CAPPING IMPACTS INSTEAD OF DEVELOPMENT: AN ALTERNATIVE APPROACH TO GROWTH MANAGEMENT

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Abstract

Traditional growth management techniques that focus on regulating the amount of development often fall short of their objectives because of the weak relationship that exists between the amount of growth and its impacts. Performance zoning and similar efforts to control impacts are insufficient solutions because they ignore the cumulative effects of new and existing development. Jurisdictions are experimenting with a new approach where caps are put on impacts rather than development. This is different from previous strategies because it focuses on ambient conditions and the impacts of new and existing development. Capping impacts entails setting cumulative impact standards, devising a strategy to achieve them, and following a program to monitor progress and make necessary adjustments. While capping impacts is not without its technical and political difficulties, it does offer the potential for more effective growth management.

Introduction

For nearly twenty years, planners have used the term "growth management" to refer to something more than traditional zoning. Generally, it means "the utilization by government of a variety of traditional and evolving techniques, tools, plans, and activities to purposefully guide local patterns of land use, including the manner, location, rate, and nature of development" (Scott 1975). Since the 1970s, growth management has been employed by a number of state and local governments throughout the United States. In its early days, it was primarily used to manage residential growth. However, since around 1980, it has been directed at both commercial and residential development.

One frequent approach to growth management is to regulate the amount or rate of new development. Classic examples include the use of annual permit quotas as practiced, for example, by Petaluma, California, for residential development and by Seattle and San Francisco for office development.

This growth management strategy is showing its limits. It relies on the tenuous assumption that a strong relationship exists between the

amount of growth and its impacts. In fact, there is a far from perfect relationship between growth and impacts.

In many places, the impacts of growth are increasing faster than development. For example, during the past twenty years, the amount of developed land and traffic increased more than twice as much as population or floor area (Pivo and Lidman 1990, Chesapeake Executive Council 1988).

In other places, the impacts of growth are increasing more slowly than development. For example, downtown Portland and San Francisco have experienced substantial development without a commensurate increase in traffic by limiting available parking.

In both fast- and slow-growing areas, growth and impacts are not always closely related. It is therefore all too common for areas with growth management policies that focus on the amount or rate of growth to be unsuccessful in accomplishing their objectives.

Performance zoning and other efforts to directly regulate impacts rather than development do not sufficiently address these problems. They only deal with new projects, one at a time. In many instances, both new and existing development need to be regulated in order to achieve the desired objectives.

Another approach is needed if we are going to effectively manage the cumulative impacts of development. One approach being tried by a number of jurisdictions is to shift the emphasis of regulation from the amount or rate of new development to ambient environmental conditions. In short, these jurisdictions are capping impacts, not development.

Capping Cumulative Impacts

There are two major differences between this approach and previous growth management methods. One is that it focuses on ambient conditions rather than on the impact of single projects. Greater concern is placed on the interaction between development decisions and existing development than on the incremental effects of single permit decisions. The second difference is that both new and existing development are subject to regulation. Increases in impacts from existing development are recognized as potentially significant and as being suitable for policy attention.

Several jurisdictions are capping impacts instead of development (Pivo 1989). One is Bellevue, Washington, which has specific traffic standards and is managing both the demand and supply side of the traffic problem to meet the standards. Another is Carlsbad, California, which has standards for neighborhood infrastructure services and requires a neighbor-

hood plan to achieve the standards before new development can proceed.

What all the jurisdictions have in common is that they set specific cumulative environmental standards and develop plans to achieve them. Plans may focus on reducing the impacts generated by new and existing development or on increasing the capacity of environmental or infrastructure systems to absorb impacts without exceeding acceptable standards. The approach basically adapts the U.S. Environmental Protection Agency's methods of air and water quality planning to growth management issues.

Most schemes do not expect to meet the standards immediately and do not prohibit new growth if the standards are currently being exceeded. If this were the case, many cities would already be closed to development because they exceed federal air pollution standards. Instead, a strategy is developed for meeting the standards by a specified date, and growth is permitted as long as it conforms to the plan.

The standards vary from place to place depending on local concerns. They may deal with schools, traffic, open space, water, air quality, housing, economic growth, or other issues. Some places focus on one standard while others rely on several.

The standards typically apply to a whole jurisdiction or to a large area within it. The process starts with the ambient standards one wishes to attain and works backward toward business and development regulations that will achieve the cumulative targets. Among these regulations are often more traditional growth management controls.

The standards are set by a community, based on its own goals and values. One of the problems associated with this is the conflict that can arise between regional and local priorities. For example, it might be the region's plan to accept higher levels of traffic congestion and lower traffic standards at a regional employment center in order to encourage mass transit, while residents in the immediate neighborhood might prefer higher standards to protect the level of service in their neighborhood. This is ultimately a governance problem that will require institutional forms that can balance neighborhood and regional interests.

However, by broadening the focus of growth management to area-wide concerns, regional priorities will have a better chance of being addressed. Even when standards are being set by local governments, regional interests could voice their concerns and discuss ways in which local goals might be mitigated if the regional needs are met. Of course, as long as the power to set standards remains in local hands there is no guarantee that regional concerns will be addressed. But if local agen-

cies are not adequately considering regional concerns, state or regional bodies could adopt regional standards that must be adhered to in local planning. This is the case in the Lake Tahoe basin, where local plans must conform to regional standards set in the Tahoe Regional Plan; it is also the case in Washington State, where local plans must be consistent with regional traffic standards for service-level which are set in regional transportation plans.

Another reason why cumulative impact management may better address regional concerns is that it can help reduce local opposition to individual projects. Acceptance of projects would depend on their conforming to a cumulative standards plan. One of the most common ways in which regional goals are undermined is through opposition to individual permit approvals for housing or regional facilities. Much of the opposition to these proposals comes from fear of the cumulative effects that growth will have on neighborhoods. If proposals for housing or facilities can be shown to be consistent with a plan that leads to a desired situation, much of the opposition to individual projects may evaporate—except probably the more disingenuous opposition that derives from a basic resistance to change or diversity. In fact, it may be possible to outlaw discretionary decisions on individual project permits with respect to issues, such as neighborhood density, that are agreed to be, and are more rationally, managed at the areawide level. This would help make progress toward regional goals that are routinely blocked through local permit decision-making.

Achieving a desired density is a good example of a regional goal that is commonly made harder to reach by compromises on individual permits. Density really is an areawide issue that could be resolved at the areawide level of planning. Aside from problems of compatibility with neighboring land uses, most density problems relate to the capacity of an area's environmental or infrastructural systems. Permitted densities could be set at such levels that the impact of development did not exceed cumulative impact standards. A focus on impacts would in fact eliminate the issue of density from decision-making. It would, in particular, do away with the tendency to reduce densities for the sake of low density itself as a way of controlling development.

Thus, the cumulative approach appears to have a better chance of addressing regional concerns than current ways of managing growth. However, the issue of balancing regional and local concerns will ultimately require not just planning reforms but institutional reforms as well.

Along with standards, a government must develop a strategy to achieve and maintain them. This involves the management of both the demands placed on environmental or infrastructural systems, and of the capacity of the systems to accommodate new development. Typically,

one or a few specific systems are most critical and become the limiting factors that affect how quickly new demands can be placed on the overall system without exceeding the established standards. These will change from time to time as bottlenecks are identified and eliminated.

Imperfect information, changing behavior and values, new technology, periodic fluctuations, and other unforeseen events will cause errors in predictions about what is needed to achieve the standards, as well as problems in the adequacy of the standards themselves. Therefore, monitoring and evaluation must be an important part of these programs if they are to be successful.

An Illustration from Downtown Growth Management

Both San Francisco and Seattle have placed annual permit limits on their downtown growth (Keating and Krumholz 1991). The problem with this approach, however, is that it does not establish either the cumulative performance standards that should be achieved nor a specific strategy for their achievement. As a result, it may not effectively control cumulative environmental impacts. The total development being permitted may either be too much or too little.

An alternative approach to capping development would be to cap impacts. This would first require a strong commitment to the process. This was done by Congress when it passed legislation in 1980 directing the Tahoe Regional Planning Agency to develop and adopt "environmental thresholds" for the Tahoe Basin and a regional plan to reach them. In Seattle and San Francisco, the city councils could provide similar direction. They might state the areas of concern for which standards have to be developed, such as traffic, housing demand, and open space.

The same legislation would establish the process to be followed. It is important to build a consensus in a forum where the participants can become informed about technical matters and discuss the issues. A committee might be established to represent the various interests in the regional and local community. Elected officials could be involved, so as to make them comfortable with the consensus that emerges.

The committee would develop the cumulative standards. These could be in any area of concern, for different points in time and for different geographic locations. For example, a non-degradation standard could be established for air quality, while traffic standards could be set which become increasingly tough over a 20-year period. For those features directly related to downtown growth, such as downtown parks, the impact standards could be stated in direct terms such as the number of acres of parks or plazas per 1,000 workers that should exist by the year 1995 and thereafter. For those features that are affected by develop-

ment both downtown and in other locations, such as traffic on the freeways or air quality, the standards could be stated in terms of the downtown's impact upon them, such as the number of trips or the volume of air pollutants generated from downtown development.

The standards that are set should be stated in quantifiable, measurable terms. Doing otherwise would cause problems in their interpretation and use. Where normal fluctuations are expected, a multi-year range or an average should be used. Alternative standards would be evaluated in terms of the benefits they would produce and the cost of achieving them.

Meeting the standards would require expenditures on infrastructure and programs, which themselves have their own impacts. It could also require, as a way of limiting impacts, the imposition of limits on the density, type, or rate of downtown development. These impacts would have to be evaluated before a final set of standards is adopted.

After commitment has been secured, a process has been defined, and standards have been set, it would be necessary to develop strategies to achieve and maintain the standards. These strategies could include expanding infrastructure, creating new incentive programs, and regulating the timing, mix, type, amount, impact, or design of new construction. Alternative measures for achieving the standards would be examined and evaluated for their costs, benefits, and impact on the environment at large.

A strategy for achieving the standards could involve managing both supply and demand. On the demand side, one could manage either the impact or the amount of growth. Each parcel of land could be allocated a certain level of impact it would be permitted to generate. Development would be permitted as long as its impacts did not exceed the level of impact that was allocated to the parcel or acquired from other parcel owners willing to sell their impact privileges. On the supply side, the strategy could manage the efficiency or capacity of infrastructure systems to deliver services at a level equal to or higher than minimum standards.

The strategy for achieving the standards would also need to determine how the city would allocate the capacity for growth if it were found to be limited, either temporarily or permanently. This would be the case if the impacts of growth exceeded the standards and could not be mitigated to meet the standards. Systems that have been used in various cities to ration growth allocations include lottery, first-come/first-served, merit, competitive, and market approaches.

In the case of growth limitation, it may be desirable to consider reserving or allocating certain portions of the capacity for growth for those

types of growth the city wishes to ensure or encourage. For example, a share of the traffic capacity could be set aside for housing or blue collar jobs in order to ensure an equitable distribution of economic opportunities. Such a proportion of capacity could also be allocated as an incentive to encourage certain types of development. For example, the city could set aside growth capacity for retail or cultural development. Set-asides could be made for geographic areas as well as for types of development.

After standard-setting and strategy development, the third part of the plan would be the design of a system to monitor progress toward the standards, maintain consensus on what the standards should be, and make adjustments in the strategy for achieving the standards. This would require the collection and reporting of information on how the city is doing in achieving the impact standards. The original consensus-building committee could be maintained as an informed core of individuals who can help monitor the plan. A growth management audit would be done on an annual or biannual basis which would report on growth trends and determine whether the city is on track toward achieving and maintaining its standards. If the city is heading off-course, the audit could report on what adjustments are needed. The audit should be done by an independent analysis team using measurement methods acceptable to the committee.

If a growth management audit found that the city was not meeting its standards, it would not necessarily mean that growth would have to stop. Rules would need to be established for this contingency. Although temporarily halting or slowing development could be one option, setting tougher development standards, improving the capacity to accommodate growth, and other options would also be available. This would mean, however, that there is a need to amend the strategy for achieving the standards.

Conclusion

The result of the suggested effort would be the creation of guidance systems capable of moving communities toward a situation that meets explicit cumulative environmental standards. The approach includes three elements:

1. Measurable cumulative impact standards;
2. A strategy to achieve and maintain the standards; and
3. A means of maintaining a consensus on what the standards should be, of monitoring progress toward their achievement, and of making adjustments in both the standards and the management strategy as new information becomes available.

Cumulative impact management is an alternative approach to growth management that moves away from the current emphasis on physical development and individual permit decisions and focuses more on achieving overall environmental and infrastructural standards. This may be an effective means of overcoming the limitations with current approaches caused by the imperfect link between growth and impacts. While the approach presents an opportunity to improve the effectiveness of growth management, it also presents a number of technical and political difficulties. However, the idea of capping impacts rather than development seems promising enough to justify ongoing attempts to overcome these difficulties and make it a useful tool for growth management.

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