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Putting More Public in Policy Analysis

A persistent criticism of policy analysis is that it undermines basic democratic institutions and processes by replacing public participation with expert analysis. Many decision makers shun broader participation because of the complexity of an issue or the cost, uncertainty, and delay often associated with public involvement. This article presents a model for the systematic inclusion of public input into relatively complex public policy decisions. It outlines two determinants of success in public participation efforts: the purpose for public involvement and the nature of the issue; furthermore, it applies the model to two issues in recent Utah history that have involved public participation. Using these principles, decision makers should be able to design and implement public participation strategies that both inform the public about substantive policy questions and improve the quality of the final decision.

Introduction

One of the persistent criticisms of policy analysis is that it undermines basic democratic institutions and processes by replacing public participation and debate with esoteric expert analysis. As the criticism goes, policy analysts, decision makers, and other experts hold one or more of the following views regarding public participation in policy discussions:

- Officials and experts see today's problems as too complex for the public to understand (Bell 1973; Brzezinski 1976; Fischer 1995, 12, 190; Prewitt 1983, 51; Mathews 1994, 73). Consider the following observation: "I've heard many times that although democracy is an imperfect system, we somehow always muddle through. The message I want to give you, after long and hard reflection, is that ... it is no longer possible to muddle through. The issues we deal with do not lend themselves to that kind of treatment.... Jeffersonian democracy can not work in the [contemporary] world—the world has become too complex" (John Kemeny [1980], former chairperson of the presidential commission appointed to investigate the Three Mile Island nuclear disaster, as quoted in Fischer 1995, 257).

- Technical experts see the incremental decision making characteristic of democracy as irrational (Sternberg 1989).
- Officials view the public as either uninterested (Mathews 1994, 72), or as pursuing their self-interest rather than the public interest (Fischer 1995, 44; Rein 1976, 98).
- Rational decision making and democratic decision making have different goals, and there is a fundamental tension between the rational pursuit of efficiency and the democratic pursuit of participation (Fischer 1995, 224; Heineman et al. 1997, 25; Rein 1976, 98–101).
- Greater citizen involvement means redefining public officials' roles in the decision making process, an uncomfortable process rejected by many officials. Sharing

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power is often not appealing to officials (Walsh 1997, 19; Thomas 1995, 5).

- Officials oppose citizen participation because it is more time consuming, expensive, complicated, and emotionally draining (Creighton 1981, 13).

In opposition to these views, those who advocate greater discourse and public participation assert that traditional, scientific, or expert views should no longer be afforded privileged status, allowing a broader range of views and treatments to be considered in decision making (Farmer 1995, 236–7). Others claim that analysts and decision makers have forgotten why the Founders paired rational administration with democratic government. Administration has now become the end rather than the means (Saul 1992, 234). Ultimately, these authors argue that reliance on administrative discretion in decision making is not consistent with democracy or pluralism (Reich 1988).

To be sure, this debate embodies some fundamental differences of opinion. To the extent that decision makers do not wish to open the decision-making process or share power, there is little more to be said. But it appears that many analysts and decision makers shun broader participation due to the cost, uncertainty, and delay often associated with public involvement. Our purpose in writing this article is to suggest that such concerns may be somewhat overblown. We have the sense that decision makers are frequently required to involve the public without incurring additional costs or inefficiency, but do not know how to do so (Thomas 1995). The purpose of this article is to propose a model for the systematic inclusion of public input into relatively complex public policy decisions.

We begin with an overview of two cases from recent Utah history that involved extensive citizen participation. We present a framework for seeking public input and apply it to the two cases as we identify two determinants of success in public participation efforts: the purpose for public involvement and the nature of the issue. Finally, we present a purpose-issue matrix that illustrates appropriate participation techniques given the purpose for including the public and the nature of the issue.

The Utah Wilderness Debate and the Utah Growth Summit

The state of Utah recently held a series of public hearings on wilderness designation and growth management. Because these two issues utilized public input differently in the policy development process, they allow us to illustrate our framework in very different situations. While we apply our framework to these cases later in the article, some contextual and historical information is needed to introduce the reader to these issues.

The Utah Wilderness Debate

Utah's wilderness debate centered on one of the most contentious issues in the West—land use. More specifically, how much land should be given the designation of "wilderness." According to the Wilderness Act of 1964, wilderness is defined as "... an area where the earth and its community of life are untrammelled by man, where man himself is a visitor and does not remain" (U.S. Code, Title 16, 1995, 213). As part of the review process for wilderness assessment, the Wilderness Act requires public hearings "... at a location or locations convenient to the area affected" (U.S. Code, Title 16, 1995, 214).

In 1984, in accordance with the Federal Land Policy and Management Act (FLPMA) of 1976, the Bureau of Land Management (BLM) completed its survey of the Utah lands under its jurisdiction (U.S. Code, Title 43, 1995, 506). It identified 3.2 million acres in Utah that could qualify for wilderness designation (an area somewhat larger than the state of Connecticut) and recommended that approximately two million acres receive the wilderness designation (U.S. Code, Title 43, 1995, 506; Israelson 1994a). While local residents and extraction industries saw the recommendation as being too high, conservationists felt that both the recommendation and the potential wilderness figures were too low (Israelson 1994a). They felt the BLM had improperly excluded some land in its land survey (Spangler 1995). Instead of resolving the wilderness issue, the land survey further polarized the opposing sides.

On January 7, 1995, Utah Governor Mike Leavitt and the Utah congressional delegation announced that by June 1, 1995, Utah would submit a bill to Congress designating an amount of Utah wilderness land (Spangler 1995). The state organized a series of public hearings to determine the exact amount of Utah land to be included in the bill, splitting the process into two phases: county-level public hearings focused on opinions in the counties that encompassed the proposed wilderness land, and regional public hearings. Furthermore, organizers stipulated that: (1) all proposals had to recommend some amount of wilderness land; (2) the BLM inventory of 3.2 million acres of potential Utah wilderness land would stand; and (3) the wilderness bill would have hard release provisions, meaning that land not recommended for wilderness would never again be studied for possible wilderness designation (Spangler 1995).

The county-level hearings were held between January and April 1, 1995 and resulted in a county-commissioner proposal of one million acres of wilderness (Israelson 1995a). In contrast, the regional public hearings recommended 5.7 million acres of wilderness (Spangler 1995; Kriz 1996, 67). The Utah delegation's wilderness bill eventually advocated 1.8 million acres of wilderness which, despite optimistic projections, failed to gain the support necessary for passage into law.

At this writing, the Utah wilderness debate still continues without serious prospect for a broadly accepted resolution. The majority of Utah residents appear to support substantially more wilderness than was recommended in earlier proposals, but not the extreme position of most environmental groups. Local officials and perhaps the majority of residents in rural counties that incorporate these lands favor a minimal designation and hard release of remaining lands. In the end, broadly-based public discussion shed very little light on the issues or potential solutions.

The Utah Growth Summit

In addition to wilderness designation, Utah utilized public hearings to address the issue of growth management. In recent years, Utah has had one of the highest growth rates in the country. Between 1990 and 1997, Utah's population increased by 18.5 percent, from 1.73 million to 2.05 million (Utah Governor's Office of Planning and Budget 1998).

Even more noteworthy than the growth rate, however, is how Utah experiences growth. Seventy-seven percent of Utah's population lives along the western side of the Wasatch Mountain Range, an area referred to as the Wasatch Front (Utah Governor's Office of Planning and Budget 1995a, 75). Running 80 miles along the base of the Wasatch Mountains, the Wasatch Front is limited geographically to an area only five to 15 miles wide. As Utah looks to the future, it faces the difficult questions of where to put new residents and how rapid growth will impact the quality of life in the region.

A regional discussion of growth-related issues began when Governor Mike Leavitt proposed a "growth Summit" in an address to the Utah Legislature in July 1995. (Bernick 1995, 2A). The several meetings of the Utah Growth Summit were eventually scheduled for December 1995. Three working groups—Democratic, Republican, and non-partisan local officials—were to present growth policy proposals at these meetings.

To prepare for the Summit, many communities and interest groups began holding public meetings on growth issues in September. At these meetings, citizens, various interest group representatives, experts, and government officials searched for solutions to the problems associated with growth. A number of groups were also invited by Utah Lieutenant Governor Olene S. Walker to present their policy proposals in the areas of water, transportation, and open space at public meetings held in November (personal letter 1995). Armed with these proposals, each working group then formulated policies to effectively address the problem of growth in Utah (Utah Governor's Office of Planning and Budget 1996, 3). Two days prior to the Summit, state newspapers devoted one section to articles discussing water, transportation, and open space issues.

The Growth Summit began on December 6, 1995, with a television special on Utah growth issues. Aired by all the television stations and some radio stations in Utah, it was followed by presentations of the three working groups' growth policy proposals. State radio stations subsequently aired call-in shows for citizen response (Utah Governor's Office of Planning and Budget 1996, 9).

The second night, a local PBS station aired a call-in show with Governor Mike Leavitt and other leaders to answer questions and discuss issues raised the night before (Harrie 1995, 1A). On December 8th, the final day of the Growth Summit, Governor Mike Leavitt held an Internet chat session with residents; however, the vast number of responses caused the system to crash (Semerad 1995, 1A).

Overall, the Growth Summit is considered by most participants to have been successful. The public was broadly involved and sensitized to growth issues. Numerous policy proposals were put forward and eventually enacted by the Utah State Legislature (Utah Governor's Office of Planning and Budget 1996, 6). Growth management continues to be an important topic in policy discussions around the state, with both formal and informal groups continuing to develop and discuss potential strategies.

A Framework for Public Involvement

While both the Utah Wilderness Debate and the Utah Growth Summit relied on non-voting public participation methods, the two efforts were not equally successful in fulfilling their respective purposes. The wilderness hearings sought agreement on the amount of wilderness land that should be protected in the Utah wilderness bill, yet the wilderness hearings did not end the debate over wilderness designation. The Utah Growth Summit, on the other hand, accomplished its more fundamental task of introducing the issue of growth to Utah residents (Utah Governor's Office of Planning and Budget 1995b, 1). The question for decision makers is: what made the difference?

Prior scholarly research recognizes that successful citizen participation depends on the appropriate crafting of citizen participation strategies. To be fully effective, decision makers must appropriately tie the selected strategy to both the purpose for participation and the nature of the issue being considered. We explicate each of these concepts more fully below (Checkoway 1981; Creighton 1981; Hathaway and Wormser 1993; Kathlene and Martin 1991; Kweit and Kweit 1987; Prisco 1978; Rosenbaum 1978; Rosener 1975; Thomas 1995).

Purpose Tied to the Policy Development Process

Various authors have already noted the need for a careful consideration of the decision makers' purpose for involving the public (Kweit and Kweit 1987; Prisco 1978).

James L. Creighton highlights the purposes of information exchange and legitimization (1981, 57). Additionally, John Clayton Thomas states that decision makers should involve the public to gain information and to exchange public acceptance for influence (1995, 93). He recommends *more* public participation when the acceptance of a decision is important and *less* public participation when the quality of a decision is important (Thomas 1995, 73). The International City/County Management Association and the National League of Cities list community building, public information, deliberation, and decision making as purposes for involving the public (Walsh 1997, 36). Other reasons offered include the venting of emotions or resolution of conflicts (Rosener 1975).

Both Kweit and Kweit and Rosener point out the importance of communicating the purpose to participants. If a purpose is not chosen or not communicated, participants will infer their own purpose and expectations will proliferate without a reasonable means for decision makers to meet them. Citizens hold dear the fact that decision makers serve and represent the people. They soon become dissatisfied with their leaders if they feel decisions have no basis in public opinion. Additionally, without first articulating the purpose, the success of an activity cannot be readily determined (Kweit and Kweit 1981, 37–41; Rosener 1975, 112).

To be helpful though, the observation that purpose is important must be linked to some framework that allows the analyst to understand, organize, and consider alternative reasons for approaching the public. In this light, the purposes for seeking public participation can be organized around the stages of the policy development process. This process is often iterative, but there are relatively well-defined steps that analysts employ in developing an effective public policy. These include:

- Define the problem;
- Identify the criteria to be used in evaluating alternative solutions;
- Generate alternative solutions to the problem;
- Evaluate the alternative solutions based on the evaluation criteria;
- Recommend an alternative.

(Bardach 1996; Dunn 1994; Kweit and Kweit 1987; McRae and Whittington 1997; Patton and Sawicki 1993)

Depending on where the analyst is in the policy development process, the purposes for including citizens will vary. Creighton advocates that decision makers first identify a four-step decision-making process and then set public involvement objectives for each step (1981, 57). More direction is needed, however, regarding what these public involvement objectives should be, as some activities that support the objectives of the policy development process do not require public participation. Additional guid-

ance on when to involve the public is needed. For example, Creighton explains that involving the public simply to fulfill legal requirements, but without an intention of considering their input is often worse than excluding the public all together because it “poisons the agency’s relationship with the public and dooms future programs” (1981, 29).

As we see it, the purposes for involving citizens in decision making may be summarized as follows:

1. Discovery—Aid in the search for definitions, alternatives, or criteria.
2. Education—Educate the public about an issue and proposed alternative.
3. Measurement—Assess public opinion regarding a set of options.
4. Persuasion—Persuade the public toward a recommended alternative.
5. Legitimization—Comply with public norms or legal requirements.

These five purposes consolidate and explicate the purposes offered by other scholars. Creighton’s purpose of “information exchange” encompasses a broad spectrum of motives for communicating with the public, including our purposes of discovery, education, and measurement (1981, 64–5). We feel that it is more appropriate to list discovery, education, and measurement as discrete purposes for involving the public, along with persuasion and legitimization, because each implies a different type of communication. Furthermore, these distinctions are important in describing why the public is involved at different stages in the policy development process.

At least one of our five purposes explains the function of public involvement in all of the policy development stages. Table 1 outlines where these purposes fit in the policy development process.

As Table 1 suggests, discovery is the primary purpose for involving the public in the first two stages of the policy development process. In this context, discovery fills two distinct purposes. First, as Reich (1988) and his coauthors note, it is often the case that people do not have well-formed values and opinions on relatively new public policy topics until there is public discussion and debate. For example, in discussions of growth in Utah prior to the Growth Summit, many participants did not exhibit a particularly rich understanding of the range of growth-related issues facing Utah. Through the Summit process, the public learned about and formed attitudes on these changes and the options for future growth management. They came to understand that growth was more than simply more people; it meant more people on the freeway, increased demand on the water supply, and less open space.

Second, discovery helps develop both a common language for discussing problem definitions and evaluation

Table 1
Policy Development Stages and Participation Purposes

Policy Development Stages	Participation Purposes
1. Define the problem	1. Discover—Aid in the search for definitions
2. Identify criteria	1. Discover—Aid in the search for criteria
3. Generate alternatives	1. Discover—Aid in the search for alternatives, and/or 2. Educate—Educate public about issue and/or proposed alternatives, and/or 5. Legitimize—Comply with public norms
4. Evaluate alternatives	2. Educate—Educate public about proposed alternatives, and/or 3. Measure—Assess public opinion regarding a set of options, and/or 5. Legitimize—Comply with public norms
5. Recommend an alternative	2. Educate—Educate public about issue and/or proposed alternatives, and/or 4. Persuade—Persuade public toward a recommended alternative, and/or 5. Legitimize—Comply with public norms or legal requirements

criteria and a broad perception of the problem being considered. Public policy problems can often be viewed in potentially countless ways depending on a person's interests, background, and experience. Consequently, different participants have different views on exactly how a given problem should be defined, what criteria should be used to identify a good solution, and which alternatives hold the greatest promise for solving the problem. Discovery involves eliciting different problem definitions and evaluation criteria from the public (Creighton 1981, 64), so that a representative problem definition can be formulated. For instance, the Growth Summit began with the growth criteria of water, transportation, and open space; however, through the discovery process, concerns about crime and the viability of communities also emerged. Decision makers, therefore, profit from listening to the public's views on the issues (Creighton 1981, 64).

Furthermore, the representative problem definition narrows the context within which alternative solutions will be generated and evaluated. Without this reference, the rest of the policy development process lacks the agreement necessary to reach a viable resolution. In contrast to the Growth Summit, the participants in the Utah Wilderness Debate never agreed on a problem definition or a set of evaluation criteria. Both sides of the debate realized that the public hearings offered a way to legitimize a single proposal—either one side or the other—and fought earnestly for their side. From the outset, conservationists disagreed with the BLM base and the hard release provisions. They went into the public hearings unsatisfied with what they perceived to be a pre-determined outcome. Had more effort gone into discovery and consensus building, there

may have been more room for successful results. As it was, rather than resolving the two views of the problem, the public hearings perpetuated them.

As the analyst seeks to generate alternatives, there are three possible purposes for involving the public: discovery, education, and legitimization. Discovery seeks citizen participation in order to generate more formalized solutions to the problem (Creighton 1981, 64). The public was extensively involved in the development of proposals during the Utah Growth Summit. At the November meetings, various interest and expert groups presented their ideas and proposals to the three working groups.

Public involvement also educates the public on an issue. One major purpose for the Growth Summit was to inform the public about the possible consequences of "unmanaged" growth and the range of options available to governments seeking to influence community development.

Another potential purpose for involving the public in the generation of alternatives is legitimization. High-conflict issues may require citizen participation in the development of alternatives in order for the public to accept the final outcome. Otherwise, groups may see the decision as biased against them or as not reflective of the majority opinion. In the wilderness debate, conservationists criticized the counties' control of the first stage of the public-hearing process. They generally saw the county commissioners as being biased against wilderness designation (Lowry 1993, 48–9). Additionally, key participants refused to legitimize the alternatives without broader agreement on definition and criteria.

As the analysis moves into the evaluation of alternatives, there is still an opportunity to educate the public regarding the consequences of different options. Public involvement informs citizens about the criteria being used to determine success and how well each alternative meets those criteria (Creighton 1981, 65). The preparatory meetings to the Growth Summit educated the participants about alternatives that would and would not work in light of different evaluation criteria.

Analysis of possible solutions also often involves assessing public attitudes and values. A determination of the tradeoffs acceptable to the public defines in part each alternative's political feasibility (Creighton 1981, 65). The political attractiveness of a policy option increases, as does the ease of its administration, if it corresponds to the values of the public. Opinion polls during the wilderness debate had this measurement purpose as citizens were asked to choose between various amounts of wilderness land (Israelson 1994b; Israelson 1995b; Israelson 1995c). It must be noted, however, these polls probably served more as general thermometers of public support for wilderness than as viable indicators of how much land should receive wilderness designation.

As the analysis moves into the final recommendation stage, persuasion often emerges as an important purpose in the policy development process. After evaluating the various policy options, decision makers need to explain the reasons for their decision and build support for their decision. In the Wilderness Debate, the focus was on legitimizing an outcome, and organizers made very little effort to persuade participants that a particular outcome was acceptable if not ideal. In general, building public support for the merits of a recommendation will boost the public's acceptance of any change generated through its implementation.

If it is a low conflict issue and the public has not been included earlier in the process, then the education purpose also applies here so that the public understands the issue. In other situations, decision makers are required by law to include the public in the decision-making process. Legitimization can be gained at this stage if it is a low conflict issue. Formal public involvement strategies—such as public hearings, elections, and referendums—fulfill this requirement.

Whatever their actual reasons for including citizens in the policy development process, the method chosen communicates to citizens the degree to which the results will influence future policy decisions. The Utah Wilderness Debate provides an illustration. By using public hearings to involve citizens, decision makers led participants to believe that their input would influence the delegation's proposal. When neither recommendation was chosen, participants became unhappy with the congressional delegation. It is crucial to the success of citizen involvement that decision makers determine in advance how the results will be used.

None of the stages of the policy development process inherently preclude successful public participation. Rather, the purposes for including the public require different forums and approaches to solicit that participation. Using this process of determining a policy's status in the policy development process enables decision makers to narrow the purpose possibilities, which, in turn, provides guidance on when to include the public and the best methods to solicit that participation. Good decisions on citizen participation methods facilitate their success by both managing public expectations and clearly specifying how public input will be incorporated into the analysis.

The Nature of the Issue

The second dimension in designing and appropriately incorporating public participation in policy development is the nature of the issue being considered. Previous research argues that both the desirability of public participation and the appropriateness of participation mechanisms vary with the issue being addressed. Understanding the nature of the issue is, therefore, vital to choosing success-

ful participation strategies (Creighton 1981; Rosener 1975; Thomas 1995).

Past efforts have identified a host of issue characteristics that affect the success of public participation. These characteristics can be effectively grouped by augmenting the description of problem structure set forth by Mitroff and Sagasti (1973; see also, Dunn 1994, 146). In this description, the structure of policy problems is characterized as a continuum from well-structured, through moderately-structured, to ill-structured. Placing a given problem along this continuum requires an understanding and assessment of six clusters of problem attributes, listed here and summarized in Table 2.

1. The degree of conflict over the issue.
2. The number of stakeholders.
3. The level of confidence in the information on the issue.
4. The number of alternatives.
5. The knowledge of outcomes.
6. The probability of the outcomes.

<i>Characteristics</i>	Well-structured	Moderately-structured	Ill-structured
Degree of Conflict	Consensus	Consensus/conflict	Conflict
Number of Stakeholders	Few	Few	Many
Information Confidence Level	Confident	Confident	Not confident
Number of Alternatives	Limited	Limited	Unlimited
Knowledge of Outcomes	Certain or marginal risk	Uncertain	Unknown
Probability of Outcomes	Calculable	Incalculable	Incalculable

These issue attributes significantly affect the success of alternative public participation strategies. The degree of conflict determines when decision makers should include the public in the decision-making process and the amount of consensus building necessary to productively move through the policy development process. In a high conflict issue, public involvement is needed early to encourage consensus and to legitimize the process. Additionally, widespread disagreement about the definition of the problem means that decision makers should utilize participation methods that emphasize compromise in order to establish a common concept upon which the subsequent steps can build. Workshops are often more successful for this purpose than public hearings because they provide an opportunity for dialogue between differing interests, whereas public hearings are frequently more adversarial (Creighton 1981, 77).

Further, because single-issue groups are wholly committed to their issue, they tend to be more resistant to compromise than multiple-issue groups (Creighton 1981, 72; Walsh 1997, 61). Multiple-issue groups have incentives to sacrifice a little on one issue in order to gain in others or overall. When single-issue groups are involved, participation techniques such as small group workshops, advisory committees, or conflict mediation should be used to ensure that their concerns are considered, as well as those of other interested groups.

Utah Wilderness is an issue that has been and continues to be highly divisive. Organizers of the hearings did not acknowledge its contentious nature when they decided on a public-hearings process that provided little opportunity for compromise. The process-strategy decisions also did not ensure a representative sampling of opinion or consensus on the issue definition itself. Rather, the hearings provided a forum for well-entrenched interest groups to become even more entrenched and polarized.

The number of stakeholders and their level of organization is also significant in determining participation mechanisms (Creighton 1981, 78; Thomas 1995, 41; Walsh 1997, 61). If the stakeholders are organized into a few groups, participation can make use of the groups themselves and work through elected political leaders or interest group leaders. Stakeholders recognize the legitimacy of their group leaders; therefore, involving those leaders is often an effective participation strategy (Creighton 1981, 78; Thomas 1995, 57). Examples of methods that involve group leaders are interviews, workshops, and advisory committees as well as focus groups (Creighton 1981, 77; Thomas 1995, 57). The decision maker must carefully ascertain whose interests leaders actually represent and the size of their support, noting always that the most involved groups do not necessarily represent the majority opinion (Thomas 1995, 67; Checkoway and Van Til 1978, 25).

Conversely, if the stakeholders are poorly organized or widely dispersed, and do not have legitimate representatives, methods must be chosen that deal more directly with the stakeholders, such as the media or town meetings (Creighton 1981, 77). Other examples of more direct methods are elections, opinion polls, and public hearings (Thomas 1995, 57).

The level of confidence in the information on any issue influences the amount of issue-education activity that should be pursued. Lack of confidence could be the result of unavailable data or lack of confidence in the source of the data. Thomas stresses that decision makers need to assess whether the information needed to make a quality decision is available (1995, 44). If important information is missing, outdated, or questionable due to its data collection methods, such as the BLM land survey in the wilder-

ness debate, then there will be less confidence in the evaluation of alternative solutions. An explanation of any limitations in the available information should be provided to the stakeholders as well as the impact such limitations may have on the subsequent analysis.

Further, if stakeholders doubt the reliability or objectivity of the source of the information, they may discredit the data and reject any consensus. Analysts should search for corroborating sources. Convincing group leaders of the reliability of the information, perhaps through workshop discussions and presentations, enables group members to hear the information from a source they consider reliable—their leader.

Additionally, some alternatives may be more technical than others or simply less well known. These limitations shrink the number of policy options seriously considered by stakeholders. If there is little understanding about the alternatives or the evaluation criteria, an educational process should be planned to help stakeholders learn about policy options. The Growth Summit and subsequent growth management discussions are excellent examples of this type of participation. One of the important accomplishments of this process has been to sensitize local leaders to a broader range of land use management techniques and concepts.

Creighton suggests the use of an “advisory group that can be thoroughly informed” on technical aspects. Publications might also be used to explain the technical complexities to the stakeholders at large. He prescribes a greater effort to educate other agencies or interest groups than to educate the general public (1981, 77). Again, this approach is consistent with the growth management efforts in Utah. It does not appear to be true of the Wilderness Debate, however.

The number of alternative solutions to be considered also influences participation strategy decisions. As the number of alternatives increases, the probability of achieving consensus around any one alternative decreases. Differentiation between options can become marginal, requiring a more specific measurement of values. Public involvement can become unending as more and more alternatives are introduced. Thus, in terms of citizen participation, the more concrete the alternatives the better. Education efforts can then be more focused and consensus-building activities more productive.

Further complicating many policy problems is the degree to which the outcomes of each alternative are known. When the results are certain or within an acceptable margin of risk, education, measurement, and persuasion efforts can focus on the benefits and risks of the various alternatives. When outcomes are unknown or uncertain, however, participation must be linked to other concepts, such as minimizing the worst outcomes, or incremental improvement. Additionally, when the consequences of policy op-

tions are unknown, decisions tend to be based more on principle or value.

The probability-of-outcomes characteristic is interrelated with a knowledge of outcomes. In a well-structured issue, outcomes are either certain or highly probable. The outcomes are knowable, and the probabilities of achieving those outcomes can be calculated. A moderately-structured issue has outcomes that are uncertain and the probability of these outcomes occurring encompasses a wide range. In an ill-structured issue, unknown and unintended outcomes are possible, and attempts to calculate the probability of each outcome are infeasible.

Again, the Utah Wilderness and Growth Summit processes provide a useful contrast. In the Wilderness debate, county commissioners and local residents of rural counties saw the outcomes of expanded wilderness as highly uncertain. Many of the proposed wilderness areas are rich in coal, oil, and other mineral deposits. Local economic development and job growth are closely tied to the development of extraction industries in the minds of many local residents. In their view, designating these lands as wilderness would preclude development and leave future job growth in these areas highly uncertain and even unlikely. Wilderness advocates, on the other hand, see expanded designation as the only certain way to protect a national trust for future generations. In this view, leaving protection of these lands to developers and local interests is too risky and the potential harms irreparable. This conflict over outcomes argues strongly for a less formal and smaller scale process than the public hearings that were held. Focus groups, working task forces, or town meetings with a clear education agenda, would all have been more effective than the process actually followed.

In contrast, the Growth Summit seemed to reach relative consensus on the likely effects of growth. Most participants saw the outcomes of continued growth under status quo policies as highly probable, although the timetable might be uncertain. Repeated references to southern California probably best typify the image held by most participants. Less certain in the Growth Summit were the alternatives, hence the continued discussions and policy development. In this case, public participation provided a broad forum for establishing consensus on the nature of the problem. Subsequent participation, in the form of smaller working

groups and representative task forces, has shifted to the more difficult task of identifying and evaluating alternatives to the status quo.

The continuum described in Table 2 links the different issue characteristics together, providing a characterization of an issue for the policy development process. In doing so, it narrows the viable public participation options for decision makers. In our treatment of the policy development process, we argued that regardless of where an issue is in the process, there is an important purpose in seeking public input. In contrast, the nature of the issue can place limitations on the necessity of public involvement and the appropriateness of various participation strategies. Well-structured issues often include the public only to legitimize a recommendation. Decision makers face little, if any, opposition to their recommendation. Moderately-structured issues present more opportunity for involvement but require more care in linking that involvement to the policy development process. As should be expected, ill-structured issues are the issues that require the most care by decision makers in seeking public involvement. Involvement strategies play a crucial role in determining the success of the policy development process; consequently, public participation must be focused and clearly defined so that its success can be measured. We explicate these relationships further in what we have termed the purpose-issue matrix.

The Purpose-Issue Matrix

Table 3 visually outlines the effects of purpose and nature of the issue on participation strategy decisions. The issue classification remains constant no matter the purpose;

Table 3
The Purpose-Issue Matrix

Purpose	Nature of the issue		
	Well-structured	Moderately-structured	Ill-structured
1. Discovery		Interest group forum	Task force Commission Focus groups Neighborhood meetings Internet chat, bulletin board
2. Education		Educational public forum Town meeting Neighborhood meeting News media	Educational public forum Town meeting Neighborhood meeting News media
3. Measurement		Opinion poll Focus groups	Opinion poll Focus groups
4. Persuasion		Persuasive public forum Town meeting Advocacy media	Persuasive public forum Town meeting Advocacy media
5. Legitimize	Elections Referendums Formal hearings as required by law or custom	Elections Referendums Formal hearings Media Task force	Elections Referendums Formal hearings Media Task force

however, the purpose for public participation changes with the policy development process. An empty cell means the public probably need not be involved. Otherwise the cell states the mechanisms that may be used to most effectively involve the public. Thus, different public involvement mechanisms may be utilized at different times in the policy development process as the purposes for involving the public change (Creighton 1981, 79; Walsh 1997, 63).

The timing of public involvement varies according to the classification of the issue. Well-structured issues call for citizen participation later in the policy development process, if at all. Because the few stakeholders agree on the problem and have adequate knowledge about the alternatives, consensus building and educational activities are less necessary. The recommendation may only need confirmation. A stakeholder hearing or vote would accomplish this purpose, depending on legal requirements.

Moderately-structured issues call for greater public involvement throughout the entire process. Once again the stakeholders are few and there is often sufficient knowledge about the issue so that educational and consensus-building activities are less essential. The key here is the uncertainty about the outcomes of the policy options. The utilization of stakeholder group leaders through task forces, issue committees or conferences, or focus groups reflects the increased need for the consideration of stakeholder values due to the heightened uncertainty of the outcomes. A more direct option for discovering values is an opinion poll. A referendum may be necessary to legitimize the recommendation of opinion leaders.

The greatest room for public involvement is with ill-structured issues. These are the most difficult issues because conflict often centers on the basic problem definition and the values inherent in the evaluation criteria. Public educational forums, including Internet chat rooms, provide a means for soliciting public comment on the problem and may be important in the discovery phase of analysis. Often, however, it is participation on a smaller scale that yields important progress on a problem. A carefully selected task force or commission may be able to identify the boundaries of a problem and structure more effectively than testimony in a public hearing. In general, problems that tend to lie further to the right in Table 3 (i.e., less structure) will require participation earlier in the policy development process. Public participation will tend to increase in scale as the analyst moves down through the policy development process.

Some policy problems undoubtedly will not fit neatly into these classifications. However, thinking about the policies along these dimensions produces a greater understanding of the problems and potential of public participation.

Conclusion

The founders of our country meant for decision making in government to be removed from the direct influence of public passions. Madison thought this arrangement was a good way to avoid the mischief of factions (1987). In addition, governments at all levels face complex and highly technical questions. The public is uninformed on many of these issues: they may not be aware of legal constraints, definitions, or other aspects of a problem that must be understood in order to make an informed decision. Having people serve full time in government positions, whether elected or appointed, allows them to devote their attention to these difficult questions.

As we have tried to illustrate, however, public input has its place in policy analysis. The question then becomes how to balance expertise with public opinion. Public policy requires attention to both technical constraints *and* public preference. Citizens provide guidance to expert analysts about the direction of public policy through their experiences, preferences, and values. Failing to include the public in the decision-making process deprives decision makers of valuable input and compromises legitimacy. Thus, using both issue expertise and public opinion in tandem is more likely to produce good public policy.

An objection could be raised by practitioners who are concerned that laws often dictate the type of public participation required. This could create a problem if the law calls for participation methods that are not ideal in a given situation. While this may be true in some cases, it has been our experience that laws outlining public participation methods are more often than not minimum standards rather than maximums. For example, if a law calls for hearings, as is the case in many environmental policies, practitioners can use the purpose-issue matrix to identify other public participation methods that would be useful. Such additional participation may serve to prepare both decision makers and the public for the eventual hearings, rather than attempting minimal compliance with legal norms. Decision makers and citizens will find the hearings more beneficial with some prior contextual background on the issue.

Introducing a framework to organize public participation suggests that decision makers have a proactive role in the public participation process. The questions addressed throughout this article illustrate some of the complexities of designing a public participation strategy. This framework enables those responsible for directing public participation to approach these questions as design factors rather than unknown quantities that will surface only after the process is underway. Problems associated with public involvement can be anticipated and resolved before the participatory process begins. By working through the

framework, questions are matched with answers.

Public participation in the policy process through a variety of mechanisms represents not so much a move toward a more direct form of democracy as much as it does a move toward a better form of representation. Decision

makers who use the principles outlined in this article should be able to design and implement public participation strategies that will not only inform the public about substantive policy questions, but also improve the quality of the final decision.

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