Local Environmental Impact Statements: The State of the Art

by Robert W. Burchell and David Listokin

BACKGROUND

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The purpose of this article is to summarize the nature of environmental impact statements (EISs) at the local or municipal level. It describes legal and growth climates within which the EIS has emerged, participants to the EIS process, style (form and content) of the impact statement, local filing procedure, conflicts between agencies of government which affect local EIS filings, the competency of municipal environmental impact statements, and the future of EIS as part of the local planning process.

Growth, via land use commitments of one type or another, is the most important determinant of environmental quality. Private development decisions, influenced by public investments, regulatory ordinances, and economic incentive devices, ultimately shape the nature of the immediate living environment. The effective participation of local government in private development decisions is crucial, yet currently government's role is weak, underutilized, and poorly understood.

In addition, in this era of "creative localism" brought about by the return of the revenue distribution function to lower echelons of government, municipalities have recognized that their direct actions and indirect sanctions, through the granting of permits, licenses, and so forth, can spur growth which may be environmentally harmful. Local governments, which experience on a day-to-day basis the pressures of development, are increasingly aware that they must incorporate environmental concerns in their decision-making processes. The local EIS is a manifestation of this growing municipal awareness.

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CONTEXT

EIS is taking place within the context of basic tenets of American land use. Legal theoreticians have noted that within the United States there are indeed liberal and conservative states in terms of their local land use policy. Liberal states allow considerable local discretion in the interpretation of the judicial concept of the police power. Restrictions, one of these being the EIS filing requirement, may be freely placed upon land developers under the guise of protecting the general health, safety, and welfare. More conservative states hew closely to an individual owner's inherent rights of property and sanctify the highest and best use of his land even though this may occasion discomfort to adjacent property owners or to the larger community.

Second, American land use is now in its fourth phase of land development control, having gone through zoning, subdivision control (site plan review), and master planning. These approaches have (respectively) facilitated minor, limited, rampant, and, now—with the EIS—selected control.² As opposed to the previous period in which local land use decisions were viewed with a presumption of validity, the courts currently realize that a local regulation may indeed serve a non-legitimate purpose or be the product of parochial vision—unduly harsh with little compensating public benefit or merely inept.

Third, there is a national trend toward moving the control of land from owners and developers acting individually to the general public acting communally through government. Thus, personal freedom to maximize profits from land is being replaced by collective decisions concerning its equitable disposition.³ An authority on land use controls has summarized the situation aptly.

As land becomes a scarce commodity in an increasingly urbanized society, the nature of our concepts of property and the constituional guarantees of due process, equal protection, and just compensation must change. Government becomes an intervenor on an ever-increasing scale . . . Due process "rights" of landowners diminish as they constantly evolve toward a recognition that the scope and reach of the police power of government must be ever capable of expansion to solve new problems not conceived of by our forebears.⁴

Fourth, the United States no longer desires to grow. The "Chamber of Commerce" signs which dotted American highways and pleaded for local development are being replaced with the Oregonian view of "visit, but maintain your business and residence elsewhere." As the courts have reacted to this type of growth control vehemently, a new era of "managed growth" has emerged that still seeks to limit population expansion without directly violating rights of individuals.⁵

How then can one sort through these trends to project their impact on the local EIS? The path is circuitous but clear. Reflective of the national trend of increasing public control over private development, EIS has and will continue to grow—first, in the liberal land use states and, subsequently, in the more conservative areas—initially becoming part of the local planning process and ultimately part of a more sophisticated and integrated system to manage and

plan for growth. If, instead, it proves to be arbitrary, restrictive, duplicative, or socially and economically unconscious, it will be significantly curbed and ultimately disallowed by the courts.

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Currently, approximately 32 jurisdictions have followed the federal lead (National Environmental Policy Act of 1969 [NEPA]) and have acted either legislatively or administratively to establish NEPA equivalents within the confines of their political bounds. Areas that have legislatively adopted NEPA equivalents of general applicability are California, Connecticut, Indiana, Maryland, Massachusetts, Minnesota, Montana, North Carolina, Puerto Rico, South Dakota, Vermont, Virginia, Washington, and Wisconsin. Progenitors of similar legislation of limited applicability are Alabama, Arkansas, Colorado, Delaware, Florida, Hawaii, Mississippi, Nevada, New Hampshire, New Jersey, Pennsylvania, and Rhode Island. Administratively promulgated NEPA equivalents are found in Arizona, Michigan, New Mexico, New York, Texas, and Utah. Potential environmental legislation of a similar nature is receiving at least some attention in Alaska, Georgia, Idaho, Illinois, Iowa, Kentucky, Louisiana, Maine, Missouri, North Dakota, Oregon, South Carolina, Washington, D. C., and West Virginia. There is little or no current activity at the state level in terms of developing general environmental policy guides in Kansas, Nebraska, Oklahoma, and Tennessee.6

EIS progeny at the county and local level in most instances parallels EIS progeny among states. The counties and localities that impose an EIS requirement frequently derive their authority from a "little NEPA" or an administrative equivalent which exists at the state level. The manner in which EIS regulations have been implemented varies considerably by county and locality.⁷

PARTICIPANTS

EIS users at the local level are private planning consultants and public staff planners. While the latter are typically recipients of the impact statement, either may oversee a bevy of specialists in the preparation of an EIS. Both report to a larger audience—first, in the form of the environmental commission or planning board and, second, in the form of the local electorate and general public.

Specialists brought within the realm of EIS are architects, planners, geographers, natural scientists, engineers, economists, and, of course, attorneys.

Architects are called upon to describe in detail the proposed project and, in the process, may introduce a scale model for use at public hearings. Planners are asked to describe the site relative to its potential for development or redevelopment and explain how the specific project fits within a regional development context. They may also be asked to comment on the primary or secondary effects of growth and/or the impact on existing and planned transportation networks, prepare the social impact portion of the EIS, and run the various air/noise pollution models as input to the physical section. Geogra-

phers and natural scientists split the remaining physical impact chores, the former concentrating on water supply/quality, sewerage, and solid waste, and the latter on topography, soils, climate, vegetation, and wildlife.

Engineers report on the load bearing capacity of soils, erosion, and subsurface conditions, development impact on local transportation arterials, and the capacity of municipal capital infrastructure to serve the forthcoming population. Economists frequently project development impact on both the local and regional economy and establish local and regional justification for approval of the development activity.

The attorney serves as the leader and synthesizer, sensitizing the EIS team to political climate and local priorities of environmental concern, while coordinating and integrating each specialist's segment of information for the public hearing as well as the finalized report.⁸

For several of these specialists (geographers, economists, natural scientists) the EIS provides a significant professional employment avenue outside traditional labor billets. Yet for at least one, the planner, the new employment opportunity also frequently carries with it a change of role. Rather than assess and carve the community for development and couch his specialty in a unique competence to interpret the economic, social, and physical forces which influence the location of various land uses, he is asked to provide the rationale to preserve the status quo: to conserve the wetlands, preserve the bay, keep the shorelines as they are; to protect the community against the erosion of air and water quality; and, perhaps most importantly, to protect the community against deterioration of the quality of life.

The planner does this because the mood of secondary participants to the EIS process—the planning board/environmental commission, electorate, and general public—has changed. They like the community as it is and for the most part are willing to pay for the status quo by not sharing the costs of current and future municipal services with more intensive land uses. Tax ratables, golden words in the United States during the 1950s, are unmentioned in the decade of the seventies. The environmental commission, unheard of in 1957, is the fastest growing municipal specialty in 1977.

STYLE

The impact assessment requirement form varies considerably among the cities, counties, and states which require it. In most instances, however, the variations are superficial, reflecting particular local environmental concerns or emphases. All environmental assessment regulations trace their lineage from the same venerable antecedent, the National Environmental Policy Act (NEPA) of 1969. Local EIS form in the United States is essentially a direct reflection of the NEPA requirements. Interestingly, the most significant departure from NEPA of its scions is the very definition of the term "environment." The federal definition, far broader than many of the local ordinances, emphasizes the total human environment, rather than limited consideration of primarily physical or natural science factors. The NEPA format is described in subsection 102(2)(c) of the 1969 National Environmental Policy

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Act. 10 The format requires coverage of five specific points, in addition to a description of present conditions and the proposed action:

- 1) The probable environmental impact of the proposed action.
- 2) Any adverse environmental effects which cannot be avoided should the proposal be implemented.
- 3) Alternatives to the proposed action.
- 4) The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity.
- 5) Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Although not specifically identified in the initial guidelines issued by the Council on Environmental Quality (the NEPA "handbook"), two other items introduced in the California Environmental Quality Act (CEQA) are implied by NEPA and explicitly stated in many of its more recent local progeny: 11

- 6) Mitigation measures.
- 7) Growth-inducing impacts.

Governmental agencies have also added to the proliferation of recommendations on EIS through the issuance of their own guidelines. The Department of Housing and Urban Development, for instance, recommends the following: 12

- 1) Describe the proposed project.
- 2) Describe the existing environment.
- 3) Discuss the impact of the environment on project design and the development's residents and users.
- 4) Evaluate the impact of the project on the environment.
- 5) Discuss internal project environment (for large developments, such as planned unit developments or new towns).
- 6) Discuss alternatives to the proposed projects.
- Discuss short and long-term impacts of the projects.
- 8) Note actions taken by the developer and/or governmental agencies to mitigate the impact of the project on the environment.
- 9) Describe official and private reaction to the proposed development.

Obviously, no single format has yet been established that serves as the guide in preparing local environmental impact statements. This is not surprising because environmental review, in its infancy, is still in a period of flux. Additionally, given the EIS practitioners' continued demand that review be flexible, it is unlikely that any one rigid approach for all development, under all conditions, will ever be required.

A surprising number of localities, however, have adopted procedures which attempt to invoke the form described above. This is to be expected. The Department of Housing and Urban Development has relegated its responsibility of evaluating the environmental impact of activities funded under section 104(h) of the Housing and Community Development Act of 1974 to the mayor of the locality in which this activity takes place. In so doing, the above

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format is recommended for local compliance leading to funding. Since HUD has such a pervasive influence at the local level via community development funding, its recommended format is spreading—in many cases being made applicable as well to all private developments within the locality's bounds. If one were to ask what local EIS ordinances look like, the answer would have to be, "If they have any form at all, other than the simple requirement to file, they look very much like the HUD requirement for section 104(h) 'Entitlement Cities'." Both the procedures that govern publicly funded activities and the ordinances that control private development are becoming surprisingly similar. As such there is increasing parallelism between locally produced public and private responses in the form of derivative EISs.

The content of the local EIS is much more descriptive than analytic. In 1973, the Illinois Institute for Environmental Quality produced a handbook for environmental impact statements. ¹³ Within this text, the Illinois group specifies a hierarchy of EIS content. From the very general and nonquantitative to the very specific and quantitative, the hierarchy is described as 1) an unorganized assemblage of reports produced by multi-disciplinary teams, 2) organized descriptive checklists, and 3) tightly woven assessment tables and matrices. A category that is not included in the hierarchy is the various modeling approaches.

The first category of environmental impact analysis is a largely individual approach to a specific area of environmental impact, in which aspects of the environment are investigated by an assemblage of experts. The analysis from an overall standpoint is frequently uneven, lumping in a single report nominal, ordinal, and interval data. Some impacts are treated in hundreds of pages, others in less than a page.

The second category of analysis, the checklist approach, is the level of analysis which is most frequently seen at the local level. There is an effort to oversee the assessment, to recommend methods of investigation, to standardize inputs, to provide predictable topic coverage, and finally to provide a relatively high level of replicability.

Obviously, this method also has its shortcomings. It is more descriptive than comparative, more "go or no go" than evaluative, more perceptive than analytic. In addition, judgments about the positive or negative environmental impact of a particular project are not put before the reviewer in the form of a numerical score (5 to 1, 4 to 4, and so forth), but rather in an essay format.

The third category of analysis, assessment tables and matrices, is to some the analytic ideal. This is a frequent extension of the checklist approach wherein each proposed action is identified as a column of a matrix, and the impacts are identified by reference to rows of the same matrix. Alternatives are weighed via numerical scores—the highest or lowest score is the most preferable development alternative. The Leopold method and the 88-category Geological Survey format are classic examples of these approaches. ¹⁴ The McHargian land suitability mapping is not the typical EIS matrix, but rather is a quantitative approach to demonstrate differences in impacts and costs as a function of variation in land characteristics.

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Category four, impact assessment via modeling, is only in its infancy. To date it has been narrow in its scope, virtually untried, and if employed, usually quite costly.

PROCEDURE

Two alternative criteria for filing an environmental impact statement initially confront the developer at the local level. The simplest, most arbitrary, and most frequent is an established threshold above which an EIS must be filed (for example, for subdivisions of five or more acres, eleven or more lots, ten or more housing units). In this case the determination, while arbitrary, is quite simple, and the developer knows whether he is required to file almost immediately.

The other case, derived from the federal and California experience, involves a more complex definition of the severity of environmental impact to determine whether or not there is a requirement to file. ¹⁵ In this latter case an environmental clearance (no filing requirement) or a mandated EIS may be issued after a brief description of the project and its potential impact (thumbnail sketch) is submitted by the developer/applicant and reviewed by the environmental officer, planning director, environmental commission, or a multidisciplinary staff committee. From the standpoint of the developer, the thumbnail sketch procedure, while more complicated, is much less arbitrary. In effect, it is a brief glimpse at the type, magnitude, and location of a project to determine the potential significance of its impact, with an aim to screen those projects requiring an EIS from those not needing to file.

Once it is determined that an EIS is necessary, its submission to municipal agencies consists of several steps. The first is the formal submission of the "draft EIS" and attendant site plan application to whomever is designated to receive it locally. In the northeastern United States, this is either the planning or zoning board; in the West it is frequently the environmental commission. This serves notice to both developer and municipality that the filing time countdown has begun.

Once submitted, a basic check of the draft EIS's completeness is undertaken, usually by a subcommittee of the planning board or environmental commission. The third step is a report by the committee evaluating the document's completeness, after circulation to the township engineer, building inspector, health inspector, and municipal planning consultants, if any. The fourth step is frequently the applicant's resubmission of the reworked EIS to the township planning board, county planning board, and state planning/environmental agencies.

A formal public hearing is held on both the site plan application and final EIS. Reports are heard from the township engineer, building inspector, health inspector, municipal planning consultants, county and state officials, and the general public. Revisions may be made to the report by the public agency in response to substantive comments issued during the public hearings. Ultimately a decision is made by the municipality to reject the project, approve, or approve with conditions.

Documentation of the process leading to the determination that an EIS is or is not required, and the ultimate disposition of the EIS, is a frequent EIS accompaniment. One of the fastest growing specialties in the United States' legal profession is environmental law. Comments on the project's movement through the review process are essential if the developer/applicant, private citizens, public funding agencies, or the courts question the determination made at a particular juncture of review.

Input from the local planner and environmental groups, minutes of the planning board or environmental commission meetings, and facts from the developer/applicant are all used to compile this record.

EIS CONFLICT

There is currently considerable conflict between the impact requirements of public agencies that spawn housing in the United States. The Department of Housing and Urban Development has produced guidelines which stated that an EIS would be undertaken by HUD for subdivisions insured by the Federal Housing Administration (FHA) which were in excess of 500 units.

The Veterans Administration (VA), offering similarly insured mortgages on virtually all housing that qualifies for FHA insurance, produced its own guidelines in August 1975 stating that it would undertake an EIS for subdivisions in excess of 100 units. Finally, until recently, in nonmetropolitan areas the Farmers Housing Administration (F[m]HA) had no impact requirements or guidelines regardless of the size of the project.

In effect, the overlapping among these agencies has confused developers regarding the steps necessary prior to undertaking a development. In one case a housing agency may tell them to proceed, yet for the same development another may delay groundbreaking pending the completion of an EIS.

Although these inconsistencies have been noted over the past year, the Council on Environmental Quality indicates that harmony will reign in the future, claiming that previous inconsistency between housing agencies was almost exclusively a matter of threshold. This will be remedied by a HUD-approved, sliding scale EIS filing requirement which is a function of density, location within the metropolitan area, and staging of the project. This sliding scale is currently acceptable and applicable to the three previously mentioned agencies which either influence or directly produce housing.

SCRUTINY

The local environmental impact statement—primarily, the publicly-filed EIS under HUD's section 104(h) program— is undergoing considerable scrutiny at upper levels of government. Monitoring is being undertaken to see if, in fact, a federal agency can pass its responsibility down to lower levels of government without significantly sacrificing either procedure (local compliance with process) or substance (local compliance with content). Evaluations are currently ongoing in HUD, the General Accounting Office, the Council on Environmental Quality, and the Office of the Inspector General. These probes are evenly distributed between procedure and substance.

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Results are preliminary and tentative. In terms of procedure, locals are sometimes not giving sufficient notice to the public and developers of their inhouse schedule of the processing of the EIS. Further, the EIS record—the document which describes what has happened to the EIS in the filing process—is frequently incomplete or nonexistent. In terms of substance, the quality of the filed EIS seems to vary directly with longevity of state experience with EIS. Local EISs filed in California and Colorado are better than those filed in Maryland or Pennsylvania. Quality also appears to be related to the size of the city which files the EIS. There is much more substance, cohesiveness, and organization in the EISs filed by large cities than in those filed by smaller jurisdictions.

One of the most significant findings, however, relates to the general paucity of EISs. Less than 10% of the section 104(h) "Community Development" entitlement cities filed a full-blown EIS on the activities to which it would commit its tendered funds. To a certain degree this may be interpreted as local disposition of funds to small capital facilities not exceeding size thresholds that would automatically trigger an EIS or programs (rehabilitation) which do not themselves involve significant capital additions of the type to cause a "significant effect" on the local environment.

Another interpretation is that guidelines are not being strictly followed, or perhaps worse, that the guidelines are insufficiently explicit to indicate the user's obligation to consider the collective impact of multiple actions in estimating the necessity of an EIS. The latter is a serious problem with the local EIS—one which will receive much more attention in the future.

EFFECTIVENESS

Concentration on EIS form, substance, or procedure skirts the basic issue of whether or not EIS is indeed doing the job. Is the environment and the total community better off as a result of the EIS process?

Some seasoned experts say no. 16 Within the present state of the art, they hold that the environmental impact statement is a simplistic approach to complex issues, relating neither to the regulatory nor the planning processes, incapable of estimating the cumulative impact of multiple actions or the probability of an impact on-site or the possibility of an impact off-site. The EIS, they claim, does not distinguish clearly between the identification and evaluation of impacts or specify different levels of alternatives—at the site, in the design, and so forth. In their opinion, the impact statement provides only an incremental perspective rather than a sequential and comprehensive viewpoint.

Professor Donald Hagman notes, and correctly so, that EIS is the antithesis of comprehensive land use control. ¹⁷ Under the planning process, the plan is adopted first; if proposals are not in accordance with the plan as expressed through its regulatory ordinances, they are not approved.

Under NEPA and its implementing mechanism, EIS, a proposal is imagined for a particular place and the impacts of that proposal are judged, often in the

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absence of guidelines from the community. Advocated by Hagman and many others is a more systematic approach which would achieve an increasing level of specificity in terms of environmental assessment, both as the area under scrutiny decreases and as the level of projection proceeds from plan to project.

The proposal to meet the objectives of the environmental impact assessment laws by relating them to planning processes involves a phased, as opposed to a one-shot, approach. Rather than a final product with an accompanying or subsequent assessment, it is recommended that there be a series of increasingly more specific evaluations.

The first step that should be built into the planning process is a requirement for a systematic, overall analysis of the environmental characteristics of an entire jurisdiction. This should be at a general level but be comprehensive in terms of geography and major features of the environment. (The Natural Resources Inventory [NRI] employs a similar approach.) While NEPA has spread significantly to the local level, little effort has been made to incorporate environmental concerns into the comprehensive plan. (The comprehensive plan itself is in effect being subjected to an EIS filing!) The overall analysis requirement is an integral part of the California local planning process and is also mandated by the Department of Housing and Urban Development, if a municipality desires to prepare its plan with a grant from the Comprehensive Planning and Management Assistance Program (section 701). While these comprehensive plan assessments are quite general, the requirement seems misapplied. Environmental sensitivity must derive from the process that formulates goals for community development, not as a result of its impact.

THE FUTURE

EIS at the local level will continue to receive a great deal of scrutiny. If HUD's pass-along idea works, other federal agencies, currently inundated with EIS activities, will also seek to follow this route. As upper-level public EIS requirements and procedures flow to the local level, existing local, publicly-imposed requirements on private development will emulate the form and dictates of higher order government. Presently a developer in a coastal zone locality which has its own EIS ordinance regulating private activity, desiring to offer FHA mortgage insurance on housing that he plans to develop, may easily be faced with three separate EISs—the locality's (because he is developing land within its bounds); HUD's (because he is participating in

HUD-sponsored mortgage insurance); and the U.S. Department of Commerce's (because the land which he seeks to develop is designated as part of the Coastal Zone).

There is also a recent trend to look seriously at both the public and private costs/benefits of the environmental impact statement. Are we getting what we're paying for? Initial reports appear to be that we're not getting much but it's also not costing very much either—in most cases, less than \$20 a dwelling unit. Obviously, this is an unsatisfactory state of affairs and moves will be made to improve the quality of EISs, perhaps at significantly more pass-along cost to the housing consumer.