests would be over-represented, can be dealt with by pointing out that groups would not be meeting in large confrontational forums where numbers would matter significantly; nor would choices or decisions be made by voting. The process would be an analysis intended to arrive at better alternatives, not a process of determining majority preferences. Compatible interests could be clustered in order to make a more compact

process, at the stage of weighting objectives, for instance. This would be done by agreement. Perhaps stakeholders could be grouped by self-selection by organizing meetings defined by particular concerns (objectives) as Rozelle has demonstrated (Edwards and von Winterfeldt 156). In a water management decision, Rozelle clustered representatives from 60 stakeholder groups (from an invited list of 122) into a manageable 6 by inviting them to attend one of a series of 6 meetings, "each defined by a set of concerns that some of the participating stakeholders were expected to consider most important" **Sets of concerns** that would attract compatible clusters of stakeholders in the present case might include the following:

- a) respect for market forces and needs of business;
- b) preservation of Vancouver lifestyles and viewsapes;
- c) protection and promotion of interests of marginalized groups;
- d) maintaining a high level of municipal services;
- e) meeting environmental sustainability goals;
- f) developing viable communities in Vancouver neighbourhoods.

These are put forward as organizing concerns that would need to be refined. Some representatives might feel their concerns lay in two or several categories, but with some refinement in the list, most would be able to identify one concern that was dominant for their group. 6 may not be the right number of clusters for this problem, but in any case the number of stakeholder clusters need not be very large.

Objection 2, that unaffiliated individuals should be able to have input, could be dealt with by a number of means; for example, individuals could be invited to make submissions, all

of which would be required to be considered by participants in the analysis, and proceedings of meetings could be published.

The third objection, that limiting participation is *per se* a bad thing, and does not build the whole community's capacity for decision-making and analysis, is valid, but financial costs, time-frames, focus and general efficiency suggest that it is worthwhile considering a representatives-only approach in this and other cases. CityPlan costs were high (some estimates ran as high as 3.5 million dollars [Appelbe]), and could have been reduced by a more compact representative structure.

Again from the point of view that broad-based participation is a good thing in itself, we might assume that groups sending representatives to public policy processes would require briefings by those representatives and would carry on their own policy analysis, creating a wider involvement. However, one senior planner cast this notion in doubt, saying that in her experience, representatives do not adequately report back to and involve their groups' membership, except in a few cases like First Nations groups that are exceptionally well-organized (Howard). Views and assumptions about the capacity of existing groups to represent all interests in the community well, and the capacity of representative-based participation to generate broad-based participation back in groups, need to be tested.

Getting groups to participate might not be straightforward. Some groups might prefer to negotiate from a basis of numbers of supporters and might prefer forums where they could use

organizing capacities to outweigh opponents rather than engaging in analysis or the kind of principled negotiation advocated by Fisher and Ury, for example. Groups might object to the inclusion of certain other groups in the process; in the study presented in this paper, several citizens who were interviewed stated that developers should have no say in public policy planning in the test study 'because they're only in it for the money.' This is not an uncommon view. The notion of *stakeholders* is not well understood. Some citizen participants feel that the 'community' (meaning citizens' groups, and in some cases, residents' associations) are 'the only stakeholders' (Edelson). The analyst would need to spend time learning how different stakeholder groups viewed the policy planning process and their role in it. Getting a broad and inclusive range of participation from the many geographic communities and communities of interest might not satisfy all participants. The analyst might have to deal with groups who felt that they had superior claims to representation, and getting useful participation from these groups might not be easy.

It is possible in the present case that important groups would refuse to participate, or if they did participate, would not agree to the decision frame recommended by the analyst. As we have seen, a substantial number of participants in CityPlan's Making Choices process opted for local planning arrangements with legal decision-making powers at the neighbourhood level (see figure 3-1 above); this preference was also expressed by a number of citizens and some staff in the study. It would be important for the analyst to know whether groups promoting delegation of some planning and governance powers to neighbourhood bodies¹ would be willing to co-operate in an analysis within the decision frame controlled by Council, to realize short- and

medium-term advantages. This question was not fully addressed in the study, but the results of the study suggest that this issue needs to be clarified. The willingness of all important stakeholders to engage in a genuine analysis is essential to the success of the approach demonstrated here. For the analysis to succeed, the representation structure would have to be seen as both democratic and efficient. To meet these criteria would require careful thought, investigation and negotiation. This early process of structuring and soliciting representation is the key to the success of the analysis. It is also an opportunity to present and clarify the analysis approach to all participants, and to get input and ultimately a commitment by stakeholders to the terms of reference of the analysis..

5.1.2. Identifying and structuring objectives

Problems in the evaluation of impacts in the study suggest that the objectives list needs careful reconsideration. The criteria for selection of objectives should include capacity to differentiate alternatives, and researchability. Objectives like 'contribution to regional sustainability,' and 'technical quality of local planning' may or may not clearly differentiate the performance of different alternatives. Impacts on these objectives may be hard to demonstrate either by logical prediction or through case studies. If it can be demonstrated that these objectives could be equally well-served (or badly served) in any of the likely alternatives, then they might be dropped from the list, but documented elsewhere.

Participants in the study made opposite judgements about performance of alternatives on a number of objectives. The analyst and participants, in reworking the process, should

concentrate on those objectives for which case studies and real data can be found. It would, of course, not be sensible to neglect important objectives just because it is difficult to locate research on performance or to develop measurable attributes for them, but still the emphasis should be on demonstrable measures.

Reworking and restructuring objectives could be carried out by groups of compatible stakeholders led by the analyst. This might be more efficient than the one-on-one approach in the study, and would be dictated in any case by the larger scale of participation. The time allowed for this step would be more than in the present study. It would be essential for the analyst to get a well-defined decision frame, to explain well the function of the objectives (which means giving a clear overview of all the steps in the analysis), to differentiate fundamental from means objectives, and to work on specifying objectives as far as it would be useful to do this (i.e. as far as this would yield more attributes for which well-founded predictions could be made.) The analyst could present case studies and appropriate examples of objectives hierarchies. This overall approach could be expected to increase the time requirement for participants, but would yield a better set of objectives, and give participants a greater sense of understanding and control of the process.

5.1.3. Identifying and structuring alternatives

The range of alternatives could be narrowed. There are a number of reasons for considering this. First, as we have seen, some of the alternatives are outside the decision-frame controlled by Council, and in addition are seen as not being in their own interests by Council

and some staff. Council would not be willing to implement them, and in fact would have to request legislative changes at the provincial level to do so. Council has no legal obligation to implement any of the findings of a participatory planning or analysis process, and can delay implementation indefinitely. Council may choose to support a free range of options for the analysis. They could do this either because they perceived options within the range acceptable to them as probable winners, or because they felt it was more democratic to allow a full range of options. If they choose to oppose options like 4 and 5, citizens who prefer these kinds of options would have the following choices:

1. maximize gains within Council's preferred decision frame (eliminating alternatives #4 and #5, if they see Council in a winning position in the short run, and act in other contexts to promote governance changes;
2. demand inclusion of their favoured options in the analysis, using the process as a vehicle for publicizing their agenda(s); or
3. boycott the analysis.

Secondly, alternative #1, *Smaller government approach*, is probably not capable of attracting much support. CityPlan *Making Choices* results show about 6% of respondents chose a similar-sounding option. Only 1 of 30 participants in the study presented here clearly preferred an option like this. It appeared to be a distraction for participants to have to deal with making detailed predictions on an alternative that had no credibility for the large majority of them. Some features of this alternative might, however, be incorporated in a new alternative closer to the status quo.

Eliminating options 1,4 and 5 would make useful restructuring and detailing of alternatives easier. It would make the scope of research more manageable, since case studies on current institutional arrangements in comparable North American municipal jurisdictions would be available. It would be possible within this narrowed range of options to establish well-detailed and well-structured alternatives, for which better-founded predictions about performance could be made. Key variables like scale of neighbourhoods, which were obscured in the study, could be better addressed. Having a smaller number of alternatives covering a smaller a smaller and more realistic range of options for each policy variable would make the analysis more manageable in general.

However, if involved groups want these alternatives on the table, the analysis would not be undermined by this. The scale of research and of ongoing reiterations of defining alternatives and evaluating their impacts would be larger, but this could be justified by the importance of the policy problem. Mistakes in defining institutional arrangements for local planning will be expensive mistakes.

In the study, as explained above, the analyst made efforts to structure alternatives that would be acceptable to each of the stakeholder groups and would represent their present preferences for institutional arrangements. Some senior City staff later observed that this self-structuring of alternatives in past processes had been tantamount to encouraging groups to develop positions before the analysis process got underway, positions that might be poorly

thought out, and could easily become entrenched if the style of groups was combative (Forbes-Roberts). This speaks for a strong role for a consultant in identifying and structuring alternatives, and also for a need to get commitment to an analysis process, and to principled negotiation. This kind of commitment is social capital that must be built up over time.

5.1.4. Evaluating and researching impacts of alternatives

Reducing the number of objectives and focussing on objectives that would clearly differentiate the performance of different alternatives would make the evaluation task more straightforward.

The question of who makes judgements about performance is important. In decision analysis case studies, it is common for technical experts, rather than stakeholders, to make judgements on performance of alternatives. However, this is not always the case, and some analysts have considered it critical to find out how different stakeholders predict impacts (Marttunen et al). This should be done in the study case. Administrative experts could calculate costs of transitions to new arrangements and operating costs of new and existing arrangements, but this is still subject to interpretation and differing sets of assumptions, and other stakeholders would want to make their own judgements. 'Expert' prediction of effects on objectives other than financial costs would be even less acceptable to stakeholders in general. If stakeholder groups rate impacts differently based on different sets of well-considered assumptions and on different case studies, not simply on an optimistic belief that a certain set of

arrangements would be better, then their evaluation ought to be reflected in the analysis. To enable this kind of input from stakeholders, all participants must have the same research findings in hand.

It might be advisable to conduct evaluation of impacts in a workshop format so that the participants could undertake a detailed visualization process. Each workshop could be composed of representatives from a cluster of compatible stakeholder groups, self-selected according to their principle concerns, in order to save time and reduce unproductive conflict. Alternatively, workshops could be composed of representatives from the whole range of interests; this is a matter of judgement depending on the level of conflict present.

The analyst would lead participants to carefully visualize and record a plausible range of impacts from worst to best on each objective for each alternative; that is, they would be asked to make a well-considered prediction on performance in each cell of the alternatives by objectives matrix. Again, time committed to this task would have to be considerably greater than in the small-scale study documented here, and would need to be reckoned in days rather than hours. Is this a fatal flaw? Can participants be expected to commit this kind of time and intensity? This question hinges on the basis for participation; this is addressed in the final section.

The evaluation of rough-cut options in the study showed that different participants hold contradictory assumptions about impacts of alternatives on common objectives. Presumably

these contradictory assumptions would still be present in an expanded analysis. The analysis would be compromised at this point unless

- a) these contradictory assumptions are clearly identified, and
- b) research is conducted to move beyond unsupported assumptions and see what has happened in practice elsewhere.

Berry et al. have said, "making the case for participatory democracy on theoretical principles is much easier than demonstrating that it will work"(21). This point could hold equally true for empirically demonstrating that it will not work. Research for these purposes looks expensive and time-consuming, but it needs to be done to enable different stakeholders to come closer to agreement on the likely range of impacts, in this case by examining a wide range of institutional arrangements tested in other jurisdictions.

For example, citizens may assume that institutionalizing opportunities for neighbourhoods to participate in administrative or planning functions will not make much difference to the weight given to neighbourhood input in Council decisions, unless decision-making power is delegated in law. They might therefore rate alternative #3 low on the objective *Quality of public participation in local planning*, or on *Technical quality and competence of local planning processes*. Research, however, shows that in cities with a long-standing commitment to citizen participation, ".....the neighbourhood position on neighbourhood land use issues *is* the city policy" (Berry et al 63; italics mine), in other words, governments may find it difficult to ignore input from citizen bodies which they have recognized or constituted, and to which they have granted planning functions. This is researchable. Present and past

arrangements in other jurisdictions that have institutionalized planning functions for local groups (Seattle², Toronto, and Portland, for example, among many others) can be systematically analyzed and the findings made available to all participating groups. The importance of the policy problem would justify these costs.

Research could be conducted throughout the analysis process. Literature searches should probably concentrate on studies that include quantitative indicators like participation rates³. These are not the only arguments worth bringing to bear, but it is important to get some agreement on potential performance, and well-chosen, well-supported quantitative measures are generally persuasive. On the other hand, some degree of judgement is always involved in predicting impacts in any kind of analysis. Even where estimation of impacts is clearly a technical process based on well-established principles, and where there are available data, technical experts frequently make conflicting assumptions, and different stakeholders may invoke the views of different experts.

The question of who should conduct research, under whose direction, is important. Arguably the best arrangement would be to hire independent researchers satisfactory to all stakeholders and make them responsible to all stakeholders. Any single stakeholder managing and funding research would find it difficult not to influence the researcher. The fact that citizens' groups are unable to contribute a substantial share of research funding might be viewed as a problem, but would not be an insurmountable one as long as the way in which research

consultants were directed was transparent, and the concerns of all stakeholders participating in the analysis were addressed by the researcher.

5.1.5. Quantitative steps

If no option clearly appeared as a broadly acceptable best-fit solution after the evaluation of impacts, could weighting of objectives and development of numeric performance indexes for options be a reasonable undertaking, depending on the receptivity of participating groups? Introducing these techniques to participants by presenting straightforward case studies would be essential. Even so, it is arguable that only participants with specific kinds of professional or business backgrounds would take readily to such an approach.

If, as in the study case presented here, stakeholders have made completely opposite judgements on the likely performance of several alternatives, then numerical performance indexes calculated for different groups may differ so greatly in any case that they serve no purpose except to illustrate that there is no basis for agreement. In the study, this step could not have been undertaken without reworking the first stages of analysis; evaluations of alternatives were polarized, and it was readily seen that some participants would rate highest, on all objectives, and by a great margin, what others would rate lowest by an equally great margin. Few participants in the test study liked the middle ground. Quantifying steps might be contraindicated where views are heavily polarized; on the other hand, they still might be useful in showing each group how others view likely impacts and how they rank objectives. However, if groups were committed to conducting a relatively objective analysis, if objectives were

selected so that their attributes (concrete results) would be researchable and testable, if alternatives were selected whose performance elsewhere could be evaluated, and if there were an adequate commitment of time and funds to research, then this step is potentially valuable in discovering the alternative that best fits the interests and values of the whole range of stakeholders. These conditions could all be met, given a competent analyst, an adequate commitment to analysis on the part of stakeholder groups, and a substantial time commitment on the part of participants for process and background reading. .

5.1.6. Reworking alternatives

Participants' evaluation of impacts and weighting of objectives could mutually inform groups about how each other group perceives its interests in the decision. This would create a basis for negotiation to refine features of one or more alternatives. Presumably participants would want to work hard at negotiating adjustments to all alternatives that looked capable of winning out. This kind of late-in-the-process restructuring would be useful, but it does not figure prominently in decision analysis case studies. Perhaps time pressures to come to a decision tend to work against long refining processes, but commitment to getting a sensitive and durable decision would make a recursive process essential for the question considered here.

5.1.7. Taking a decision

The way that a policy decision will be made, or is expected to be made, affects participation in the analysis process. A lack of clarity about the final decision-making

mechanism would inhibit participation in the analysis. The final mechanism for decision-making has sometimes been vague at the outset of broadly participatory forums in Vancouver. In a full-scale analysis intended to reach a solution, it would be risky not to define this mechanism at the outset as an operational feature of the analysis.

Decision analysis has largely been used in settings where decisions are taken by an institutional or governmental decision-maker. The initial assumption in the test study was that a final decision would be made by Council, who would take input from the analysis into account. One senior planner questioned this assumption, implying that the real decision under present council may be seen as one taken by consensus by multi-party planning groups (Forbes-Roberts). Three decision-taking mechanisms can be identified which have been employed, sometimes in combination, in urban planning contexts:

1. Council makes a commitment to implement policy developed in public forums, as in Seattle, if recommendations from these forums fall within certain parameters;
2. the final decision is left to Council, who may implement decisions of public planning bodies, but make no formal commitment to do so; this is the status quo in Vancouver; or
3. the question is put to a referendum in which all affected parties (e.g. the whole electorate in Vancouver in the present case) may vote.

The first option is a good one *if problems of representation can be handled well*. In the decision problem undertaken here, it may well be "not sharing power, but rather.....sharing authority in recognition of the power these groups already hold" (Potapchuk 161). The second

option runs a great risk of alienating participants and discouraging them from further participation if decisions do not incorporate their input. The referendum option may be considered in the case studied here, given that the resulting policy can be expected to have important effects on the whole electorate, but a conventional referendum runs the risk of polling a large number of unreflective, uninformed preferences. A referendum could, however, take the form of a *structured value referendum* (McDaniels 1994a). where, instead of responding to a traditional yes-no question, voters are asked to choose between several alternatives, “based on an understanding of the value tradeoffs”(4).⁴

5.2. SUMMARY CONCLUSIONS ABOUT THE APPLICABILITY OF DECISION ANALYSIS IN THIS PLANNING CONTEXT

Factors that will affect the potential productivity and acceptability of the analysis approach are shown in an influence diagram in Figure 5-1 below: this suggests the difficulty of making predictions about the successful application of the analysis method. Generalizations are attempted in the following pages about the potential usefulness of the approach, both its potential for bringing about a good resolution in the study case, and its more general potential for planning in Vancouver in programs with public and multi-stakeholder input.

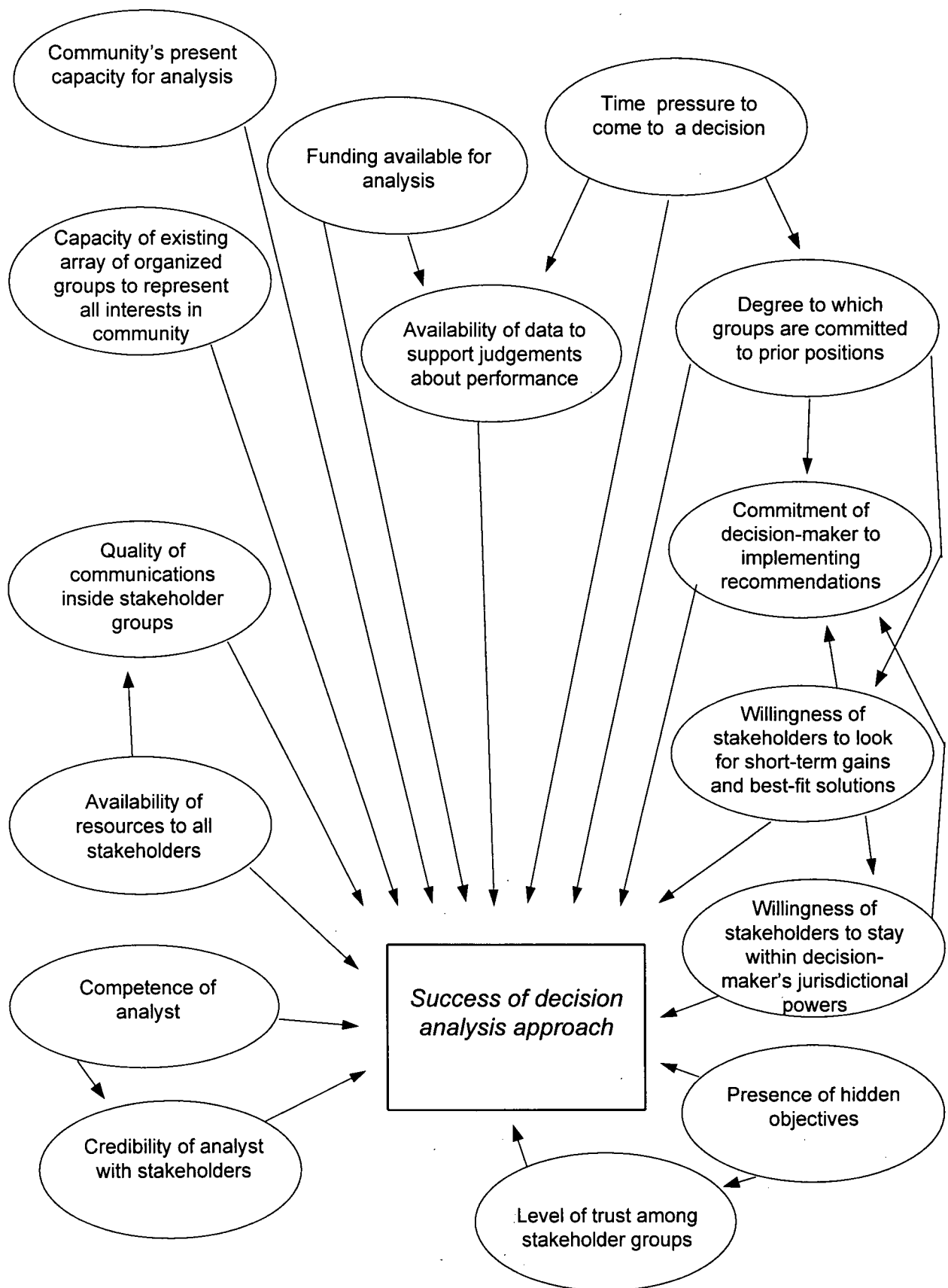


Figure 5-1: Determinants of success of decision analysis approach in the study context

5.2.1. Summary of participant reactions

It seems useful to characterize the reaction of each major stakeholder type - Council, City staff, private interests and citizens - to the exercise and the approach. This should be done systematically as is suggested in the section below on introducing and popularizing the decision analysis approach. The input received from participants in this brief study, though suggestive, does not allow firm conclusions. Participants generally did not have enough time to get an adequate overview of the structure of the analysis. The number of participants was small, so their remarks and reactions cannot be taken as representative. This being said, it is important to glean as much as possible from the test study.

Some council members would be willing to accept the approach only on the condition that the decision problem be limited in scope to alternatives that were within their power to implement, and not inimical to their own interests. One council member made it clear that, in the study case, options that Council associated with a Ward system (Alternatives 4 and 5) would have to be eliminated from this decision context, or Council would not support the analysis. However, as planners pointed out, Council dislikes conflict in public processes, and often directs parties in local planning programs to come to a consensus (Forbes-Roberts); this may indicate that a multi-party analysis and negotiation process would be acceptable to Council in general terms, if it leads to consensual agreements and a reduction in conflict. On the other hand, to the extent that Council are committed to the tactic of casting participants in public planning as individuals representing only themselves, they may reject a multi-stakeholder

approach. As Potapchuk points out, government may deal only with individuals in order to prevent opponents from organizing joint activity in opposition (163).

Some City staff who participated in the study are interested in a multi-stakeholder, negotiating approach to planning, and said they wanted to see more analysis and less positioning and conflict in planning processes. Others feel it is less risky and leads to less conflict to define participants in planning as individuals representing only themselves, and to focus on common interests rather than trying to identify and clarify different interests. Some see citizens primarily in a consultative role, and not in a partnership role; others promote a decision-making role for citizens. Some staff were enthusiastic about the way objectives were framed in the study and saw their value. It appears that the analysis approach would get support from some staff; senior staff in planning seem to be divided on these issues.

Representatives of development companies appeared to welcome an analytical and negotiating approach, wanted an opportunity to discuss their values and interests in the planning decision context, and indicated they would support a decision analysis process run by a neutral party; their own orientation to planning processes appeared to be analytical and to look for best-fit solutions rather than taking rigid positions. This did not seem to be based simply on a perception that status quo options were likely to win out; two of three individuals in this category said they were receptive to or enthusiastic about decentralization of planning and some decision-making to local levels. Of course, this is a very small sample, and participants were more or less self-selected according to interest in local planning processes.

Citizens in the study seemed least receptive to the approach. Several objected to being asked to examine or evaluate other alternatives than those they initially supported. One said she was 'past the curiosity stage' as far as the question of local planning arrangements was concerned. Another, participating in evaluation of impacts, said he was only interested in evaluating his preferred option, to see if it was detailed to his satisfaction. There were signs that some citizens might not be willing to participate in systematic analysis formats; one respondent indicated that he 'didn't like to be programmed.' This may be a key problem; it is discussed in the following section.

It must be taken into account that participants from all stakeholder types had been conditioned by past processes. Some seemed to have expectations that decisions would be made in the long run by voting, for example, and were very concerned about ratios among participants from different stakeholder types. Many expected that processes would begin with a statement of preferred alternatives. Reactions of participants might be expected to change after extensive involvement in analysis processes, seeing, for example, how input from each stakeholder interest could be incorporated in the analysis and reflected in policy outcomes, irrespective of the numbers of participants from each stakeholder type.

5.2.2. Citizen styles and professional styles; representative and participatory theories of democracy

One of the key problems in introducing a multi-stakeholder multiple objective decision analysis approach to urban planning is that it casts participants in unfamiliar roles. In the study, planning staff became stakeholders with an interest in the outcome of the analysis, not objective arbiters managing the process. Council was seen as having its own interest in the problem, as well as representing the interests of citizens not otherwise represented in the process.

Citizens are expected under this approach to take on a relatively objective, analytical and negotiating role, whereas normally, as Grant aptly points out, they are more used to taking a passionate role, performing in “a kind of moral play” (36), and arguing about values rather than systematically comparing means of achieving commonly agreed values. The decision to be made here by citizens participating in planning, is whether it makes sense to expect them to take on roles more like professional ones. Is asking citizens to act more like planners simply an imposition of corporate values on what should be social planning, as Owen and Boothroyd warn (4-5)? Does the kind of decision analysis sketched here do what these authors warn against - make decision-making ‘as programmed as possible’(4)?.

This kind of decision analysis, in theory, engages stakeholders in a discussion and deep exploration of values and interests of different parties in the decision problem. This is a systematic approach, but it does not seem inevitably to be programmatic and constraining in the way of corporate planning approaches described by Owen and Boothroyd. However, if it is

perceived to be too constraining, it may not be able to establish a foothold. This is possible, and it presupposes a need to present and introduce this kind of decision-making framework carefully, not simply to try arbitrarily to make it run.

People and groups may also reject the proposed analysis, if run as suggested here only with representatives of groups, as elite and undemocratic. This is not a straightforward question. As Grant remarks, "the rhetoric of democracy has penetrated public discourse.....(but) actors in the planning drama have different ideas about what democracy means"(13). Decisions that must reflect the interests of large numbers of different individuals and groups are bound to run into criticism from some quarter no matter what approach they take. It must be clarified here that the selection of representatives proposed for a City-supported public process should not be like what was done in this study - selection of a few individuals by invitation. This was done for convenience, and is a weakness of the framing of the study exercise. It is proposed here that participation in a full-scale exercise ought rather to be based on **solicitation of representation from the very broadest array of groups who would be interested**. Could balance among interests and a complete representation of the range of interests be achieved in this way? Arguably a very full array of interests is expressed in the great number of community groups and agencies that exist; range is not seen here as a serious problem, unless some kinds of groups are unable to participate effectively. Balance is another matter. If individuals from groups are clustered according to their principal concerns, then the problem of forums dominated by packing of certain types of interests may be avoided. These problems must not be glossed over, but the literature suggests that satisfactory ways to handle them can be devised.

Goodin lays out a taxonomy of types of democracy, shown below, according to two variables: whether governments or processes respect people's preferences directly or indirectly, and whether they respect unreflective or reflective preferences.

		Preferences are:	
		Unreflective	Reflective
Respects people's preferences:	directly	populist democracy	deliberative democracy
	indirectly	(empty)	democratic elitism

Table 5-1: Types of democracy (from Goodin, p. 230)

The analysis method described in this thesis is deliberative and respects reflective as opposed to unreflective preferences (a random phone survey, for example, or an ordinary referendum, or simply an open meeting where people vote with no requirement to take part in deliberations or be informed, respects unreflective preferences). The decision analysis approach might be seen as elite, but it doesn't tell groups on what basis to determine who should represent them, or what processes they should conduct within their own groups to address a decision problem undertaken in a decision analysis process. In this sense, the approach presented here is neither undemocratic nor elite in itself; this partly depends on the character and organization of the groups and organizations involved. However, it is clear from the experiences in the study

presented here, and judgement tells us as well, that this relatively complex process will tend to attract and retain participants with backgrounds in planning and analysis and may seem forbidding or alienating to people with 'street-smarts'.

5.3. *IS THERE, AFTER ALL, A PLACE FOR DECISION ANALYSIS IN THIS KIND OF POLICY PLANNING PROCESS?*

Can multiple objective decision analysis, based on the findings of this study, based on judgement, and based on its record in resource use and other highly technical decisions, be usefully applied in the different context of public decisions in urban planning? The present study made a foray into a complex landscape of human interaction, conditioned by past processes and arrangements in planning, analysis and participation. The framework tested here did not, of course, turn out to be a 'magic bullet.' It ran into some serious problems. Some can be attributed to the lack of resources and the unofficial character of the exercise (with corresponding lack of commitment by participants). However, two problems appear critical. One is that decision analysis appears to be time consuming, not in terms of the accumulated time for all participants, but in the amount of time required for each participant to engage fully in the analysis process. This can be mitigated by putting complex tasks like structuring alternatives and evaluating impacts more in the hands of the analyst, engaging stakeholders principally in identifying and perhaps structuring objectives, and then perhaps in a monitoring and vetting role on other stages. It should be said that this kind of division is conventional in decision analysis processes, and that the process tested here involved stakeholder participants far more than many or perhaps most decision analysis processes on resource use questions have done. The problem

of balancing expert against stakeholder participation in complex policy problems is not particular to decision analysis.

A second problem perceived in the study is that decision analysis looks complex. Perhaps this should be rephrased: decision analysis as conducted here presents stakeholder participants with the kind of analytical complexity that only professional analysts or planners and politicians usually have to deal with. This appears to favour stakeholder participants who *are* professionals. Yet presumably staff, Council and private interests normally have to tackle in some fashion equivalently complex computations about policy. The question here is not really whether decision analysis is complex, but rather whether to expose citizen stakeholders to the full complexities of issues, including the whole array of tradeoffs among values and different interests, and the whole picture of costs and benefits. There are obviously limits to this, unless there is a structure of qualified representation. All parties need to come to grips with tradeoffs between breadth and depth of processes, and the gap between what is required from analysis for good policy decisions and what citizens and voluntary groups are prepared to invest in processes. It would be unfair to expect the decision analysis framework itself to handle this problem. Every planning process that has multi-party involvement has to deal with this. The basis for participation proposed - but not tested - in this paper, may have a chance of resolving this issue, but clearly needs a good deal of consideration and study in itself.

In the end, we are probably only talking about incorporating elements of decision analysis in urban planning in Vancouver, on a piecemeal basis. The capacity of groups and

individuals to participate is not fixed, however. The reader is asked to take into account that social learning in the community is a real factor, and that increased opportunities (or demands) for deep participation could be expected to increase the community's capacity for analysis. Such opportunities might increase appreciation for the complexity of tradeoffs that underlie policy decisions of this kind, and lead to a more conscious and better-accepted division of roles between the different agencies and interests involved. .

Clarification of roles in processes, and clarification of what each stage of analysis is expected to accomplish, are critical to decision analysis and to the intent of this paper. Making a clear distinction between identification of objectives, evaluation and negotiation of alternatives, and decision-making, is seen as essential here to getting high quality results. At the same time, it is important to recognize the value of *any* processes that require engagement and participation from citizens. Decision analysis procedures are not proposed here as an all-or-nothing alternative to present forums for public involvement in planning and policy. They are seen as elements that may be layered into policy processes to improve their rigour, and to reduce early positioning by focussing on objectives and on testing real performance of alternatives on objectives. How this is done, and in what degree, would depend on circumstances (such as the scale and complexity of the problem and the configuration of interests involved) and on the judgement of all participating parties. Processes that permit involvement of many people, in straightforward ways that may be as limited as registering their opinion on a policy matter, are important. Maximal scale of participation was identified here as a fundamental value by which to evaluate local institutional arrangements; it is only logical that

this objective be applied to city-scale policy processes, even if they are complex. This implies that decision analysis elements ought to be modified and incorporated in more accessible frameworks.

5.4. NOTES FOR CHAPTER 5

¹Neighbour to Neighbour, for example, has by their own count representation from fifty residents' associations in Vancouver; this is close to the total number of such associations.

² Seattle's new local planning arrangements, now starting to be implemented, have special relevance. They test the supposition that putting planning resources in the hands of neighbourhoods and making a commitment to implementing neighbourhood policy if it falls within certain parameters, will result in more sensitive and more efficient local planning, and more co-operation from neighbourhoods in implementing growth management policy. (Hollick-Kenyon 1995; City of Seattle March 1994)

³ See for example Berry, Jeffrey M., Kent E. Portney, and Ken Thompson. (1993); Scavo, Carmine. (1993);

⁴ McDaniels views the structured value referendum as a simplified version of decision analysis; in the study case, it would present to the public well-defined alternatives and an analysis of the value tradeoffs between them, rising out of the multi-stakeholder analysis process. Voters would have access to sufficient materials to let them make a reflective decision, including the views of different stakeholder groups. This would be costly; the referendum in Victoria, B.C. described by McDaniels, which presented three alternatives for sewage treatment for that city, cost about \$1 million Cdn., mostly for the costs of administering the vote itself, as oppose to the information program and associated activities (24); this was with a turnout of 34,000 or 24% of the electorate. We might guess that costs for a similar exercise for Vancouver would be in the range of \$2 million. This seems expensive, but strong public involvement, educational benefits and the clearly democratic nature of the process would be worthwhile in themselves and would predict good public acceptance.

6. LIST OF WORKS CITED

- Anderson, Owen and Peter Boothroyd. (1987). "The Difference Between Corporate and Social Planning and the Implications for Indian Affairs." Saskatchewan Forum
- Appelbe, Alison. (1995). "Opposition slams 'hollow' CityPlan." Vancouver Courier, June 4, 1995, 7.
- Beasley, Larry. Director of Central Area Planning, City of Vancouver. Interview. May 15, 1995.
- Berry, Jeffrey M., Kent E. Portney, and Ken Thompson. (1993). *The Rebirth of Urban Democracy* Washington: The Brookings Institution.
- Blore, Shawn. (1995). "Redefining Neighbourhoods." *Georgia Straight*, Aug. 4-11, p. 11.
- Brown, C.A.. (1984) "The Central Arizona Water Study: A Case for Multiobjective Planning and Public Involvement." *Water Resources Bulletin* 20, 331-337 (1984)
- Buholzer, Bill. (April, 1976). "Local Area Planning in Grandview-Woodland" in *Quarterly Review*.
- Bula, Frances. (June 13, 1995) "Bickering Drowns Out CityPlan." Vancouver Sun, p. B4
- City of Seattle. (March 1994) *An Issues Guide to the Mayor's Recommended Comprehensive Plan*. (Document from City of Seattle Planning Department On-line Information Board.)
- City of Seattle. (October 17, 1994) *Seattle Resolution 29015*.
- City of Vancouver Electoral Boundaries Commission. (May 1988). *City of Vancouver: Boundaries for a 10-Ward System*.
- City of Vancouver Manager's Report. (Sept. 29, 1977). *Review of Local Area Planning*.
- City of Vancouver NIS Committee Report. (August 17, 1989). *Terms of Reference: Kitsilano Citizens' Planning Committee*.
- City of Vancouver Planning Department (May 1995). *Oakridge/Langara Planning Study Newsletter #5..*
- City of Vancouver Planning Department. (April, 1994). *CityPlan All Choices Book*.
- City of Vancouver Planning Department. (August 1989). *Reports to Council: Local Area Planning in Vancouver: Citizen Planning and Priorities*.

- City of Vancouver Planning Department. (August 24, 1994). *Report #4: Results from the CityPlan Making Choices Questionnaire.*
- City of Vancouver Planning Department. (August 24, 1994). *Making Choices Response Totals: 1784 responses.* Unpublished data tables.
- City of Vancouver Planning Department. (March 25, 1994). *Background Paper: Decision Making.*
- City of Vancouver Planning Department. (May 14, 1976). *Reports to Council: Local Area Planning Workshop.*
- City of Vancouver Planning Department. (May 1980). *Local Area Planning Priorities for the Eighties*
- City of Vancouver Planning Department. (Undated document) *Making Choices questionnaire.*
- City of Vancouver Planning Department. (November 22, 1990). *Report of the Study Team on Local Area Planning.*
- City of Vancouver Planning Department. (October 7, 1994). *Report #6: Results from the CityPlan Telephone Survey*
- City of Vancouver Planning Department. (September 23, 1994). *Report # 5b: Results from the CityPlan Futures Questionnaire.*
- City of Vancouver Planning Department. (June 4, 1973), *Local Area Planning: Information and Recommendation.*
- City of Vancouver. (June 1995). *CityPlan: Directions for Vancouver*
- Cornejo, Dan. (January 1978). "Local Area Planning in Vancouver" in *Quarterly Review.*
- Cornejo, Dan. (January 1979). "Progress Report on Local Area Planning" in *Quarterly Review.*
- Daneluzzi, Lidio. (1978) *Conflicting Expectations: The Situation of the Local Area Planner in Vancouver.* MA Thesis: University of British Columbia.
- Edelson, Nathan. Senior Planner, CAP Division, City of Vancouver. Interview May 1995.
- Edwards, Ward and Dietlof von Winterfeldt. (1987). "Public Values in Risk Debates." *Risk Analysis* vol. 7, no. 2.

- Fischhoff, Baruch. (1991). "Value Elicitation: Is There Anything in There?" *American Psychologist* vol. 46, no. 8.
- Fisher, Roger and William Ury. (1981, 1991). *Getting to Yes: Negotiating Agreement Without Giving In*. New York: Penguin.
- Fogel, Michael. (December 9, 1992). *Debriefing Report: Arbutus Industrial Area Planning Process*.
- Forbes-Roberts, Jacquie. Director of Community Planning, City of Vancouver. Interview. May 15, 1995; Nov. 20, 1995.
- French, Trish. Senior Planner, Community Planning Division, City of Vancouver. Interview. May 25, 1995.
- Goodin, Robert E. (1993). "Democracy, Preferences and Paternalism." *Policy Sciences* Vol. 26, No 3
- Gordon, Michael. Senior Planner, CAP Division, City of Vancouver. Interview. June 2, 1995.
- Grant, Jill. (1994). *The Drama of Democracy: Contention and Dispute in Community Planning*. Toronto: University of Toronto Press.
- Hollick-Kenyon, Sue. (December 1995). *Pressure and Context: The Development and Genesis of Power-Sharing Policies With Neighbourhoods in Neighbourhood Planning*. MA thesis. University of British Columbia
- Howard, Ronda. Senior Planner, CityPlan Division, City of Vancouver. Interview. October 25, 1995.
- Howard, Ronda. (October 1980) "Grandview-Woodland" in *Quarterly Review*.
- International City Management Association. (1986). *A Framework for Citizen Participation: Portland's Office of Neighborhood Associations*. Washington, DC : ICMA
- Keeney, Ralph. (1992). *Value-focused Thinking: A Path to Creative Decisionmaking*. Cambridge, Massachusetts: Harvard University Press.
- Marttunen, Mika and Raimo P. Hamalainen. (1995). "Observations from decision analysis interviews in environmental decision making." *European Journal of Operational Research* vol. 00 EOR 02402 T
- McCauley, Brian Private planner, VLC development corporation. Interview. July 1995.

- McClanaghan, Dale. Private planner. Vancity Properties. Interview. May 18, 1995.
- McDaniels, Timothy, Michael Healey, and Richard Kyle Paisley. (1994). "Co-operative fisheries management involving First Nations in British Columbia: an adaptive approach to strategy design." *Canadian Journal of Fisheries and Aquatic Science*, vol. 51.
- McDaniels, Timothy. (1992). *A Multiple Objective Decision Analysis of Land Use Options for the Tatshenshini-Alsek Area*. (Prepared for Commission on Resources and Environment, Victoria, B.C.)
- McDaniels, Timothy. (1994a). *Eliciting Public Preferences for Policy Alternatives: A Structured Value Referendum for an Environmental Risk Management Decision*.
- McDaniels, Timothy. (1994b). Notes from lectures.
- McNamee, P. and J. Celona. (1990). *Decision Analysis with Super-Tree*. San Francisco: Scientific Press.
- Morlan, Robert L. (September 1982). "Sub-Municipal Government in Practice: the Rotterdam Experience." *Western Political Quarterly* Vol. 35, No. 3
- Nanetti, Rafaella. (1985). "Neighbourhood institutions and policy outputs: the Italian case." *International Journal of Urban and Regional Research*. vol. 9, no. 1, March 1985.
- Nowlan, Paul. Planner, CityPlan Division, City of Vancouver. Interview. August 11, 1995.
- Potapchuk, William R. (1991). "New Approaches to Citizen Participation: Building Consent." *National Civic Review* Spring 1991.
- Raiffa, H. (1982) *The Art and Science of Negotiation*. Cambridge, Mass.: Harvard University Press.
- Renn, O, U.Stegelmann, G.Albrecht, U.Kotte and H.P.Peters. (1984). "An Empirical Investigation of Citizens' Preferences Among Four Energy Scenarios." *Technological Forecasting and Social Change* 26
- Renn, Ortwin, Thomas Webber and Branden B. Johnson. (1991) "Public Participation in Hazard Management: The Use of Citizen Panels in the United States." *Risk - Issues in Health and Safety* 197 (Summer).
- Renn, Ortwin, Thomas Webber, Horst Rakel, Peter Dienel and Branden Johnson. (1993) "Public Participation in decision making: A three-step procedure." *Policy Sciences* vol. 26: 189-214.

- Scavo, Carmine. (1993). "The Use of Participative Mechanisms by Large US Cities" *Journal of Urban Affairs*, Vol. 15, Number 1.
- Vatn, Arild and Daniel W. Bromley. (1994). "Choices without Prices without Apologies." *Journal of Environmental Economics and Management*, vol. 26, 129-148.
- Von Winterfeldt, D., and W. Edwards. (1986). *Decisional Analysis and Behavioural Research*. New York: Cambridge University Press.
- Wayne, Sandy. Planner, Community Planning Division, City of Vancouver. Interview. September 1995.
- Weimer, David L. and Aidan R. Vining. (1992) *Policy Analysis Concepts and Practice*. Englewood Cliffs, New Jersey: Prentice Hall.

Alternative # 1: Smaller-government approach

There is a withdrawal of institutional support for active citizen participation in planning. Neighbourhood planning specified in CityPlan is not implemented. New neighbourhood boundaries are not identified. Community Planning Division is reabsorbed into Land Use Planning.

INSTITUTIONAL ARRANGEMENTS (Roles and responsibilities)

Basis for citizen participation

- Planning does not initiate or support formation of citizen planning committees. Committees form spontaneously if at all.

Terms of reference (scope) of planning processes

- Planning projects are not described as community planning projects. Planning projects tackle specific and limited issues approved by Council before planning starts, as opposed to global issues.
- Areas for planning programs are defined by predicted impacts of development or infrastructure projects, or predicted impacts of rezoning.

Management of planning programs

- Planning and other City departments take responsibility for management of planning programs

Outreach

- Planning undertakes distribution of information, conducts surveys in affected areas

City-wide allocation of resources by area

- Prioritization for allocation of planning resources by area is decided by Council with advice from Planning.

CENTRALIZATION/DECENTRALIZATION

- Staff are assigned to program areas only for duration of programs. No ongoing assignment to neighbourhoods.

RESOURCES

- Cutbacks in citizen-oriented information and communications resources for planning.
- Staff hiring levels reduced from present level

Alternative # 1: Smaller government approach

Alternative # 2: Projection of present trends

This approach assumes no broad institutional policy change for community planning strategies and is projected 4 or 5 years into the future. CityPlan neighbourhood concept plans are not undertaken. Neighbourhoods are not defined. Council retains final decision-making powers in all planning matters.

INSTITUTIONAL ARRANGEMENTS (Roles and responsibilities)

Basis for citizen participation

- Citizen participation is on an individual and not a representative basis
- Citizen planning committees may be encouraged to form
- Citizen planning committees participate in planning processes but have no formal decision-making power

Management of planning programs

- Planning takes primary responsibility for management of local planning programs

Outreach

- Planning undertakes the bulk of outreach (information and local research) in affected areas

Facilitation

- Programs are generally facilitated by Planning

Scope of processes

- Local planning projects tackle specific and limited issues approved by Council, and sometimes more global issues in *neighbourhoods or local areas*.

City-wide allocation of resources by area

- Prioritization for allocation of planning resources to localized planning programs is decided by Council with advice from Planning.

CENTRALIZATION/DECENTRALIZATION

- Staff are assigned to local program area only for duration of program. No ongoing assignment to neighbourhoods. (Planners are assigned to ISTs, but this is in addition to their regular duties, and planners are not systematically assigned to planning programs in their IST area)

RESOURCES

- Staff hiring levels vary slightly downward from present level

Alternative # 2: Projected status quo alternative

Alternative # 3: Expanded partnership

Citizens have a greater role, greater resources, greater access to information, and greater responsibilities. This is like a co-management strategy. Neighbourhood boundaries are identified and fixed.

INSTITUTIONAL ARRANGEMENTS (Roles and responsibilities)

Basis for citizen participation

- Neighbourhood Planning Committees informally represent all social and demographic groups present in the neighbourhood, and all existing community associations. They receive planning resources from the city, and in turn are required to get effective representation from all groups.

Outreach and research

- Planning, other City departments and Neighbourhood Planning Committees jointly undertake outreach and research.

Project management

- Planning and Neighbourhood Planning Committees jointly manage planning projects through a steering committee.

Facilitation

- An independent facilitator acceptable to stakeholders may be brought in.

City-wide co-ordination of local planning groups

- Office of Neighbourhoods links various Neighbourhood Planning Committees' planning activities and represents neighbourhoods before Council,

Scope of processes

- Planning, Council and the Office of Neighbourhoods jointly determine planning program scope and allocation of funds among neighbourhoods.
- Programs may be limited in scope or comprehensive, depending on need and available funds.

CENTRALIZATION/DECENTRALIZATION

- Planning is partly decentralized, with some staff assigned to neighbourhoods continuously or hired by neighbourhoods. Locally-assigned staff work on planning programs in their area.

RESOURCES

- Increased communications and training resources, and funding for consultants, available to Neighbourhood Planning Committees.

Alternative # 3: Co-management alternative

Alternative # 4: Appointed neighbourhood planning councils

Neighbourhood Planning Councils are appointed by Council from nominees put forward by existing community groups. Appointees are selected so as to achieve ongoing representation for all groups in the neighbourhood. These councils have approval powers on development permit applications which clearly have local and not city-wide impact. No power to regulate zoning.

INSTITUTIONAL ARRANGEMENTS (Roles and responsibilities)

Basis for Citizen Participation

- Citizens participate in ad hoc planning committees and working groups as well as on the Neighbourhood Planning Council

Management of Planning Programs

- Neighbourhood Planning Councils manage localized planning programs

Outreach function

- Neighbourhood Planning Councils and city staff jointly undertake local outreach and research

Facilitation

- Processes may be facilitated by any qualified person jointly agreed by the involved parties (Neighbourhood Planning Council, City departments, private stakeholders, citizen groups)

Scope of processes; allocation of funds; city-wide co-ordination of local planning groups

- Council and a co-ordinating body acting for all neighbourhood planning councils (*Office of Neighbourhoods*), jointly determine allocation of planning funds among neighbourhoods.
- Programs may be global or limited in scope, according to need and available resources.
- Office of Neighbourhoods links various Neighbourhood Planning Councils' activities and represents neighbourhoods before Council (but has no voting powers).

Centralization/decentralization

- Planning is largely decentralized, with a substantial number of existing staff assigned to neighbourhoods on a long-term basis or hired by neighbourhoods.

RESOURCES for local planning

- Neighbourhood Planning Councils receive block funding for planning

Alternative # 4: Appointed neighbourhood councils

Alternative # 5: Elected neighbourhood government

Neighbourhood Councils are elected to represent neighbourhoods.. These councils have power both to regulate zoning and approve development permit applications, in cases where impacts are limited to the neighbourhood. Councils administer some other functions in addition to localized land-use and social planning (E.g. cultural activities, community centres, traffic regulations)

INSTITUTIONAL ARRANGEMENTS (Roles and responsibilities)

Basis for Citizen Participation

- Voluntary Neighbourhood Planning Committees and working groups form as required

Management of Planning Programs

- Neighbourhood Planning Committees and neighbourhood staff jointly manage local planning projects

Outreach function

- Neighbourhood Planning Committees and neighbourhood staff undertake outreach for programs with localized impact, and collaborate with City staff where impacts are broader.

Scope of processes

- Terms of reference for local planning programs are set by the Neighbourhood Council where impacts are localized. Where impacts are broader, terms of reference are set by Council with input from Planning and a board of Neighbourhood representatives.

City-wide co-ordination of Neighbourhood Councils

- A board of representatives from Neighbourhood Councils co-ordinates planning efforts of neighbourhoods, and collaborates with Council on allocation of funds to neighbourhoods.

CENTRALIZATION/DECENTRALIZATION

- Neighbourhood Councils hire their own planners, social planners and technical consultants.

RESOURCES for local planning

- Neighbourhood Councils operate on block grants from the City.

Alternative # 5: Elected neighbourhood councils

Objective	Alternative 1 Smaller government approach	
	Best Case	Worst Case
1. ↑ Efficiency of processes (time, continuity)	Development applications process quickly.	Lack of information and co-ordination leads to long conflict-filled processes; citizen backlash stalls controversial projects.
2. ↓ Short-term and long-term financial costs of planning (costs of changes, long-term running costs)	Minimal citizen participation equals less staff time for public consultation equals lower cost for City; fast approval means lower costs to developers.	High expense dealing with angry citizens; long-term escalation of legal costs.
3. ↑ Quality of public participation (scale, inclusivity, spontaneity, information)	No entries	Lack of participation increases tensions between City and citizens
4. ↑ Technical quality and competence of local planning processes	No entries	Quality will be low because of lack of understanding of local conditions, single point of view.
5. ↑ Integration among local planning processes in the city. (co-ordination, fair allocation)	No entries	Co-ordination is non-existent; favoured neighbourhoods get more resources. "very limited/spot process"
6. ↑ Sustainability of local planning outcomes (Contribution to regional environmental and economic sustainability).	Best way to deal with regional sustainability.	Neighbourhood sustainability is completely neglected; local planning makes no contribution to regional objectives. No relation to big picture. Very poor performance on economic sustainability. This should be dealt with on a local level.

Prediction of impacts of Alternative #1 on objectives (all responses combined)

Objective	Alternative # 2: Present trends projected four or five years	
	Best Case	Worst Case
1. ↑ Efficiency of processes (time, continuity)	Efficient prioritization (sic) of development applications.	Tends to formation of citizen protest groups.
2. ↓ Short-term and long-term financial costs of planning (costs of changes, long-term running costs)	No entries	Excessive staff time will be absorbed by controversial projects; staff costs will be hard to predict. Conflict resolution costs become high
3. ↑ Quality of public participation (scale, inclusivity, spontaneity, information)	Good balance between competing interests.	Public participation is regarded as secondary; community issues aren't dealt with. Ineffective or marginal tools used.
4. ↑ Technical quality and competence of local planning processes	Good technical quality.	Limited knowledge base of departments leads to inadequate planning.
5. ↑ Integration among local planning processes in the city. (co-ordination, fair allocation)	No entries	Lack of integration, spot planning. Favoured neighbourhoods receive more resources. Sporadic assignment of staff means poor co-ordination among areas, only communities with assigned staff get needs addressed.
6. ↑ Sustainability of local planning outcomes (Contribution to regional environmental and economic sustainability).	Politically accountable decisions lead to strong performance on regional issues..	Only neighbourhoods with current programs are able to contribute to regional objectives.

Prediction of impacts of Alternative #2 on objectives (all responses combined)

Objective	Alternative # 3: Expanded partnership	
	Best Case	Worst Case
1. ↑ Efficiency of processes (time, continuity)	Greater rate of participation forestalls potential conflicts.	Efficiency will be very hard to gauge as planning will be on-going.. Extra layers of approval slow process.
2. ↓ Short-term and long-term financial costs of planning (costs of changes, long-term running costs)	No entries	Great dependency on organizational and staffing requirements. Extra costs in administration and staff time.
3. ↑ Quality of public participation (scale, inclusivity, spontaneity, information)	Good balance of participation and City decision-making. Public participation greatly improved.	Vulnerable to funding; dependent on existing state of organization of neighbourhoods.
4. ↑ Technical quality and competence of local planning processes	'Home-group' works well with City to produce good quality. Expanded knowledge base.	No entries
5. ↑ Integration among local planning processes in the city. (co-ordination, fair allocation)	Good cross-neighbour communication. Balanced neighbourhood and city-wide objectives.	No entries
6. ↑ Sustainability of local planning outcomes (Contribution to regional environmental and economic sustainability).	Local accountability with Gov't instills added responsibility. Strong local contribution to regional objectives through Office of Neighbourhoods.	No entries

Prediction of impacts of Alternative #3 on objectives (all responses combined)

Objective	Alternative # 4: Appointed neighbourhood planning councils	
	Best Case	Worst Case
1. ↑ Efficiency of processes (time, continuity)	Long-term assignment of staff promotes efficiency.	Serious problems with control and management. Conflicts arise between neighbourhood and staff assigned to them.
2. ↓ Short-term and long-term financial costs of planning (costs of changes, long-term running costs)	Straightforward approvals lead to savings in long-term costs.	High short-term costs.
3. ↑ Quality of public participation (scale, inclusivity, spontaneity, information)	Very interactive, high quality participation. Maximal inclusivity on both neighbourhood and staff levels.	Local political battles lead to poor overall inclusion. Manipulation by council undermines public participation.
4. ↑ Technical quality and competence of local planning processes	Site-specific technical support works well. Able to draw on all resources and expertise.	No entries
5. ↑ Integration among local planning processes in the city. (co-ordination, fair allocation)	Strong accountability, good co-ordination among neighbourhoods.	No entries
6. ↑ Sustainability of local planning outcomes (Contribution to regional environmental and economic sustainability).	High level of co-ordination; performs strongly to promote regional interests.	No entries

Prediction of impacts of Alternative #4 on objectives (all responses combined)

Objective	Alternative # 5: Elected neighbourhood councils	
	Best Case	Worst Case
1. ↑ Efficiency of processes (time, continuity)	Efficient because process is inclusive; continuity is ensured.	Poor overall co-ordination makes processes inefficient. Poor efficiency for city-wide issues. 10 different sets of local zoning by-laws, massive accumulation of rules, means process goes mad.
2. ↓ Short-term and long-term financial costs of planning (costs of changes, long-term running costs)	Cost effective to look at each of 10 areas strategically. Long term savings due to reduced conflict.	Duplication of administrative and service costs. Addition of another level of government leads to intolerable costs.
3. ↑ Quality of public participation (scale, inclusivity, spontaneity, information)	High inclusivity; high quality participation in general..	Areas are too large for effective representation. Characterized by co-option of power by interest groups.
4. ↑ Technical quality and competence of local planning processes	Superior quality and competence result from application of local knowledge and expertise. Quality of planning would increase, though not uniformly.	Will lack consistent professional approach. Quality of process will depend on income levels in neighbourhood. Poor quality and unsophisticated planning. Neighbourhoods only look at bits of systems and not whole systems (like arterial roads)
5. ↑ Integration among local planning processes in the city. (co-ordination, fair allocation)	City-wide representation ensured by representation on council.	Size of units means local efforts don't get well-integrated. Local areas are indifferent or hostile to needs of outsiders. Local leaders use nbhd. councils as launching pads for public office.
6. ↑ Sustainability of local planning outcomes (Contribution to regional environmental and economic sustainability).	NIMBYism disappears; all groups address regional issues.	Self-interest will prevail at this scale. Neighbourhood interests override common regional objectives. Very difficult to get any high capital regional transit implemented.

Prediction of impacts of Alternative #5 on objectives (all responses combined)

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