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EVALUATING STATE LAND USE CONTROL: PERSPECTIVES AND HAWAII CASE STUDY

G. KEM LOWRY, JR.*

I. INTRODUCTION

A state role in land development control, considered "revolutionary" a decade ago, has become commonplace in recent years. At least thirty-four states exercise some type of regulatory authority over land development, although the level of state involvement and the purposes for which state authority is exercised vary widely.¹ States have developed or are developing programs to manage flood plains and wetlands,² designate and regulate development in critical areas,³ site power plants and other regional facilities,⁴ protect agricultural land,⁵ regulate surface mining⁶ and achieve other goals.⁷

The case for a state role in land development control is based on

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1. COUNCIL OF STATE GOVERNMENTS, STATE GROWTH MANAGEMENT (1976).
3. E.g., FLA. STAT. ANN. § 380.05 (West Supp. 1979).
5. E.g., MINN. STAT. ANN. § 273.111 (Supp. 1978); HAWAII REV. STAT. § 246-12,
several arguments. Perhaps the most prominent argument is that the local structure of land development control is insufficiently sensitive to the environmental consequences of local land development decisions. Since polluted air and water do not respect jurisdictional boundaries, extra-local authority is required to minimize the "spill-over" of adverse environmental impacts from one jurisdiction to another. The Air Pollution Prevention and Control Act, the Water Pollution Prevention and Control Act, and the National Coastal Zone Management Act are prominent examples of federal statutes which have redistributed regulatory authority to state governments in order to deal with the regional impact of local land development decisions.

A second argument for a larger state role in land development control is that particular natural resource units such as coastal wetlands and prime agricultural lands are statewide resources which are not adequately managed by local governments. Many states have developed programs that require state permits for development in environmentally sensitive areas or provide incentives, such as tax breaks, for the protection of some resource units. At the federal level, the Coastal Zone Management Act provides financial incentives to thirty-four coastal states and territories to develop programs for the management of coastal resources. One condition of federal approval of state programs is a state role in the authorization of coastal development.

A third rationale for a state role in land development control is the fragmentation of land use regulatory authority in many metropolitan

7. E.g., CAL. GOV'T CODE § 65300 (Deering 1979) (requiring city and county legislative bodies to adopt a comprehensive plan).
12. See notes 2, 5 supra.
14. Id. § 1455.
areas. This fragmentation of authority, it is argued, contributes to competition for fiscally preferable industrial and commercial development, to exclusionary land use policies, and to a general lack of attention to regional needs for subsidized housing or major, region-serving capital facilities. In some metropolitan areas, regional bodies have been established to provide a broader geographic base for land development planning and control.15

The size or the impact of certain public and private facilities has led some states to require state development permits. While thirty-four states have power plant siting requirements,16 a few states go much further. Vermont, for example, requires state development permission for subdivisions and developments which are “of greater than local concern,” defined in terms of the number of housing units involved, the amount of acreage involved or the elevation of the proposed development.17 The American Law Institute’s Model Land Development Code also promotes a state role in reviewing regional facilities with its section on “developments of regional impact or benefit.”18

Finally, some believe that a strong state role in land development control is preferable to a local monopoly on control because state authority is less subject to the political forces that surround local city councils and zoning boards. Critics of locally administered land use controls argue that land development is an enormously profitable industry, an industry whose profits go not only to landowners and developers, but also to contractors, local businessmen, lawyers, mortgage bankers and a host of others. These critics suggest that the local administration of land use controls is dominated by such interests.19 Ironically, at a time when decentralization of authority is being touted as a solution to many ills including land use problems,20

greater centralization of authority is promoted to reform the existing structure of land use control.21

The distribution of land use regulatory authority is a volatile issue. For example, while noting the "pervasive feeling that local control has been a failure,"22 One observer questions whether states or metropolitan areas can do a better job.23 Substantive arguments about the relative merits of state versus local land use control illustrate the general problem of determining the "success" or "failure" of any policy program or series of public actions. Formal policy evaluation poses formidable conceptual and methodological problems.

Most evaluative generalizations about state land use control rest on a few impressions and anecdotes gleaned from case studies of particular programs. Given the disparate purposes for which state land use control programs are designed, the wide variety of control mechanisms employed, and the different socio-economic and political contexts within which programs have been implemented, this is not surprising. Now, however, there is sufficient experience with state land use programs to begin to conduct evaluative studies.

This Article will identify five general approaches for evaluating the effects of a comprehensive state land use control program. The vehicle for this analysis will be the Hawaii land use program. The study will focus on the implementation of the Hawaii program as opposed to the conditions that led to its enactment with particular attention to the development of concepts and analytical approaches from which hypotheses can be generated and tested comparatively.

II. EVALUATIVE APPROACHES

Presently, studies purporting to be evaluations of state land use or environmental programs generally fall into five categories: legal assessments, goal achievement studies, administrative capability assessments, cost studies and compliance studies.


A. Legal Assessments

Perhaps the most prevalent type of "evaluation" is that found in legal journals. The authors of these studies assess particular state land use control strategies in terms of their judicial acceptability in state or federal courts. While judicial acceptability is a necessary condition of program effectiveness, it is not a sufficient one. Nevertheless, legal evaluations are important because they draw attention to particular issues that may affect program implementation. Such evaluations help to convey a sense of the boundaries of permissible regulatory behavior and to draw attention to glaring loopholes and burdensome aspects of a particular regulatory regime. A broader evaluative perspective, however, is needed: one that focuses on patterns of regulatory behavior and the distribution of benefits and burdens resulting from that pattern of behavior.

B. Goal Achievement

A second evaluative approach is to focus on the extent to which state land use programs successfully achieve their statutory objectives. Most of these studies rely on subjective perceptions of effectiveness. While most such studies focus on single cases there are examples of comparative studies of perceived effectiveness based on large sample surveys. Because the standards by which effectiveness is judged frequently are not stated, the inferences drawn from these studies suffer from problematic validity. Even when specific permit decisions are discussed, the reader can only speculate how characteristic the particular case is of the total population of decisions from which it is drawn. Finally, most of these studies lack an explicit framework or set of concepts to serve as a basis for comparative analysis. Nevertheless, the best of these accounts provides rich sources of descriptive information about the problems of implementing state land use programs.

A second type of goal achievement study seeks to trace the actual


impacts of specific land use programs rather than relying on subjective perceptions of impacts. To what extent do tax incentive programs encourage landowners to dedicate land for agriculture or open space? Do coastal zone regulatory programs enhance the aesthetic quality of the shoreline? Analysts seeking to determine how state land use programs affect the problems they were designed to address deal with these and other similar questions.

C. Administrative Capabilities

Another mode of evaluation is to focus on a state's administrative capability to engage in land use control. In one such study, components of an "ideal" state planning apparatus were identified and then states were evaluated with respect to the extent they measured up to that ideal. While this particular study has received criticism regarding the appropriateness of the "ideal" system components and the research methods for rating states, other standards and research methodologies might make this a more useful approach. Such an approach might be particularly useful if variations in types of administrative structures and administrative resources could be correlated with variations in patterns of regulatory behavior. This would make possible inferences about "optimal" administrative conditions for the implementation of state land use programs.

D. Cost Studies

One of the principal arguments against state land use and environmental control programs is that they impose additional development costs. Cost, then, is another criterion for evaluating these programs. Increased development costs occur directly because of additional interest charges the developer must bear since permit processing takes more time, and because of additional legal, planning or engineering studies which the new permits may require. Indirect costs may in-

29. Letter from Jack Thomas to the Editor, 38 Plan. 219 (October 1972).
30. For a further discussion of the administration of state planning, see Council of State Planning Agencies, State Planning Series (1977).
31. See generally Bergman, External Validity of Policy Related Re-
crease if the price of developable land increases in other areas as a result of new or more stringent controls. While the current evaluative interest is in the costs of such programs, the costs of not having such programs also would be an appropriate area of inquiry.

E. Compliance Studies

Compliance studies represent a fifth evaluative approach. Compliance theorists are concerned with the conditions of and propensity toward obedience. Compliance studies have their intellectual antecedents in the psychological and sociological analysis of individual deviant behavior and in legal philosophy. In the 1960's political scientists, in particular, became interested in the compliance of institutions such as police departments and school boards with U.S. Supreme Court decisions. Compliance also is an important concept in administrative theory. In this field, the principal focus is on compliance within organizations.

Environmental management is a potentially rich field for compliance studies although few such studies have been conducted. Such studies might focus on the consistency with which a subordinate agency implements environmental management policies of a legislative body or an implementing agency follows its own substantive or procedural guidelines in its individual regulatory or allocative decisions. The principal evaluative criterion in such studies is administrative consistency. The principal criticism of this approach is that too little attention is given to the impact of the policies or guidelines on those whose behavior is regulated.


35. For one such study, see Bryden, The Impact of Variances: A Study of Statewide Zoning, 61 Minn. L. Rev. 769 (1977).
The study of the actual impacts of state land use programs is an important evaluative enterprise. Because state land use programs differ so widely, however, the analysis of program impacts does not lend itself well to comparative evaluation. Tracing the consequences of a wide range of permit decisions in a particular state would make for an extremely valuable case study. Although direct and immediate generalizations to other states would be of dubious validity, the insights gained from such studies could at least serve as credible hypotheses to be tested in other states.

Although states vary widely with regard to what the state controls, it is possible to evaluate states in terms of how rigorously land use and environmental regulatory programs are enjoined. Whether state land use regulatory programs involve comprehensive state controls,36 special purpose state permits,37 shared state-local authority over certain resources or classes of uses,38 mandatory local planning with state review39 or any other regulatory model, all such programs can be evaluated in terms of how regulatory decisions are made. Specifically, one can ask:

*To what extent are state land use regulatory decisions consistent with local preferences?*

*To what extent are regulatory decisions consistent with the recommendations of the professional staff?*

*Are decisions on permits, approval of local plans or appeals of local decisions consistent with the legislative goals or other policy objectives of the regulatory program?*

*If not, with what goals or policies are they consistent (i.e., what is the manifest regulatory policy)?*

*Is compliance with program goals changing over time? If so, how?*

*What are the characteristics of permit applications the decisions on which depart substantially from legislated goals or engender conflicts with local authorities or the professional staff?*

Although this emphasis is not evaluative in the sense of referring to the achievement of program goals, it makes it possible to establish some inferences about the “success” of state land use regulatory programs. The answers to these and other questions can also be useful.

37. See notes 2-4 supra.
39. See note 7 supra.
in guiding further inquiry into the appropriateness of the policy base upon which decisions are made, the effect of particular decision-making arrangements on state-local relations, the impact of special interest groups on regulatory decisions, and related questions. The compliance questions above are the basis for the evaluative case study of Hawaii's State Land Use Law40 that follows.

III. A Case Study: Hawaii

The introduction of state land use control in Hawaii was not revolutionary. State control has been viewed as a response to conditions unique to the fiftieth state: a relatively small land mass, concentrated ownership of land, and a history of centralized government.41 Hawaii has a land area of just over four million acres, most of which is distributed among six major islands. More than five hundred thousand acres are mountainous or barren, unsuitable for development or agriculture. Another million and a half acres are in forest reserves, national parks, military or other uses which remove them from potential urban use.42

Land ownership is highly concentrated. The federal government controls nine percent of the land in the state; thirty-nine percent is controlled by the state government and about forty-five percent is in the hands of major private owners.43 Hawaii's Land Use Law, originally enacted in 1961,44 has since been amended several times.45 The law's goals, as stated in its preamble, are to protect the state's dwindling supply of prime agricul-

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43 Id. at 102.
tural land and prevent scattered urban subdivisions. To achieve these purposes the law set forth a system of controls and incentives. The law contained differential tax assessment provisions making it possible for agricultural interests to dedicate their land to agricultural uses and consequently to receive tax breaks. Before the 1973 amendments, only about 60,000 acres had been dedicated, but an additional 361,000 acres were dedicated after the amendments.

The regulatory aspects of the law have received the most attention. The law originally mandated placing all state lands in one of three districts: urban, conservation, and agriculture. A fourth district, rural, was added by amendment in 1963 to make possible low density development on the counties of Hawaii, Kauai, and Maui. The law established a nine-member State Land Use Commission to allocate lands among districts, to approve or deny amendments to district boundaries, and to rule on special permits. The Land Use Law broadly defines state land use districts and administrative authority for determining permitted uses. Districts and permitted uses are defined as follows:

Conservative districts include all lands within forest and watershed zones as of 1961, although the Land Use Commission may reclassify such lands. Areas necessary for protecting watersheds, scenic and historic areas, parklands, wilderness, beach, open space or recreation areas are also to be included within this district.

51. Id.
52. Under the original legislation the directors of the Department of Planning and Economic Development and the Department of Land and Natural Resources served as ex officio voting members. Amendments enacted in 1976 require that one member be appointed from each of the counties and the remainder appointed at large. Six affirmative votes are required for a boundary amendment. Id. § 205-1.
53. Id. § 205-2.
54. Id.
55. Id.
Agricultural districts include uses characterized by the cultivation of crops, orchards, forage and forestry, as well as such ancillary uses as worker housing and processing mills. Minimum lot size in agricultural districts is one acre, although each county may adopt larger lot standards.

Rural districts include small farms with very low density residential lots. A minimum lot size of one-half acre (substantial by Hawaii’s standards) is required in rural districts.

Urban districts include activities or uses permitted by ordinance or regulation of each county. Since 1964, the Commission’s primary objective has been to allocate land use in the state by ruling on proposed changes in district boundaries. Boundary changes occur in one of two ways. A government agency, landowner, lessee, or the Commission itself petitions for a change under the first method. After two hearings and a recommendation from the county in which the subject land unit is located, the Commission rules, approving the petition either wholly or in part or denying it. Under the 1961 law, the Commission was also required to conduct a statewide boundary review every fifth year, revising district boundaries as it deemed appropriate. The comprehensive boundary review procedure was repealed in 1975.

In its conception, Hawaii’s Land Use Law closely relates to zoning. That is to say, the Land Use Law sets up four broad “use” categories of land by describing each district in terms of the uses allowed therein. Beyond this rather superficial similarity, however, the Land Use Law barely resembles the modern local zoning ordinance. Approval of a land use district boundary change by the Commission

56. Id.
57. Id. § 205-5.
58. Id. § 205-2.
59. Id.
60. Id. § 205-4.
61. Act 193, Hawaii Sess. Laws (1975). Ironically, the five-year boundary review was originally viewed as the primary means of amending district boundaries. Thus, petitions filed between reviews were referred to as “interim” petitions. Increasingly, however, developers chose to submit “interim” petitions rather than take their chances in the more comprehensive periodic review of district boundaries. By dropping the more comprehensive approach to land use regulation inherent in the five-year boundary review procedure the legislature has provided explicit recognition to the ad hoc approach currently favored by developers.
does not confer development permission upon the petitioner,\textsuperscript{62} nor does approval necessarily imply the future density or quality of the development. Counties exercise the full panoply of land use controls in the urban district.\textsuperscript{63}

The Land Use Law gives the State Land Use Commission a larger direct role in allocating land among alternative uses than is available to any other American state. The Land Use Law gives the Land Use Commission primary responsibility for what Professor Daniel Mandelker suggests is the most fundamental planning decision made regarding new urban growth, namely the determination of the spatial limit of growth, in terms of quantity and location.\textsuperscript{64} The determination of how much growth is to be allowed is critical. If the boundaries are too loosely drawn the result may be an irregular, discontinuous pattern of growth. Such a pattern of growth can result in much higher costs for public services and facilities, such as roads and sewers. Tightly drawn boundaries, on the other hand, increase the competition for development approvals and increase land costs as developers compete for developable land units.

The second major category of planning decisions delegated to the Commission involves the determination of where new development is to occur. Should Honolulu be allowed to encroach on prime agricultural land? Will more urban expansion occur in Windward Oahu where small farms and low density development are now prevalent? Decisions about the location of urban expansion have critical implications for the direct public costs of growth; the provision of water, roads, sewers and schools. They also have important social implications. A tight urban-limits policy where growth is allowed to occur only in carefully selected locations lessens the public costs of development and protects certain existing land uses such as plantation agriculture or small farms, but could easily result in increased housing costs if too tightly drawn.

In making these decisions about where and how much land is to be added to the urban district, then, the Land Use Commission makes important trade-offs. The Commission has been delegated the responsibility for determining which land uses are more socially valuable. In changing the district designation of agricultural land to urban district designation, for example, the Commission is in effect making

\begin{enumerate}
\item \textsuperscript{62} \textit{Hawaii Rev. Stat.} § 205-6 (1976).
\item \textsuperscript{63} \textit{Id.} § 46-4.
\item \textsuperscript{64} D. Mandelker, \textit{The Zoning Dilemma} 36-44 (1971).
\end{enumerate}
a policy decision that the urban use of that land is more valuable to the community than the agricultural use of that same land or, at least that the political costs of denying a more intensive use are greater than the benefits that would flow from such an action.

From a planning perspective, then, the primary impacts of the Commission are on the location of urban development, the amount of land designated for urban development, the trade-offs between urban and other uses, particularly agriculture, and the protection of environmentally fragile areas from uses that would degrade or deplete the land. Each of these potential impacts has secondary and tertiary effects on the cost of public services, potential agricultural revenues, open space amounts, scenic values and environmental degradation.

From a political perspective the issues include an analysis of those served by particular allocative patterns; whether or not the allocation is consistent with some standard of equity; and what the ideology is which rationalizes a particular pattern of allocation. Prior to the 1975 amendments (discussed below), no explicit legislative policy existed beyond the broad goals stated in the law's preamble. Hence, the Commission made state land use policy when ruling on individual petitions. This is, of course, not new, either in land use control or in many areas in which governmental control is exercised in America. Regulation is usually, in practice, allocation; a process of distributing benefits and burdens often without an explicit plan or well-developed criteria to rationalize the process.65

The process of allocation has special meaning in Hawaii. Because the land ownership is so concentrated, the Commission in effect regulates competition among a relatively small number of landowners. Secondly, there is some evidence that the Conservation, Agriculture and Rural districts serve as holding zones in which some land units, particularly large ones, are taxed at relatively lower rates.66 A Commission decision to place such land in an urban district therefore often confers large financial benefits upon the landowners. The financial advantages of this arrangement may explain why corporate interests have never staged a major political or judicial challenge to the Land Use Law.

Hawaii's Land Use Law supplements rather than substitutes for

local land use development authority. The Land Use Law adds an additional level of land use control to existing local controls. Commission approval of a boundary change is merely the first step in a maze of regulatory authority that stands between private initiation of a development proposal and ultimate change in a land unit's use.

Once the Commission places land in the urban district, it is subject to a broad range of county controls including the county's general plans, the zoning and subdivision ordinances, the grading ordinances, and building permit laws among others. In short, the counties exercise substantial authority including the power to alter or deny private proposals for urban development.

The primary role exercised by the counties in public management of land conversion is in determining how much growth is to occur at specific sites. Zoning and subdivision ordinances regulate the amount and distribution of growth controlling population densities. Both these ordinances, and the building code, also affect the quality of the development by establishing minimum aesthetic and construction standards.

A. To What Extent are State Land Use Regulatory Decisions Consistent with Local Preferences?

In the previous section a number of evaluative questions were raised, focusing on the compliance of a state land use regulatory authority with statutory goals, administrative guidelines and the recommendations of local authorities and professional staff. In examining the implementation of Hawaii's Land Use Law, we turn first to the question of state-local relations.

Each petition acted upon by the Land Use Commission from the time permanent land use district boundaries were drawn until the end of 1978 was reviewed and coded for computer analysis. Petitions withdrawn before final Commission action were not included. Table I summarizes Commission actions for that study period.

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68. HAWAII REV. STAT. § 46-4 (1976).
69. *See* note 67 *supra*.
70. Withdrawals involved about three percent of the total number of petitions. The analysis is somewhat biased by excluding petitions that were withdrawn since withdrawals were sometimes caused by an adverse county or staff recommendation.
Table 1
Commission Decisions on Interim Boundary Petitions 1964-1978, by Island

<table>
<thead>
<tr>
<th>Island/County</th>
<th>No. of Petitions filed</th>
<th>Approved</th>
<th>%</th>
<th>Partial Approval</th>
<th>%</th>
<th>Denied</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaii</td>
<td>111</td>
<td>69</td>
<td>62.2</td>
<td>15</td>
<td>13.5</td>
<td>27</td>
<td>24.3</td>
</tr>
<tr>
<td>Kauai</td>
<td>56</td>
<td>39</td>
<td>69.6</td>
<td>10</td>
<td>17.9</td>
<td>7</td>
<td>12.5</td>
</tr>
<tr>
<td>Maui</td>
<td>54</td>
<td>37</td>
<td>68.5</td>
<td>6</td>
<td>11.1</td>
<td>11</td>
<td>20.4</td>
</tr>
<tr>
<td>Oahu</td>
<td>72</td>
<td>38</td>
<td>52.8</td>
<td>15</td>
<td>20.8</td>
<td>19</td>
<td>26.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>293</td>
<td>183</td>
<td>62.5%</td>
<td>46</td>
<td>15.7%</td>
<td>64</td>
<td>21.8%</td>
</tr>
</tbody>
</table>

Of the 293 petitions acted upon by the Commission, 286 involved requests for more intensive land uses. Of that number, 247 petitions, or eighty-four percent, were for urban district classification.

The law stipulates that a petition for a boundary change must be forwarded to the county in which the land unit under petition is located for recommendations and comments by the county council. Data on the consistency with which the Commission has followed county recommendations were organized by first dividing the study period into three periods corresponding to the tenure of the Executive Officers of the Commission staff. Second, the analysis used only those petitions for a boundary change that could have resulted in more intensive land use. Third, the data were arranged to indicate: 1) those petitions which the Commission approved, approved in part, or denied consistent with the county recommendation; 2) Commission decisions that would have allowed a more intensive land use than recommended by the county (Commission permissive); and 3) those petitions for which the county recommended a more intensive land use than allowed by the Commission (county permissive). The data indicating the degree of agreement between county recommendations and Commission decisions are presented in Table 2.

71. HAWAII REV. STAT. § 205-4(a) (1976).
72. Because Commission members have died, resigned or been reappointed, there is no clear division among Commissions. To the extent that there have been water-sheds in Commission history, those points are more likely to be reflected in a change of the Commission's Executive Officer rather than in specific time segments. Hence, the first period is from October 1964, until July 1966. The second period is from February 1976, until March 1971. the third period extends until October 1975, and the fourth period extends from that time until December 1978.
Table 2
Degree of County-Commission Agreement on Petitions

<table>
<thead>
<tr>
<th>Period</th>
<th>No. filed</th>
<th>County/Commission Agreement</th>
<th>%</th>
<th>Commission Permissive</th>
<th>%</th>
<th>County Permissive</th>
</tr>
</thead>
<tbody>
<tr>
<td>'64-'66</td>
<td>46</td>
<td>30</td>
<td>65</td>
<td>2</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>'66-'71</td>
<td>124</td>
<td>90</td>
<td>65</td>
<td>2</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>'71-'75</td>
<td>80</td>
<td>61</td>
<td>76</td>
<td>3</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>'75-'78</td>
<td>36</td>
<td>25</td>
<td>69</td>
<td>4</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>286</td>
<td>206</td>
<td>72%</td>
<td>24</td>
<td>8%</td>
<td>56</td>
</tr>
</tbody>
</table>

As the data in Table 2 indicate, Commission decisions on proposed boundary changes were consistent with county recommendations for nearly three out of every four petitions. The instances in which the counties were “more permissive” has declined markedly over the years, while the Commission has become “more permissive.”

What does all this indicate about state-county relations in land use control? Bearing in mind that state-county agreement usually means that a petition should be approved either wholly or in part, an increasingly high “degree of agreement” seems to indicate consensus regarding the need for boundary amendments and the appropriateness of the locations for more intensive land uses. There is, however, another explanation more consistent with the history of most regulatory agencies. A thesis familiar to students of regulatory agencies holds that although such agencies often begin with great regulatory fervor, they are, in time, “captured” by the very interests they are intended to regulate.73 Because county recommendations are made by elected officials rather than by the local professional planning staff, the decline in “county permissive” decisions and the increasing agreement between Commission decisions and county recommendations can also be interpreted as evidence supporting the hypothesis that the Commission has become more sympathetic to the same real estate and development interests that are said to dominate local land use regulatory decision-making.74

73. See T. Lowi, supra note 65.
Although the data above suggest growing state-county consensus on land use issues, such a conclusion is misleading. While elected officials often support Commission decisions, the professional planning staffs of the counties have grown increasingly antagonistic toward the Commission.  

When Hawaii's Land Use Law was enacted in 1961, county governments appeared to have neither the will nor the means to cope with the rapid growth that accompanied statehood. County planning offices were understaffed and overworked, particularly on the Neighbor Islands. The Land Use Law bought time for all the counties. Because they had direct responsibility for exercising land use controls only in the urban districts, the planning staffs were better able to concentrate their energies there while the state controlled the rest of the land.

Since the Land Use Law provides the Commission with the authority to determine where urban development may occur and how large urban land inventories are to be, the counties have been relegated to a secondary role in growth management. Once land is put in an urban district, it becomes difficult for the counties to resist granting required development approvals. Instead, their role has been one of exercising authority over the density and quality of approved development through zoning and subdivision ordinances.

Since the law's enactment, the role and influence of county planning has expanded. HUD 701 grants made possible a wide variety of county and local plans. County planning staffs have grown in size, in professional ability and in their desire to exercise more authority over the disposition of lands within their jurisdiction.

The 1974 boundary review suggests the potential conflict between a Land Use Commission and a county having substantially different community development objectives. In 1974, the City and County of Honolulu refused to take part in the five-year boundary review con-

75. Such opposition takes many forms. For example, a motion for a resolution calling upon the legislature to abolish the Land Use Commission was introduced by a county official (and former executive officer to the Commission) at the annual meeting of the Hawaii Congress of Planning Officials at Kailua-Kona in September 1977. The motion was tabled; but the point was made.

76. See Lowry & McElroy, supra note 49.

ducted by the Land Use Commission.78 The county indicated that major studies for revision of the county general plan were nearly completed, and that any changes in district designations should conform with the draft plan. The county general plan revision program focused on housing, transportation, and community development needs; preliminary recommendations supported intensification of development in the already-urbanized Honolulu coastal corridor, with “directed growth” toward a new urban concentration in the area of central Oahu closest to existing urban centers.79 The more compact urban pattern would be served primarily by a combined bus/train rapid transit system now in advanced planning stages. The pattern of low-density suburban development in less accessible areas of central Oahu and the windward coast would be discouraged by a low-priority capital improvement program for those districts.

The Commission approved additions of 1,782 acres to Oahu’s urban districts.80 While the county, holding to its earlier position, made no recommendations on these petitions, 796 acres approved were in areas designated for little or no growth under the preliminary county general plan revisions.81 To be fair to the Commission, it could have done far more to undermine Honolulu’s draft general plan revision than ultimately occurred in 1974. The Commission turned down major development proposals for the windward coast and central Oahu, rezoning far less acreage than had been requested.82 The county’s “directed growth” strategy for a concentrated urban node in accessible parts of central Oahu was supported by several major rezonings. The major “losing” development proposals of 1974 will be submitted again. Commission action on these

78. See note 61 supra.
81. Id.
82. A less generous interpretation of the Commission's behavior was offered by Robert Way, a former director of the Department of General Planning in the City and County of Honolulu: “It drives me crazy as a planning technician. Here they go around willy-nilly deciding how land should be used. They might as well be throwing darts at a map saying 'the blessed shall receive.'” Way Assails Land Use Decision, Honolulu Sunday Star-Bulletin and Advertiser, Dec. 22, 1974 at A-1.
petitions will be an important test of intergovernmental cooperation on growth management for Oahu.

Oahu’s general plan revision process is representative of the increasing sophistication and comprehensiveness of county plans. While earlier county plans for Oahu have resulted in detailed maps of desired land uses, the general plan revision stressed the definition of general policies and desired development patterns at the regional scale. Thus, Honolulu seeks to institute allocation at the same scale as that practiced by the Land Use Commission. If all the counties move to this approach (and in so doing begin to consider the supply of urban land as somewhat less of a “given”), opportunities for direct state-county conflict will increase.

B. To What Extent are Regulatory Decisions Consistent with the Recommendations of Professional Staff?

Studies of the professional staff role in regulatory decision-making bodies suggest that full-time staffs are likely to dominate part-time decision-makers. Such domination arguably is likely because of the decision-maker’s lack of expertise in the relevant policy area and because of the staff’s ability to devote more time and energy to background research on the decisions they must make. Staff domination, if it existed, would be manifest in a high degree of consistency between staff recommendations and Commission decisions. Unfortunately, such a consensus might also be explained by either Commission intimidation of staff members or by an ideology shared by both Commissioners and staff members.

Hence, the degree of agreement between staff recommendations and Commission decisions only becomes fully meaningful in explaining staff-Commission relations if 1) it is supplemented with other data, such as interviews, or 2) one inquires into the details of particular cases. The data on Commission-staff agreement are presented in Table 3.

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83 See Lowry & Elroy, supra note 49.
The data in Table 3 indicate a remarkably high "degree of agreement" between the staff and the Commission. The consensus is particularly high from 1971 to 1975, but drops off dramatically after 1975. After that time the role played by the Commission staff changed. The Land Use Division of the Department of Planning and Economic Development assumed the advocacy role previously played by the staff. The Commission staff currently generates information about the petition, but makes no recommendation. The data in Table 3 for 1975-1978 represent the degree of agreement between the Commission and the Land Use Division. While it is not possible to infer from this data whether the staff dominates the Commission or vice versa, there appears to be either a remarkable consensus among staff and commissioners on both the intent of the law and its application to particular petitions, or, at the very least, widely shared beliefs about how the law should be implemented, irrespective of its intent. The drop in the "degree of agreement" from 1975-1978 suggests that the institutional separation of the Land Use Division from the Commission increased the Division’s willingness to view petitions more independently.

There is some impressionistic evidence that the Commission has dominated the staff rather than vice versa. The late 1960's and early 1970's were a particularly active time for the Commission. It was increasingly at odds with its executive officer. One of the conflicts concerned the proposed second phase of a development in the rich agricultural plain in central Oahu. In 1969, Oceanic Properties, a subsidiary of Castle and Cooke, a major landowner in the state, requested urban designation for an additional 2,500 acres increment to an existing development. In recommending denial, the Commis-

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Table 3

Degree of Staff-Commission Agreement on Petitions for Boundary Amendments, 1964-1978, by Time Period

<table>
<thead>
<tr>
<th>Period</th>
<th>No. Filed</th>
<th>Staff/Commission Agreement</th>
<th>% Commission Permissive</th>
<th>% Staff Permissive</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964-66</td>
<td>46</td>
<td>36</td>
<td>78</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>1966-71</td>
<td>124</td>
<td>92</td>
<td>72</td>
<td>28</td>
<td>4</td>
</tr>
<tr>
<td>1971-75</td>
<td>80</td>
<td>74</td>
<td>93</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>1975-78</td>
<td>36</td>
<td>24</td>
<td>67</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>TOTALS</td>
<td>286</td>
<td>226</td>
<td>79%</td>
<td>51</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: Tabulated from Commission files.
sion's staff pointed to the developer's failure to produce proposed low-cost housing in an already completed first phase. Of 14,265 units developed in the first phase, only 75 could be termed "low-cost." 85

In assessing Oceanic's performance, the executive officer stated that "(the petitioner) has not performed. The Land Use Commission has been duped. They should recognize their mistake and not correct a mistake by repeating it. They have not kept faith with the Commission and should be willing to accept the consequences." 86 Some months later he resigned under pressure and was replaced. As Table 3 indicates, the recommendations of the subsequent executive officer were consistent with the Commission's decisions in more than ninety percent of the petitions.

The Land Use Commission has been attentive to the staff's recommendations with regard to a large proportion of the petitions on which they ruled. Yet there are some cases which, because of their size, or location, or perhaps because of the pleas, promises or political influences of the petitioner, have been approved by the Commission over strong objections by its professional staff.

The question of whether Commission decision-making processes are more or less political than, say, the typical zoning decision-making process cannot be answered by focusing solely on Commission decisions or voting patterns of the Commissioners. In any case, the characterization of a regulatory decision as "political" may not signify anything more than the fact that the observer disagrees with the decision.

If, however, we understand "political" decisions to mean seemingly arbitrary ones, decisions that do not conform to the applicable rules, guidelines or criteria that are intended to govern regulatory decision-making, then it is possible to provide a perspective about the degree to which "politics" is a part of the decision-making process by conducting a case-by-case analysis of the extent to which decisions conform to such guidelines. 87 Such a perspective is offered in the following section.

86 Id.
87 There are, of course, more refined approaches to identifying "politically significant" petitions, such as reputational surveys and cross-checks of petitions with lists of campaign contributors.
C. Are Land Use District Boundaries Consistent with Statutory Objectives?

We turn now to the question of the consistency of the Land Use Commission's decisions with the intent of the law. To facilitate analysis, Commission history has been divided into two periods. The first period begins in 1964 when the "permanent" Commission boundary lines were established and includes petitions acted upon prior to the major procedural and substantive changes in the Land Use Law enacted in 1975. The second period includes petitions reviewed by the Commission after those changes were enacted.

In its original form, the Land Use Law provided little in the way of substantive policy guidance to the Commission for ruling on specific petitions. The "Findings and Declarations of Purpose" section of the law suggests that the purposes of the law are to prevent "scattered subdivisions with expensive, yet reduced public services" and "the shifting of prime agricultural lands into non-revenue producing residential uses when other lands are available that would adequately serve urban needs."88

Prior to the enactment of the interim statewide land use guidance policies in 1975,89 such detailed policy guidance as was available could be found in the Commission's regulations.90 The Commission's State Land Use District Regulations includes a section entitled "Standards for Determining District Boundaries."91 According to the Regulations, these standards "shall be used in establishing the district boundaries. They also shall be used as guides for the periodic review of district boundaries for the granting of amendments to the district boundaries and for other changes and amendments."92

These standards are intended to ensure that new urban districts are located near existing urban concentrations, in close proximity to existing facilities and services and involve land units that are environmentally suited for development. Taken together the statutory language governing changes in district boundaries and the standards

88. 1961 Hawaii Sess. Laws, Act 187. This section was repealed before the law was codified.
91. Id. § 2-2.
92. Id. § 6-1.
set forth in the regulations provide the policy base for Commission decision-making.

While most of the guidelines are individually clear and straightforward, in application there are potential ambiguities and contradictions. For example, guidelines require the Commission to ensure that there is a "sufficient reserve" of undeveloped urban land to accommodate new growth. The guidelines also require the Commission to protect prime agricultural land. While there is no necessary policy conflict here in principle, in actual practice a petition may involve a land unit that is both well suited for agriculture and for urban purposes. When such policy conflicts occur with regard to particular petitions, the Commission emphasizes one or more guidelines at the expense of others when it chooses to approve or deny the petition in which the conflict occurs. Such tradeoffs are, of course, characteristic of any regulatory program. To the extent that it is possible to empirically identify a consistent pattern of tradeoffs, it is possible to speak of Commission policy with regard to changes in the district boundaries.

The empirical delineation of Commission policy is conceptually simple. It involves trying to identify a subset of the original set of guidelines which the Commission has consistently emphasized in its decisions. If, for example, the Commission has been faithful to the original goals of the land use law with regard to the preservation of prime agricultural land and the prevention of scattered, non-contiguous urban development, those guidelines having to do with location and agricultural suitability will, other things being equal, best distinguish between decisions to approve a petition for urban boundary classification and decisions to deny.

To identify Commission policy, a multi-variate statistical technique, discriminant analysis, was selected. While the mathematics of the technique are complex, the findings greatly facilitate under-

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93 For a discussion of discriminate analysis, see J. Overall & C. Klett, APPLIED MULTIVARIATE ANALYSIS (1970); M. Tatsuoka, MULTIVARIATE ANALYSIS TECHNIQUE FOR EDUCATIONAL AND PSYCHOLOGICAL RESEARCH (1971). For a discussion of the conceptual basis for discriminant analysis, see J. Nunnally, PSYCHOMETRIC THEORY (1967). For an application of discriminant analysis to dichotomous data (such as those used in this Article) see Maxwell, Canonical Variate Analysis when the Variables are Dichotomous, 21 EDUC. PSYCHOLOGICAL MEASUREMENT 259 (1961). See generally: N. Nie, C. Hill, Jenkins, K. Stembliener & D. Bent, STATISTICAL PACKAGE FOR THE SOCIAL SCIENCES (2d ed. 1975).
standing the types of tradeoffs made. First, the technique identifies specific guidelines to distinguish petitions that were approved, partially approved and those that were denied. These guidelines constitute Commission policy in explaining Commission decisions. Second, the technique makes it possible to determine whether there was more than one Commission policy at work and it indicates the relative importance of each policy. Third, the technique makes it possible to determine how consistently the policy (or policies) were applied by identifying those individual decisions on petitions that can be "explained" in terms of the policy (or policies) and those which cannot be so explained.

Since eighty-four percent of all petitions involved requests for changing a district classification from agriculture, conservation or rural to urban, only petitions for urban classification were analyzed. The results of the discriminant analysis applied to all petitions for urban district designation for the period 1964-1975 are shown in Table 4 and explained below.

Table 4

<table>
<thead>
<tr>
<th>Decision Criteria</th>
<th>Standardized Function</th>
<th>Discriminant Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>Proximity to Employment and Commerce</td>
<td>.24</td>
<td>-.28</td>
</tr>
<tr>
<td>Proposal is economically feasible</td>
<td>.19</td>
<td></td>
</tr>
<tr>
<td>Satisfactory topography</td>
<td>.10</td>
<td>-.17</td>
</tr>
<tr>
<td>Satisfactory drainage</td>
<td>.18</td>
<td>-.22</td>
</tr>
<tr>
<td>Sufficient reserve for ten years growth</td>
<td>.19</td>
<td>.22</td>
</tr>
<tr>
<td>Consistent with county plan</td>
<td>.23</td>
<td></td>
</tr>
<tr>
<td>Will not contribute to scattered urban development</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td>Land unit is characterized by city-like concentrations of people, structures and streets</td>
<td></td>
<td>-.28</td>
</tr>
<tr>
<td>Proximity to parks</td>
<td>.15</td>
<td></td>
</tr>
<tr>
<td>Prime agricultural land</td>
<td></td>
<td>-.19</td>
</tr>
<tr>
<td>Suitability of soil for development</td>
<td>.19</td>
<td></td>
</tr>
<tr>
<td>Percentage of total sum of eigenvalues accounted for by each function</td>
<td>80.2%</td>
<td>19.2%</td>
</tr>
<tr>
<td>Percentage of cases correctly classified</td>
<td></td>
<td>70%</td>
</tr>
</tbody>
</table>

94. The data for this portion of the analysis were drawn from the staff reports. If, in the opinion of the staff, the land unit for which an amendment was requested met a guideline "I" was coded and "0" was coded if it did not meet the guideline.

95. See note 93 supra.
Table 4 indicates that the Commission had two policies for urban district boundary amendments. Function I identifies the dominant Commission policy. The most striking characteristic of the dominant commission policy is that in spite of the express goal of the law to protect agricultural land, agricultural suitability does not appear to have been a major factor in Commission decision-making. This characteristic is consistent with a review of Commission files which indicates that more than 36,000 acres of agricultural land have been added to the urban district since 1964, about ten percent of which was ranked "prime" in terms of agricultural productivity. In other respects, however, the dominant policy is generally consistent with the intent of the law. Several measures of the location of the proposed additions to the urban district—proximity to employment, consistency with the county plan, and the avoidance of scattered urban development—emerged as crucial variables in the dominant policy. Two measures of the environmental suitability of land units—topography and drainage—were also important.

The minor policy described by function II is almost the opposite of the major policy. Again, criteria having to do with the location of new urban development are important as are criteria related to the environmental suitability of the land units. The coefficients are negative in this function, indicating that they are describing land units not characterized by these attributes. In addition, some of the land units

\(^{96}\) The discriminant technique calculates two measures for judging the relative importance of each discriminant function. One of these is the relative percentage of the eigenvalue associated with the function. The eigenvalue is a special measure computed in the process of deriving the discriminant function. The sum of the eigenvalues is a measure of the total variance existing in the discriminating variables. When a single eigenvalue is expressed as a percentage of the total sum of eigenvalues, we have an easy reference to the relative importance of the associated function. Here the first function accounts for 80.2% of the total sum of the eigenvalues. \textit{See} N. Nie, \textit{ supra} note 93, at 442.

\(^{97}\) These figures were computed from petitions in the Commission’s files.

\(^{98}\) The standardized discriminant function coefficients, which are analagous to beta weights in multiple regression, indicate the relative contribution of the decision criteria to each function. The larger the coefficient the greater its significance in discriminating among petitions that were approved, partially approved, and denied. In this instance, the proximity of a land unit under petition to "centers of employment and commerce" (.24) and "consistency with county general plan" (.23) emerged as dominant explanatory variables.
described by this function were highly productive agricultural units as indicated by the negative value of that criterion.

Four criteria had positive coefficients on this second function. The largest coefficient was the “sufficient reserve” criterion which, as interpreted and applied by the Commission, indicates that the justification for approving the petitions described by this function was to ensure an adequate supply of land for new development. Petitions described by this function were also characterized by stable soil types that make them suitable for development. The criterion involving the proximity of the land units to parks was also positively associated with this function. Since park dedication by the developer is sometimes promised by petitioners seeking a change, this criterion may mean that this function describes petitions involving large land units.

How is this “minor” Commission policy, which represents an almost total rejection of both the major policy and the official goals of the law, to be interpreted? Further analysis indicates that function II describes a policy applied only to a small subset of petitions before the Commission. These petitions were partially approved by the Commission. Generally, such partial approvals occurred when district boundary amendments were requested for land units involving several hundred acres. The Commission would approve only a portion of the amount requested.

D. How are Decisions Inconsistent with Commission Policies to be Interpreted?

In the analysis of Commission policy in the first study period, two policies were identified which explain seventy percent of the Commission’s decisions. What of the other thirty percent of the petitions? How are these decisions to be interpreted?

The discriminant analysis not only identifies Commission “policy” by revealing which guidelines best distinguish between those petitions approved either wholly or in part and those that were denied, but it also classifies individual petitions according to the degree to which they are consistent with empirically derived Commission poli-

99. This interpretation is based on inspection of the means for each of three groups—approval, partial approval and denial—on each of the functions. Comparing the group means on each function indicates how far the groups are along that dimension. Partial approvals had a group mean of .33 on Function II, while approvals had a group mean of .07 and a denials group mean of .11.
cies. The discriminant technique presents a theoretical decision on each petition before the Land Use Commission. These theoretical decisions can then be compared to actual Commission decisions, making it possible to identify each of the petitions not conforming to the dominant Commission policy. Figure 1 compares actual Commission decisions with those predicted by the two discriminant functions. Those decisions in which the theoretical decision is the same as the actual decision are located in the cells in the main diagonal extending from the lower left to the upper right. The 152 petitions in the cells on that diagonal represent seventy percent of the total of 218 petitions.

Figure 1
Theoretical Decisions Compared with Actual Commission Decisions

<table>
<thead>
<tr>
<th>Theoretical Design</th>
<th>Partial Approval</th>
<th>Approval</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Decision</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approval</td>
<td>13</td>
<td>18</td>
<td>98</td>
</tr>
<tr>
<td>Partial Approval</td>
<td>6</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>Denial</td>
<td>31</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>52</td>
<td>119</td>
</tr>
</tbody>
</table>

The empirical delineation of Commission policy provides a valuable global perspective on the bases for Commission decision-making.

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100. The classification problem involves determining which group each petition "resembles" the most in terms of the variables identified as constituting Commission policy. The "typical" classificatory problem to which discriminant analysis is applied involves determining a set of characteristics that differentiates among a particular set of well-defined groups and then assigning an individual whose group membership is unknown to one of the groups on the basis of his individual characteristics. For example, job placement in a large organization might be aided by matching an individual's placement test scores (characteristics) to the job profiles until the best "fit" between the individual's profile and a particular job profile is obtained. The particular discriminant program being used in this analysis computes two classification measures: chi-square and posterior probability. The chi-square is a measure of distance or dissimilarity. The higher the chi-square value of a particular petition, the farther away is the point representing the score of an individual petition from the centroid of that group. Conversely, the lower the chi-square value, the closer the petition is to the "average" petition in that group. The second classification measure is the posterior probability of group membership. The posterior probability is the probability that a particular petition, X, belongs to a particular group, H_k. Both the chi-square and posterior probability result in the same classification.
in the first period. In this section the focus is on individual petitions which cannot be explained with reference to that policy; that is to say, those petitions in the cells above and below the main diagonal in Figure 1 above. While it is not possible to account for all the factors that motivated Commissioners to react positively or negatively to particular petitions, it may be possible to identify some of the substantive bases for departing from the primary Commission policy.

The first set of petitions to be examined involves those petitions in which the "theoretical" decisions would have allowed for more intensive land uses than actually allowed by the Commission. There are three subsets of petitions to be examined under the heading of "permissive misclassifications:" 1) those petitions statistically classified as approval but actually denied by the Commission; 2) those petitions classified partial approval but actually denied by the Commission; and 3) those petitions classified approval but partially approved by the Commission.

Detailed analysis of the individual misclassified petitions in the three cells revealed some interesting similarities. All but one of the six petitions denied by the Commission but classified approval were located on the island of Hawaii. All the petitions involved relatively small agricultural parcels adjacent to or in close proximity to urban areas. In each case the land unit was served by facilities and services and consistent with the county general plan.

The denial by the Commission of these six petitions points to one of the sources of tension between the state and the counties in land use planning matters. Each of these petitions was consistent with the county's general plan and each was recommended for approval by the county. Each met most of the relevant standards for an urban district. And yet, the Commission's denials were not wholly capricious: the failure of a petitioner to develop a previously re-districted parcel, the failure to establish the need for additional urban land; or a petitioner's unwillingness to submit a development plan for a land unit each represent a legitimate basis to deny a petitioner. On the other hand, the denial of these six petitions does justify a charge of inconsistency on the part of the Commission. As subsequent analysis indicates, the Commission has approved petitions involving several similar land units.

Ten of the eleven petitions denied by the Commission but classified as partial approval involved land units located on Oahu. Seven of the eleven petitions involved land units in the conservation district.
These land units are, for the most part, adjacent to urban districts and in close proximity to urban services. They met all or most of the standards governing urban designation except those relating to topography. Several of these land units included steeply sloped land which, if graded and developed, would have increased the probability of flooding and slides.

These classifications are, in part, an artifact of the discriminant technique. The application of the technique to all petitions for urban designation in the 1964-1975 period revealed an overall Commission policy for deciding on petitions in that period. The petitions under examination represent a subset of petitions to which that policy does not apply. These petitions were classified partial approval on the strength of the second discriminant function, which, it should be recalled, was a secondary Commission policy of approving in part petitions for large land units or petitions involving environmentally fragile land units, some portion of which might be suitable for development.

Of the fourteen petitions classified approved, but actually only partially approved by the Commission, eleven involved land units on the neighbor islands (i.e. islands other than Oahu). Each land unit met the tests for urban district classification usually applied by the Commission (as revealed by the discriminant analysis). In eleven of the fourteen petitions, the Commission staff recommended partial approval and the Commission followed the staff recommendation. In each instance, the Commission appears to have used the partial approval decisions to maintain some control over the supply of urban land available for urbanization, as well as the pace and character of development.

Partial approvals constitute the most interesting, and perhaps the most important, class of decisions made by the Land Use Commission. By definition a partial approval decision is somewhere between a decision to approve and a decision to deny a district designation change of a land unit. In distinguishing between partial approvals and denials on the one hand, and partial approvals and approvals on the other, the Commission has exercised a great deal of discretion. The proportion of misclassifications involving partial approval is much higher than that involving other types of decisions. The overall Commission policy described in the previous section cannot adequately explain the circumstances surrounding this class of decisions.

What gives this class of decisions special importance in under-
standing the role of the Commission in land use guidance is the foot-in-the-door character of these decisions. Partial approvals represent several special classes of approval. A partial approval can be a tentative “green light” to further urban development in a particular area, signaling some urbanization is likely to take place. It may create pressures on the petitioner to develop the initially approved portion in a way that is likely to gain favor with the Commission so as to allow total development of the land unit at some future time. A partial approval, like an approval, may also create development pressures on adjacent landowners whose taxes may increase as urban development moves toward this land unit.

The second major subset of petitions unexplained by the Commission policy are those in which the theoretical decision was more restrictive than the actual decision reached by the Commission. This subset includes the following: 1) petitions approved by the Commission but classified partial approval; 2) petitions partially approved, but classified denial; and 3) those petitions approved by the Commission but classified denial.

As Figure 1 indicates, the Commission approved eighteen petitions although they were classified partial approval according to the global Commission policy. Twelve of the eighteen petitions involved changes not in compliance with the county general plan. Nine of the twelve petitions involving land units on Oahu led to land use classifications inconsistent with Oahu’s general plan. Four of the petitions involved land units, some portion of which had steep topography. Two of the petitions involved land units with a high agricultural productivity. In short, most of the petitions in this subset did not meet one of the “critical” standards and therefore received a more restrictive classification than that granted by the Commission.

The Commission’s use of “partial approvals” to control the supply of urban land and the timing of development was discussed in the previous section. In those petitions, there was a high degree of agreement between the Commission staff and the Commission regarding how much land should be redistricted.

The six petitions partially approved by the Commission but classified denial represent a different use of the partial approval technique by the Commission. The Commission staff and the Commission disagreed on each of the six petitions. Three of the six petitions appeared to directly contravene the purposes of the Land Use Law. And three petitions involved large undeveloped and unimproved
land units in areas in which the staff held that there was already a "sufficient reserve" of undeveloped urban land. These decisions to partially approve petitions appear to be attempts to strike a compromise between the dictates of the law (as represented by the staff) and the preferences of politically powerful development interests.

Finally, thirteen petitions were classified denial but were approved by the Commission. None of the thirteen petitions met the "sufficient reserve" standard. In the judgment of the staff, approval of each of these petitions would result in more urban land than required to meet anticipated population growth over the next ten years.

Approval of nine of the thirteen petitions resulted in a land use designation inconsistent with the county's general plan. Three of the petitions involved land units on the island of Hawaii that the staff stated would result in scattered urban development, if approved. Four petitions involved land units with steep slopes and possible drainage or flooding problems. A number of the other petitions also involved land units lacking basic services and facilities such as water, roads, sewers and the like.

E. 1975 Procedural Revisions in the Land Use Law

As noted above, the 1975 legislature made significant changes both in Commission procedures and in the policy guidelines governing Commission decisions.101 A 1974 ruling of the Hawaii Supreme Court102 dictated reforms in Commission procedures. The court held that the Commission was bound by the contested case procedures for adjudicatory proceedings as contained in the state Administrative Procedures Act.103 One of the most controversial of the new procedures related to participation in Commission hearings on boundary amendments. Under the amended procedures, full participation in boundary amendment proceedings is limited to "parties."104 The petitioner, the Department of Planning and Economic Development, and the Planning Department of the county in which the land unit under petition is situated are automatic parties. Standing may also be granted to "all departments and agencies of the state and of the county in which the land is situated . . . upon timely application for

intervention." Standing is also granted to persons with a property interest in the land as well as to those who reside on it or who can demonstrate that they will be directly affected by the proposed change. Others are granted standing at the discretion of the Commission.

Because all such parties have an opportunity to present evidence, to call witnesses, and to rebut the testimony of witnesses, the new Commission procedures were viewed by environmental activists, community groups, and development interests with a mixture of concern and enthusiasm. While the conference committee called the standing provisions "extremely liberal," other legislative participants thought the effect of these provisions might be to restrict participation.

Allowing individuals, community groups and special interest groups to have formal standing before the Commission provides another set of recommendations to the Commission. These recommendations do not constrain the Commission in its decision-making any more than do the recommendations of County Council or the Commission's staff (or the Land Use Division since 1965). To the extent that recommendations by parties are unanimous, however, it is possible to assess the extent to which the Commission has been responsive to those recommendations.

Of the thirty-six petitions ruled on by the Commission since these procedural changes were enacted in 1975, there were only seven instances in which parties other than the petitioner, the Department of Planning and Economic Development and the County Planning Department, all of whom are parties on every case, petitioned for standing. Of that number, the parties, which included state agencies, individuals, community groups and special interest groups, were generally opposed to six petitions, although often in different degrees and for different reasons. Table 5 indicates the degree of agree-

105. Id. § 205-4(e)(2).
106. Id. § 205-4(e)(3).
109. However, "[i]f any party to a proceeding has filed proposed findings of fact, the Commission shall incorporate in its decision a ruling upon each proposed finding so presented." HAWAII STATE LAND USE COMMISSION, RULES OF PRACTICE AND PROCEDURE, Pt. 4, at 3 (1975).
110. One petition involving the downzoning of portions of a marsh located in windward Oahu was dropped from the analysis because the parties were divided in
ment between recommendations by parties and Commission action.

Table 5
Degree of Party-Commission Agreement on Petitions for Boundary Amendments, 1975-1978*

<table>
<thead>
<tr>
<th>Party/Commission Agreement</th>
<th>Commission Permissive</th>
<th>Party Permissive</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>33%</td>
<td>0%</td>
</tr>
<tr>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

* Using only those six petitions upon which there was general agreement by parties.

The recommendations of the parties were consistent with those of the Land Use Division of the Department of Planning and Economic Development on each of the six petitions. Hence, while the Commission has not used the new procedures to restrict access to Commission proceedings neither have they been particularly responsive to the views and recommendations introduced by other parties.

F. 1975 Substantive Revisions in the Land Use Law

The 1975 legislature was also very concerned with the substantive policy basis for Commission decisions. The conference committee noted that there is an urgent need for substantive State land use policies to guide and govern the Land Use Commission in determining land use district boundaries. The standards of Hawaii's existing Land Use Law, although laudable, lack sufficient specificity to guide the Commission in the exercise of its very important functions.111

The legislature inserted the following test:

No amendment of a land use district boundary shall be approved unless the Commission finds upon the clear preponderance of the evidence that the proposed boundary is reasonable, not violative . . . [of the statutory definition of the uses and activities allowed in land use districts] and consistent with the in-

interim policies and criteria established . . . [by the legislature] or any state plan enacted by the legislature which plan shall supersede any interim guidance policies.112

Pending the development of a state plan, the legislature specified eight "interim" policies to be observed by the Commission "except when the Commission finds that an injustice or inequity will result."113 Five of the interim guidance policies emphasize containing urban sprawl. One of the original purposes of the Land Use Law, the preservation of prime agricultural land in agricultural use, receives only passing mention.114

Final decisions were made on twenty-eight petitions for urban district designation from the time the interim statewide land use guidance policies were enacted in 1975 until December 1978. The results of the discriminant analysis of these twenty-eight petitions are shown in Table 6.

112.  HAWAII REV. STAT. § 205-4(h) (1976).
113.  Id. § 205-16.1.  The interim policies are:
(1)  Land use amendments shall be approved only as reasonably necessary to accommodate growth and development, provided there are no significant adverse effects upon agricultural, natural, environmental, recreational, scenic, historic, or other resources of the area.
(2)  Lands to be reclassified as an urban district shall have adequate public services and facilities or as can be so provided at reasonable costs to the petitioner.
(3)  Maximum use shall be made of existing services and facilities, and scattered urban development shall be avoided.
(4)  Urban districts shall be contiguous to an existing urban district or shall constitute all or a part of a self-contained urban center.
(5)  Preference shall be given to amendment petitions which will provide permanent employment, or needed housing accessible to existing or proposed employment centers, or assist in providing a balanced housing supply for all economic and social groups.
(6)  In establishing the boundaries of the districts in each county, the Commission shall give consideration to the general plan of the county.
(7)  Insofar as practicable conservation lands shall not be reclassified as urban lands.
(8)  The Commission is encouraged to reclassify urban lands which are incompatible with the interim statewide land use guidance policy or are not developed in a timely manner.
114.  Id. § 205-16.1(1).
Table 6
Key Commission Decision Criteria for All Interim Petitions for Urban Districts, 1975-1978

<table>
<thead>
<tr>
<th>Decision Criteria</th>
<th>Standardized Function</th>
<th>Discriminant Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land unit is characterized by city-like concentrations of people, structures, and streets</td>
<td>-0.0.81</td>
<td></td>
</tr>
<tr>
<td>Proximity to basic services such as</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>1.43</td>
<td>-0.65</td>
</tr>
<tr>
<td>Roads</td>
<td>0.68</td>
<td>-0.04</td>
</tr>
<tr>
<td>Sewers</td>
<td>-1.62</td>
<td>-0.77</td>
</tr>
<tr>
<td>Consistent with county plan</td>
<td>-0.05</td>
<td>1.11</td>
</tr>
<tr>
<td>Percentage of total sum of eigenvalues accounted for by each function</td>
<td></td>
<td>73.1% 26.9%</td>
</tr>
<tr>
<td>Percentage of cases correctly classified</td>
<td></td>
<td>94%</td>
</tr>
</tbody>
</table>

The discriminant analysis indicates that the availability of urban services and existing development patterns figured prominently in Commission policy. Generally, however, the pattern is not consistent with a strict urban containment philosophy. Had the urban containment philosophy so well expressed in the interim land use guidance policies been followed more closely by the Commission one would expect a stronger association among these variables having to do with urban services (water, sewers and roads), the variable indicating existing urban attributes (city-like concentrations of people, structures and streets) and the county general plan.

An analysis of the individual petitions suggests that the Commission was faithful to the urban containment philosophy with regard to several petitions, but that several large land units were approved for urban uses although they did not meet several of the urban tests, most notably those having to do with the availability of urban services. Two of these petitions involved land units on Oahu's central plain. In approving these petitions, the Commission chose to emphasize the policy having to do with providing a "balanced housing supply." This emphasis, it should be recalled, is consistent with Commission policy prior to the enactment of the interim land use guidance policies.

115. Id. § 205-16.1(5).
G. The 1978 State Plan and the Land Use Commission

The State Plan proposed by the state administration and enacted by the 1978 legislature provides the institutional and policy context for Hawaii's future state growth management efforts. The legislation mandates a "statewide planning system" which explicitly includes state functional plans, county general plans, the state program appropriations process, state capital improvements appropriations, the budgetary review process conducted by the Department of Budget and Finance, land use regulatory decisions made by the Board of Land and Natural Resources and the Land Use Commission and, finally, a Policy Council. The "statewide planning system" can be thought of as including a policy apparatus, a planning apparatus, an implementation apparatus and a monitoring apparatus.

The policy context of the state plan is found in the overall theme, goals, objectives, policies, and priority directions of the legislation. These objectives and policies vary somewhat in the level of generality in which they are expressed. Most of them, however, are not sufficiently specific to provide clear guidance in regulatory decision-making or budget allocations. The most specific policy guidance in the legislation is found in the section on priority directions. Priority directions are defined as "overall direction and implementing actions." The legislature developed priority directions for the economy, for population growth and distribution, and for land resources. The legislature also extended the Land Use Commission's interim guidance policies, originally scheduled for repeal upon enactment of the state plan, until "two years after the effective date of the reenactment of the state plan."

The planning apparatus includes state functional plans and county general plans. Functional plans are to be based on the policies articulated in the state plan. Additionally, "[c]ounty general plans and development plans shall be used as a basis in the formulation of

116. Id. § 226 (Supp. 1978).
117. Id. §§ 226-52, 53.
118. Id. §§ 226-3 to 226-8, 226-101 to 226-105.
119. Id. § 226-2(7).
120. Id. § 205-16.2.
121. Id. § 226-52(3). "State functional plans shall be prepared for, but not limited to, the areas of agriculture, conservation lands, education energy, higher education, health, historic preservation, housing, recreation, tourism, transportation, and water resources development." Id.
state functional plans."\textsuperscript{122} Likewise county general plans are to be consistent with policies in the state plan and the "[f]ormation, amendment, and implementation of county general plans or development plans shall utilize as guidelines, statewide objective, policies, and programs stipulated in state functional plans adopted in conformance with this chapter."\textsuperscript{123}

The state plan specifically designates several mechanisms for implementing the plan:

* the appropriation of funds for major programs under the biennial and supplemental budgets;
* a capital improvement projects and plans;
* the budgetary review and allocation process of the Department of Budget and Finance;
* state plans;
* decisions by the Land Use Commission; and
* decisions by the Board of Land and Natural Resources.\textsuperscript{124}

The state plan act requires that decisions and appropriations be "in conformance with the overall theme, goals, objectives, policies and priority directions" contained in the plan.\textsuperscript{125} The act also specifies that the appropriation of funds for capital improvements and decisions by the Land Board and the Land Use Commission must be consistent with functional plans adopted pursuant to the law.\textsuperscript{126} In addition, rules and regulations adopted by both the Land Board and the Land Use Commission are to be in conformance with the Act.\textsuperscript{127}

The Hawaii state plan legislation is far-reaching both in terms of the degree of consistency required between the law and individual plans and programs and in terms of the sheer number of planning, programmatic, regulatory and budgetary processes that must be coordinated. Given the generality of the policy statements in the state plan and the array of planning, budgetary and regulatory activities that are to be coordinated, conflicts are inevitable. To deal with such conflicts, the act mandates the formation of an eighteen-member policy council, half of whose voting members are appointed by the governor from lists submitted by county mayors. In addition to these

\textsuperscript{122} Id. \S 226-52(3).
\textsuperscript{123} Id. \S 226-61(a).
\textsuperscript{124} Id. \S 226-52(b)(2).
\textsuperscript{125} Id. \S 226-52(a)(5).
\textsuperscript{126} Id.
\textsuperscript{127} Id. \S 226-52(b)(2)(D).
“public” representatives there are nine members who represent state and county agencies.\textsuperscript{128}

The Policy Council is to “provide a forum for the discussion of conflicts” and to make recommendations on all such conflicts to the governor, the legislature, the mayors and county councils.\textsuperscript{129} The council is also to review and evaluate the state’s functional plans for conformance with the plan;\textsuperscript{130} to conduct comprehensive reviews of the plan’s policies on a periodic basis commencing in 1981;\textsuperscript{131} to make recommendations for the legislature on the administration, amendment and review of the plan;\textsuperscript{132} and to issue an annual report assessing the progress of the plan.\textsuperscript{133}

IV. CONCLUSIONS

While there is little disagreement concerning the need for evaluating state land use regulatory programs, less consensus exists as to the appropriate evaluative approaches and methods. Among the various approaches reviewed, the compliance approach proved fruitful because it lends itself well to comparative analysis and because it can provide the basis for broader analysis focusing on the institutional, political and socio-economic conditions that enhance or impede compliance.

In particular, the compliance analysis of the implementation of Hawaii’s Land Use Law indicated several points of interest to those concerned about state land use programs.

1. There was a high degree of agreement between local (county) recommendations by elected officials for boundary amendments and Commission decisions. This apparent consensus, however, masked some genuine conflicts with local professional planning staff.

2. The Commission’s decisions were consistent with the recommendations of its professional staff on a substantial proportion of decisions. The Commission followed staff recommendations closely on most routine cases, but was more apt to depart from staff recommendations if the peti-
tion involved potentially large additions to the urban district.

3. The original legislative objectives of the Land Use Law were to preserve prime agricultural land and prevent scattered urban subdivisions. Analysis of Commission decisions indicated that the preservation of agricultural land was not emphasized in Commission decisions, although the Commission was more sensitive to issues regarding the appropriate location of new development, particularly where petitions involving small land units were concerned.

4. Analysis of compliance of Commission decisions with administrative guidelines during the period before the reform of the law in 1975 indicated that the Commission had two policies governing proposed additions to the urban district. The major policy applied to the majority of the petitions before the Commission was largely consistent with the intent of the law, except that it did not emphasize preservation of prime agricultural land in agricultural use. The minor policy, however, violated the intent of the law. Under this minor policy the Commission partially approved several large proposed additions to the urban district involving agricultural land. Several steeply sloped land units were also added to the urban district under this minor policy. The minor policy applied to about seventeen percent of the petitions before the Commission.

5. Despite the procedural and policy amendments to the Land Use Law enacted in 1975, the same major pattern of Commission decision-making prevailed in the period from 1975-1978.

6. A Commission decision to “partially approve” some proportion of a proposed addition to the urban district has been its way of seeking a political compromise on petitions about which there was a great deal of conflict. Historically, however, the area that is approved for addition to the urban district subsequently becomes the rationale for further additions to the district.

It is difficult to explain the approval or partial approval of many petitions by reference to the formal criteria governing Commission decision-making. How, then, are they to be explained? What “informal” criteria govern Commission decision-making?

The need for housing, or more specifically, the need for low-cost housing, is generally cited as the primary rationale for most of the
decisions consistent with the Commission’s minor policy. The need for low-cost housing is a constant theme echoed by almost all developers or landowners whose land unit would not qualify for urban designation if the Commission rules and regulations were consistently enforced.

On Oahu, in particular, some of the land most suitable for development in terms of location and topography is also the most agriculturally productive. Faced with what appears to be a choice between preserving this land for agriculture and redistricting for low-cost housing, promised by a developer, how should the Commission decide? The case for development becomes more compelling when those with the largest stakes in agriculture argue for development. Some of the corporate managers of the agricultural interests have argued that rising labor costs, new technologies and foreign competition have made Hawaii’s pineapple and sugar less competitive in a world market. The closing of several mills and processing plants seems to have underscored their arguments. It is possible to discount the argument of corporate managers as being somewhat self-serving attempts to realize the greater corporate profits that can come from land sales or a development package. When they are joined by leaders of the unions that represent the agricultural workers, the case for development becomes politically viable.

“Low-cost housing” is not the only value against which the preservation of prime agricultural land has been weighed. At least two other factors can also be cited to explain Commission departures from their policy of maintaining loose control over the supply of urban land and its location relative to other urban areas.

134. With regard to one such decision the Commission’s executive officer is quoted as saying that “the vast plain of prime agricultural land in Central Oahu will be sacrificed to urban use as fast as leases expire, withdrawal clauses are exercised, development contracts are signed and bulldozers can move.” On the other side, an official of the union that represents agriculture workers and a member of the Commission noted that the Commission agreed to a change in the district boundary from agriculture to urban because there is a “desperate need for housing for plantation workers in the Waipahu area.” Waipahu Land Zoned for Homes, Honolulu Star Bulletin, Sept. 13, 1969, at A-9, col. 1. See Official Split on Land Use, Honolulu Advertiser, Sept. 18, 1969, at A-18, col. 1.

135. The amount of land in sugar production declined from 329,800 acres in 1967 to 220,700 acres in 1977, but lands in pineapple declined from 64,000 in 1967 to 47,000 in 1977. While the number of major pineapple producers in Hawaii has dropped dramatically, some have merely shifted their operations to Taiwan and the Philippines. STATE OF HAWAII, DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT, DATA BOOK 292 (1978).
One of these important factors seems to be the scale of a proposed development. A petition for several hundred acres—or several thousand—often creates a certain dynamic in the form of high-priced lawyers, slick brochures, feasibility studies and endorsements from community groups and elected officials. In reviewing the Commission's decision to partially approve the original Mililani Town petition, the Commission's Executive Officer commented that "the Commission was undoubtedly overwhelmed by the fact that $500,000 was spent in planning and economic feasibility studies, three separate housing studies, three different architectural teams all submitting supporting data justifying $15,000 to $20,000 housing packages."\(^{136}\)

Closely related to the importance of scale in explaining otherwise difficult-to-explain decisions is what seem to be certain value premises shared by Commissioners about the use of land. Among these value premises that seem to guide the Commission in its decision-making is a conception of land as primarily a commodity, an economic resource. The Commissioners are not alone in this orientation toward land. It is, in fact, widely shared.

It is difficult to determine whether some of those Commission decisions that contravene the purposes of the Land Use Law actually represent a belief that a developer will provide low-cost housing, a respect for large-scale investment, or a feeling that investors and landowners are entitled to the "highest and best use" of their land so long as those uses do not violate too many public purposes. It is, however, possible to construct a plausible ideology to account for what otherwise appear as aberrations in Commission decision-making, to impute this ideology to the various Commissioners and, thereby explain all the Commission’s decisions in a large but tidy package.

Ideology is, of course, just one of several possible lines of inquiry to explain the seemingly inexplicable. One of the arguments to explain Commission decisions with which one disagrees is to suggest that they represent “political payoffs.” Historically, the zoning process in America has been rife with subtle and less-than-subtle forms of influence peddling. There is no reason to think that Commissioners in Hawaii have been wholly immune to the pressure of powerful political forces or to the favors that a beneficial land use decision can bring.\(^{137}\)

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136. See note 85 supra.

137. One prominent example involved charges made by two community groups
Several of the petitions which violate the explicit purposes of the Land Use Law involved state legislators or county councilmen either as owners or as lawyers for the landowners or developers. Other favored petitioners have been prominent financial backers of one faction of the Democratic Party. Finally, two Commissioners were themselves active in re-districting land in which they had a financial interest.

Several observers of the Commission have used these examples to serve as a basis for inferences about the processes which led to a wider range of Commission decisions. Charges of political favoritism or corruption are often advanced as convenient explanations for land use decisions that are difficult to explain with reference to the standards that are supposed to govern such decisions. The process of gaining a favorable Commission decision is, however, often more subtle and complex, involving elements of merit, shared ideology, and cronyism. Such a process is more difficult to evaluate by the sorts of "objective standards" of which ethics laws are constructed.

Whatever the explanation for Commission decisions in contravention of the Land Use Law's intent, it is important for policy makers and program administrators to determine the implications for state land use control elsewhere. One perspective is that the sort of broad discretion exercised by Hawaii's Land Use Commission in the interpretation and application of legislative mandates and/or administrative guidelines to particular petitions is one of the political costs of engaging in state land use control. Tight, specific policies, it is argued, will result in the legislative death of most state programs as

on Kauai that a mainland firm approached the then chairman of the Commission about how to expedite its petition. The chairman was alleged to have recommended a particular lawyer and suggested that a fee of several hundred thousand dollars was not out of line. See Land Use Manipulation Charged in Kauai Case, Honolulu Star Bulletin, Oct. 4, 1974, at A-1, col. 1.

138. See, A Hot Argument over Bills, Honolulu Advertiser, June 20, 1969, at A-1, col. 5. A former commissioner alleged that a legislator and former lawyer for a major development corporation introduced legislation designed to aid the developer.

139. See, Apartment Greener than Golf Course, Honolulu Star Bulletin, Oct. 19, 1972, at A-2, col. 1. This Article recounts the successful efforts of the campaign finance chairman of a former governor to engineer a multi-million dollar development through the regulatory maze of two state agencies.

would strict enforcement of generally stated preservationist policies. Thus, the broad discretion exercised by a regulatory body such as Hawaii's Land Use Commission and the consequent, seemingly arbitrary decisions which may result from that discretion are not a "problem" but a condition inherent in regulation.

For those who regard such discretion as a problem, there may be other, more appropriate regulatory models. Specific policies are one solution, particularly when tied to cause of action provisions that make it possible to sue in instances of noncompliance by an administering body. One of the difficulties with such policies, aside from potential inflexibility, is that a state generally trades comprehensiveness for specificity. A specific set of policies which leave little room for discretion is generally more likely to be politically and judicially viable when dealing with only a few special resources (wetlands) or particular uses (power plants).

Another regulatory model of which there are several variations is state or regional review of certain classes of decisions at the local level (residential developments of more than a certain size), or all local decisions in certain areas (coastal zone). Such review would also require a specific policy base. Such a state review reduces the potential arbitrariness of decisions at only one level of government.

The tight coordination between planning, budgetary and regulatory decisions inherent in Hawaii's new state plan legislation represents a third potential model for other states. These management models and their many variations require careful evaluation.