carolina planning

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ECONOMIC DEVELOPMENT

Introduction

In recent years, North Carolina and the Southeast have experienced an unprecedented level of growth and development. Industries have moved down from the Northeast in search of lower operating costs and a warmer climate. They in turn attract more people to the smaller communities of the Southeast.

Faced with both the positive and negative impacts of growth, states and localities are forced to make important policy decisions. Should industrial attraction be the first priority? How much control should the state or locality exert? To what degree should the private market be allowed to run its course? How can the positive characteristics of small communities and local industries, as well as historic and natural features, be preserved in light of modernization and change?

carolina planning is pleased to present in this issue a wide range of articles that consider questions of growth and change in North Carolina and the Southeast. Policies and strategies to encourage statewide development are considered by an environmentalist, the state Secretary of Commerce, two students of urban economic development, and a professor with international development experience. On the local level, changes in central business districts in North Carolina communities are examined.

Modernization and growth influence preservation programs, as shown by North Carolina's use of computers to make data on cultural resources available, and by simultaneous concern with energy conservation and historic preservation. Financing of development is of importance throughout. One program, North Carolina's Housing Finance Agency, is evaluated. Another method of financing new construction, impact taxes, is recommended for North Carolina.

With this issue, *carolina planning* completes its fourth year of publication. Never before have contributions been received from such a diverse group of authors. Financially, *carolina planning* is increasingly supported by its subscribers. The magazine continues to receive aid from the Department of City and Regional Planning and the University of North Carolina, without which current costs could not be covered. Readers can help by renewing subscriptions on time, by subscribing for more than one year, and by telling colleagues and friends about the magazine. Please continue to send reactions and contributions. *carolina planning* looks forward to furthering the exchange of ideas and information among planners, policy makers, members of the academic community, and concerned citizens.

Ann Silverman

carolina planning

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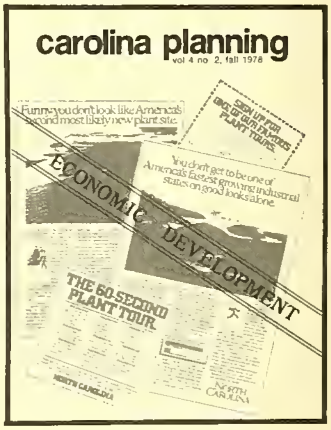

This Issue's Cover

The collage of advertisements displays one of the tools the Department of Commerce in North Carolina uses to attract diversified industry. The advertising program strives to promote a progressive image of its productive workers and available resources and appears in the nation's top business publications. Advertisements courtesy of North Carolina Department of Commerce, Economic Development Divisions, Raleigh, North Carolina.

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carolina forum

Western North Carolina: Destruction or Protection?

As coordinator of the Western North Carolina Mountain League and founder of the Save Joyce Kilmer League, I would like to take this opportunity to present a most interesting and pressing problem in regional planning.

Presently, the North Carolina Department of Transportation is proposing the completion of a four lane Appalachian Regional Development Highway known as Corridor K. Corridor K begins at the North Carolina-Tennessee state line in Cherokee County, North Carolina and travels northeastward to Murphy, North Carolina. Between Murphy and Andrews, construction is already underway to replace old US 19 with another sixteen-mile segment of the new limited access highway. At Andrews, North Carolina the road narrows and enters the Snowbird Mountains, Corridor K's present terminus. Thirty miles east of the Snowbirds, however, the Bryson City Bypass has already been completed and represents the final stretch of Corridor K.

The Appalachian Regional Development Highway System, of which Corridor K is only a part, was originally planned over ten years ago to connect Appalachian population centers. By improving transportation to and within the area, the Appalachian Regional Commission (ARC) hoped to stimulate economic growth of the depressed region. In a June 14, 1977 editorial, the *Winston-Salem Journal* framed the issue succinctly: "The road transects what the ARC calls the Asheville-Chattanooga-Atlanta Corridor, a sort of mini-mountain-megalopolis envisioned by Appalachian Regional Commission planners as an economic stimulant. It is a four-lane highway that would cut across some of western North Carolina's most impressive wilderness . . ."

Eight alternative routes have been proposed by the North Carolina Department of Transportation (NCDOT) to complete this final "missing link" of Corridor K. Six of these proposals were considered "unacceptable" by the US Department of Interior in a study completed in December 1977. Although three of the proposals were set aside with qualifications—needing "detailed environmental and engineering studies"—only Alternatives 7 and 8 were recommended for final consideration. Alternative 8, which is the least environmentally damaging, transects the Snowbird Mountains and the proposed Cheoah Wilderness, and crosses the most rugged section of the 2,000-mile Appalachian Trail, has been endorsed by NC DOT. This super highway will pass through Graham County bringing little, if any, of the promised economic progress, but delivering plenty of strip development, neon lights, displacement of eleven mountain communities, and inexcusable degradation of one of western North Carolina's most unspoiled mountain areas.

The Western North Carolina Mountain League has proposed the following solution to the economic, transportation, and environmental problems of the area and has asked that it be considered as Alternative 9.

The Western N.C. Mountain League Stands AGAINST:

1. The destruction of the western North Carolina mountains' beauty and heritage by any more superhighways in the name of "development."
2. The wiping out of many mountain communities and heritage by superhighways in the name of "progress."
3. The setting aside of unnecessarily large and unqualified mountain areas for wilderness.

The Western N.C. Mountain League stands FOR economic progress, jobs and protection of the area's great natural resources:

4. Sensible Highway improvements where needed.
5. A National Wilderness Visitor Center overlooking the Great Smokies and western North Carolina from the magnificent view at the end of the "Wagontrain Road" spur, providing jobs in the area, increased but dispersed tourist visitation, and including an area heritage exhibit.
6. A Scenic Santeetlah Lakeshore Access Drive providing faster access between Robbinsville and the Wagontrain Road.
7. A fast, scenic and unique passenger railroad service to connect Robbinsville and Asheville with Atlanta and Florida via Bryson City-Nantahala Gorge-Murphy-Blue Ridge.
8. A scenic bus system to connect the area's towns and attractions (Nantahala Gorge, Fontana Dam, Lake and Village, Smoky Mtns. National Park, National Wilderness Visitor Center, etc.) for the benefit of residents, industry, tourists, and hikers.
9. Protect and set aside only the heart of the two uniquely qualified (low timber and highly scenic) remaining wilderness heritage and resource areas, i.e. Nantahala Gorge-Upper Cheoah Bald and Upper Snowbird Creek.

Unlike the other eight routes, Alternative 9 puts the protection of the mountains—one of North Carolina's greatest economic and environmental assets—first. It rejects the outdated notion that bigger roads bring more progress and promotes the judgment that such irreparable damage to the mountain environment cannot be beneficial in any way.

A brief history of the decision making process regarding this issue demonstrates what happens to planning once political muscle is applied. The US Department of Interior study, completed in December 1977, excluded and continues to exclude Alternative 9. The NC Department of Natural Resources and Community Development, without performing a study of its own, and in contradiction to an earlier Alternative 9-like position, then recommended to the Governor that Route 8 be supported. The ARC will be providing 70 percent of the necessary twenty-five billion dollars, yet passes its decision making responsibility to the NC Department of Transportation. The NCDOT, in turn, has resisted considering anything but fragments of Alternative 9. Reportedly it will unveil a "Reduced Facility Concept" alternative of its own in the much delayed Draft Environmental Impact

Statement, which we predict will be an inadequate solution designed to better defend the NCDOT chosen superroute.

Turning away from this web of bureaucratic frustrations, it is worth highlighting the most important aspects of WNCML's nine point alternative. First of all, most of the existing roads in the area are in excellent shape, and existing and projected traffic volumes do not support the need for a four-lane superhighway even if such a road were environmentally feasible. Alternative 9 proposes improvements where needed and also incorporates a six mile section of four-lane road which the state improperly approved in 1974.

A proposed superhighway in western N.C. concerns conservationists.

Photo courtesy of North Carolina Department of Natural Resources and Community Development.

We consider the proposed National Wilderness Visitor Center a key element of our program. The Center would provide jobs, introduce present and future generations to the history, meaning, and benefits of wilderness, and make North Carolina a national leader in wilderness preservation. The *Charlotte Observer* and the *Winston-Salem Journal* both endorsed this idea in 1971, and Governor Hunt instructed state agencies to study the proposal. Not surprisingly, however, it became a prime target of highway proponents and anti-wilderness forces in western North Carolina and has been quietly shelved.

WNCML also proposes several modes of mass transportation to reduce the vehicle traffic within the region and provide alternative means of access. Our proposals for renewed passenger railroad service from Florida and Atlanta to Robbinsville and Asheville is meeting with great interest. We believe it would be a success if efficiently run. Certainly it is worth a detailed study. While the NCDOT has been holding hearings on introduction of public bus systems in the mountain counties, the proposal has met with silence when presented as an integral part of the regional planning program by WNCML.

Finally, the nine-point program proposes a means of safeguarding the wilderness areas of Nantahala Gorge-Cheoah Bald, Upper Snowbird Creek, and Kilmer-Slickrock, parts of which lie in the path of the proposed Corridor K. The National Wilderness Visitor Center would serve as a point of access for a system of southern Appalachian hiking loops that will allow this resource to be enjoyed but not overused. Should this wilderness be destroyed, much of our remaining program would become of doubtful validity, opening the road to blind economic progress and environmental destruction.

Our nine-point program provides a basic framework for regional planning in western North Carolina. Although other conservation groups are now joining our firm stand against the supposed inevitability of this destructive superhighway, the political outlook for our proposal does not seem bright. Yet we have not lost faith that enlightened minds in the federal and state governments, and most importantly among the public, will insist that protection of western North Carolina mountain resources remain the priority in regional planning. The Western North Carolina Mountain League invites your support and inquiries.

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Computers and Cultural Resources: A Planning Perspective

Under the auspices of the National Environmental Policy Act (NEPA) of 1969 and the National Historic Preservation Act (NHPA) of 1966, applicants for federal funds for planning or development must evaluate the effects of their activities on significant cultural resources*. When cultural resource data are not readily available to project planners, or are not incorporated into the planning process in its early stages, problems and project delays often result.

The Archeology and Historic Preservation Section, North Carolina Department of Cultural Resources, is the state agency responsible for advising private project planners and federal, state, or local agencies of their legal responsibilities under NEPA, NHPA, and other legislation concerning the protection of cultural resources. At present, this advisory function is primarily exercised through the A-95 review process and coordinated through the regional Councils of Government and the State Clearinghouse. In order to improve the quality and utility of data available to participants in the A-95 process, the Archeology and Historic Preservation Section is in the process of implementing the Cultural Resources Evaluation Programs (CREP).

CREP is a series of inter-related computer programs used to manipulate the cultural resource data base by performing the following functions: records management, statistical applications, and graphics applications. One portion of this system that is of particular relevance to planners is the use of the Department of Natural Resources and Community Development's Land Resources Information Service (LRIS). LRIS is an interactive tutorial graphics information system housed within an independent mini-computer. The system has the capability to store any point, line, or polygon data in North Carolina State Plane coordinates (with a resolution of one foot). Such information may be output in graphic form with State Plane coordinates that relate the map to the surface of the earth. Thus, with LRIS it is possible to store virtually any map data, such as roads, streams, city boundaries, detailed soils, evaluations, and archeological sites or structures. Later, these can be recalled and maps can be drawn. Graphical output includes numerous types of maps (e.g. contour, 3-D surface representations, polygon, drainage, and line) as well as overlays or combinations of these maps.

Two components of this system make it particularly useful for cultural resource evaluation: polygon and label subroutines. The polygon subroutines are a set of computer programs which draw and/or compute the acreage not only of every polygon, but also the intersection of polygons when two polygon maps are overlaid. These subordinates will be used to isolate areas of high site probability. Known sites in similar geographic zones will be analyzed statistically to isolate environmental conditions most often found in conjunction with specific archeological sites. Thus, if it was found that sites frequently occur on clay/loam subsoils, with a slope of one to three percent, and between 200 and 225 feet in elevation above water, LRIS could produce a map of all areas satisfying these criteria.This would allow projections from areas of known archeological resources into areas that have not yet been subjected to archeological investigation.

Of similar importance are the label subroutines. These tie a series of alpha-numeric labels to each graphic display (point, line, or polygon). Labels for each graphic display may be printed on the map output. These could identify a particular archeological site by its corresponding file number or a soil by its soil abbreviation code. This is particularly relevant for our uses, as labels will be used to store over thirty cultural and managemental variables which can be used to select which resources will be graphically displayed. Thus, it would be possible to produce a map with all the Victorian structures in Moore County that are listed in the National Register of Historic Places.

LRIS will be used to perform two major tasks with respect to the review of a project area. These will be the spatial isolation (mapping) of known cultural resources and production of maps depicting areas which are likely to contain archeological sites. Maps of labeled archeological sites and/or structures along with printed reports on each of these resources will form the base planning reference for a given project. In addition, environmental information stored in the interactive graphics system will be used to create environmental models of site location. These will spatially isolate areas of predicted high, medium, and low site density based on sites in and around the project area. It is anticipated that the implementation of CREP will streamline the A-95 process and should greatly increase our ability to produce information suitable for planning purposes.

The Archeology and Historic Preservation Section is in the process of implementing CREP for A-95 review. CREP will provide planners with the necessary data for the inclusion of cultural resources into early stages of the planning process. Thus, it is hoped through the use of CREP and, more specifically, LRIS, that quick, accurate, and easily interpretable information on North Carolina's cultural resources can be made available to city, county, and regional planners as needed.

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**Cultural resources, in the context of this article, are defined as prehistoric and historic archeological sites and historic buildings.*

A Balanced Approach to Industrial Development

Trying to plan for economic growth in a free economy is like trying to herd a covey of flushed quail. At best, you move it in a general direction. Happily, North Carolina does have strong economic growth these days, and what once was nicknamed "Tobacco Road" is now hailed the bustling "Sunbelt." The state has enjoyed a steady increase in new capital investments for the past three years, and 1978 continues the trend. Governor Jim Hunt has emphasized economic development in his administration, and he has engaged the state in an ambitious effort to develop a "balanced growth" policy.

Directing such expansion is not easy. Growth involves many variables such as labor markets, tax policy, land use, transportation systems, environmental regulations, and investment capital as well as more intangible items such as community attitudes, quality of living, and worker productivity. All of these figure in a state's effort to attract new industry and to encourage the expansion of existing industries. And not surprisingly, each industry may have its own shopping list of priorities.

The Hunt Administration wants to diversify the industrial base and, in the process, attract higher-wage industries. There are sound and historic reasons for this. North Carolina's manufacturing economy for decades has revolved around the textile, apparel, and furniture industries. Even today, over 54 percent of the state's manufacturing jobs are in these sectors. They are traditionally very competitive, low-wage industries, although their wages are almost equal to the national average in their respective industry. Such a concentration, however, has made the state vulnerable to the ups and downs of the economic cycle, and the recession of 1974-75 left many textile towns with record unemployment.

State leaders beginning with Governor Luther Hodges have tried to diversify the state's industrial base. Diversification spreads out the risk of unemployment so that a recession in one industrial sector does not necessarily cripple the entire state economy. Because a majority of the

Advertising is part of the industrial recruitment strategy in N.C.

Courtesy of North Carolina Department of Commerce, Economic Development Division

factory jobs have been in low-wage industries, new industries generally have brought with them higher wages. While they pay wages comparable with the local rate they increase competition for labor, and after developing experienced work forces, pay better than the average prevailing wage. For instance, the state through its industrial revenue bond program requires applicants to pay better than the local prevailing wage in order to receive the tax break afforded by the bonds.

To these goals, the Commerce Department wants to add the challenge of balancing growth geographically. There are sound reasons for pursuing this objective. Diversifying and spreading growth across the state will preserve the traditional balance among North Carolina's urban areas. No one city will dominate the state as is the case in other states. Rather, the population will continue to be spread from the mountains to the coast, giving the state economic stability and diversity at the same time.

Secondly, the distribution of industrial growth is a way to prevent the urban sprawl that has attended rapid economic expansion elsewhere in the country. North Carolina's larger cities, which are attractive, prosperous, and safe by national standards, remain manageable in size and in touch with their citizenry. They also provide commerce and industry with accessible distribution centers for goods and products.

Growth in our smaller communities means more jobs for citizens and less cause for the dislocation of family and home that has characterized economic growth in the past. Sons and daughters will not feel the need to migrate to the cities in search of good jobs. Moreover, these small cities and towns often are those most in need of economic development when one considers unemployment and per capita wealth. Also, they are sometimes ill equipped to sell themselves to industrial prospects. Professional staff with an understanding of industry's transportation needs, water and sewer demands, and market analysis are beyond their budgets. Indeed, they are like the child who needs love the most but is the hardest to love.

The state, however, starts from a position of strength. North Carolina is one of the most attractive states in the nation to business, according to any number of respected surveys on the subject. *Business Week* ranked us number two in the country in 1976; the Fantus Company, a consulting firm specializing in industrial locations, put North Carolina in the top five in business climate.

We have the basic ingredients that attract industry: a good highway network; solvent railroads; a labor force willing to work and augmented by a tested industrial training program; and a water supply that will improve our position as growth states in the West find this essential increasingly harder to provide. We also have the lowest rate of work stoppages in the country, and we have the highest credit rating among states—a fact that we effectively advertise to businessmen. North Carolina's taxes are competitive in the region and are expected to improve with Governor Hunt's proposed credit for inventory intensive industries. In short, industrialists see a growing market here and a state that looks after its own budget as closely as business looks after its books.

The proof in this pudding can be measured in the Department of Commerce's figures on investment capital in new and expanding industries. In 1976, the state had a record year with one billion dollars reported in industrial growth. Last year showed a 44 percent increase, totaling $1.45 billion. The first six months of 1978 showed projected investment capital at $1.2 billion or almost double the growth announced for the first six months of 1977.

Last year's industrial investments will mean 26,700 jobs when the factories come on line. Some, of course, will not be operating at capacity until several years from now, but these factory jobs will provide the nucleus for the 200,000 new jobs that Governor Hunt has set as a goal for his administration by 1981. Obviously many of these jobs will be in labor-intensive factories such as textile expansions, but increasingly more will be in high-wage industries such as cigarette manufacturing and electronic work. Commerce Department figures indicate that beginning in 1977, investment capital in non-traditional, new industrial growth surpassed capital expansion in domestic industries. For example, investment in new industries totaled $730 million while investment in expanding (domestic) industries totaled $720 million. That trend has increased in the first six months of 1978, with $800 million in new industry compared to $248 million in expansion projects.

We also have noted a trend that we believe will work in our favor in diversifying industrial growth. Industries themselves are showing more interest in smaller communities. And we believe that the best place to locate an industry may well be in the smallest community able to meet the industry's demands. Some of the more notable plant locations in recent months illustrate this point: Miller Brewing Co. has built a $200 million facility in Eden, population 16,570 by 1976 estimates; Timken Co. is building a $135 million project in Lincolnton, population 5,880; Campbell Soup Co., $250 million, in Maxton, population 2,100; Dana Corporation in Morganton, population 15,670; Novo Biochemical, Inc., in Franklinton, population 1,520; Stanadyne Corp. in Jacksonville, population 19,280; Data General Corp. in Clayton, population 4,020; Eaton Corp. in Kings Mountain, population 8,850; and the much publicized Philip Morris plant in Concord, population 18,700.

While it is true that many of the towns are near larger, metropolitan areas, the companies did select a small community in which to grow. This is reflected, too, in the relative growth rates among the state's three regions. Since 1970, the fastest growing job market has been in eastern North Carolina, according to Department of Administration figures. The East is composed mainly of small towns and cities. Similarly, during

1977, the amount of investment dollars in industrial growth in the East was 31 percent of the total $1.45 billion, a large portion considering past performances. The growth rate in jobs in the West was not as pronounced during the first half of the decade, but population did grow at a higher rate than in the Piedmont.

Much of this new industry and industrial expansion is in non-traditional areas; that is, in growth outside of textile and furniture manufacturing. Paper products and food processing showed the largest amount of investment growth in 1977. An analysis of inquiries from industries seeking information for new sites also shows that interest is coming from non-traditional, high technology industries such as chemicals, fabricated metals, electronics, rubber, and plastics.

Thus, we know that North Carolina sits squarely in a growth region. We know that we have what industry wants because industrial growth has set records for the past two years and continues to improve. We know that new industry tends to be of a higher-technology than our current industrial base and that it is more diversified in content. What then, can we do to direct this growth to achieve a geographic and economic balance in its development?

Industry, of course, will have the biggest voice in such decisions. In our free market economy, that is how it should be. Government cannot begin to decide for the multitude of private enterprises what is the best site for their particular operations. Industrial recruiters, however, can improve their sales techniques and localities can be better groomed for industrial prospects. We intend to do these things.

Our recruiters now say that many new industries ask for a location within a hour's distance of an interstate highway and within 30 minutes of an airport served by three commercial carriers. Prospects also want workers who will be available and willing to work and buildings ready to use. The state already is recognized as a hub for the trucking industry. There are more headquarters for long distance carriers here than in any other state.

Obviously, not all of our communities meet these requirements. We believe, however, that our road building program will help open more cities to controlled access highways. The commerce department also feels confident that our air carrier service will grow along with our markets. And the Hunt Administration and the commerce department in particular have taken the initiative in developing our labor market with innovative use of Comprehensive Education and Training Act (CETA) funds to provide on-the-job training. In one of the most efficient programs in the nation, the department's labor force section has worked with private enterprise to find jobs for hard-to-employ workers, some 85 percent of whom remain on the jobs at the end of the program. These are people who are removed from public sector dependence and become productive taxpayers in the private sector.

More specifically, our industrial development program can help small communities by taking the following initiatives:

One, the state can identify those towns and areas in need of new industrial growth. This is no easy task. Some small communities, may in fact, have low unemployment and may satisfy the social needs of their citizens. Likewise, some of our larger cities may have an unacceptable unemployment rate and need new economic life to make use of their existing facilities. We are preparing such an identification system now in the Governor's Balanced Growth Plan, and it will help us select targets for our industrial recruiters.

Two, the state can give more emphasis to training smaller communities in salesmanship and industrial growth planning. The Business Assistance Division currently conducts programs of this sort to interested towns or local industrial development boards. The Governor and I have asked for an extra $200,000 to expand and improve this effort. The department also is seeking new ways to expand the use of unoccupied buildings in industrial recruitment. As noted earlier, these plant "shells" increasingly have become an important attraction to industrial prospects.

Three, the state can improve its recruiting team so that smaller communities are given a chance to compete for the clients. Of course, these towns are not left out of the competition now, but we can give them special attention. For example, industrial recruiters can make a point of showing at least one community on the priority list to each qualifying industrial prospect. Special recruiting teams can focus on finding and soliciting prospects for these communities.

Overall, the attention that Governor Hunt and I give to this objective will have an impact of its own. This enthusiasm will have a direct effect on the state's industrial recruiters, and it can only uplift the spirits of those in these smaller communities. They will know we are listening to them. They will know we are extending a hand.

The consequences will not be what some might call an anti-big city direction. The facts and history of industrial recruiting show that our metropolitan areas will continue to get a large share of the industrial growth. Many of our larger cities such as Charlotte, Winston-Salem, Greensboro, and Raleigh have excellent industrial recruiting programs of their own. Similarly, these cities also house many industrial promoters connected with the state's financial houses and growth related businesses such as railroads, utilities, and construction firms. So these large municipal citizens will not be left out or neglected.

There are some industries, too, that will not qualify as prospects for smaller communities. It would do the state little good to take executives interested in a high-technology labor market into areas devoid of such expertise. Indeed, it is likely that the need for jobs in these target communities may outweigh the state's commitment to high-wage industries. We may have to settle for lower-wage, lower skill industries in order to match the industry with the community. This is not a retreat from our goals; it is making a hard choice for low-wage jobs rather than none.

This is, I believe, a practical way to approach a tough problem. We do not expect overnight results. We will need help from our small communities because we know that the state cannot sell an industry to a town that doesn't want it. For example, local leaders will have to help identify suitable locations for prospective industrial clients. They must be prepared to work with state recruiters to find adequate and environmentally acceptable water supplies and waste disposal systems. Their support is key to measurements of available labor and skilled training. In sum, local community attitude must complement the state's established reputation as one that welcomes more and better jobs. Together, I believe we will achieve results.

D. M. Faircloth
North Carolina
Secretary of Commerce

Letters

Solar Energy in North Carolina

In the spring issue of *carolina planning* (Volume 4, Number 1), Norman Axler presented the possibility of converting solid waste to fuel for electric power generating plants in North Carolina. Although the use of recoverable materials is one alternative to conventional energy resources, the use of solar energy is a more substantial renewable resource and also should be given serious consideration for helping meet North Carolina's energy needs.

Over the last year grassroots interest in solar energy in North Carolina has increased tremendously. At both the state and local level, evidence of this interest has been manifested through the creation of organizations to promote use of solar and other appropriate technology. Appropriate technologies are those which: make efficient use of energy and other resources and in other ways enhance environmental quality; are light on the use of capital and particularly conducive to small-business participation; depend as much as possible on, and seek to dignify, human labor; use local materials and labor; are simple to install, operate, and maintain; serve people rather than dominate them and are responsive to human needs; are conducive to decentralized control and democratic decision making; and result in durable, recyclable systems and/or products and offer low life cycle costs to the consumer (*Solar Age* July 1978).

There are two state-wide solar groups working to promote solar energy in North Carolina. The North Carolina Solar Energy Association (NCSEA), formed in February 1978, has established itself primarily as a communications medium. The Association publishes a newsletter and encourages the submission of articles from anyone in the state on solar installations and equipment. The NCSEA (not to be confused with the North Carolina State Employees Association) holds regular meetings at the North Carolina Science and Technology Research Center in Research Triangle Park. The meetings include, for example, a presentation on some practical aspect of solar energy by a builder or installer. Members include architects, engineers, builders, and others with a professional interest in solar. The newsletter is available for $5.00 per year from NCSEA, P.O. Box 12235, Research Triangle Park, NC 27709.

Also at the state level is a less formal body which has met only once. It has not chosen a name but is an amalgam of community-based solar and appropriate technology groups from across the state. A group of about fifty people, representing interests from Asheville to Carteret County, met in July as a follow-up to Sun Day to determine what could be done at the community and state-wide levels to promote solar. The result of the conference, and forty-nine others like it held in each state, was a position paper outlining the barriers to and strategies for implementation of solar based technologies.

Representatives of all fifty states met in Washington on August 4 and 5 to form a national solar lobby, entitled Solar Action, to promote solar energy. Copies of the North Carolina position paper are available for $1.00 from Thom Gunter c/o the Piedmont Crescent Energy Project, 236 Phillips Hall, UNC, Chapel Hill, NC 27514. The conference proceedings should also be available from Thom by the end of September for $3.00.

The concensus of the conference was that a state-wide organization was useful for political work and communication. However, the actual solar and appropriate technology demonstration projects are practical only at the local level. One of these projects is currently being erected in Chapel Hill by the local Committee on Solar and Appropriate Technology (CSAT).

CSAT was formed following Sun Day to demonstrate and promote alternative technologies. The organization's first project is to build an attached food and heat producing solar greenhouse at the Pine Knolls Community Center on Johnson Street in Chapel Hill. The greenhouse is being constructed by volunteer labor from CSAT and the Pine Knolls community. Financing came from the now defunct Tri-City Sun Day, Pine Knolls, CSAT, and contributions from local builders including R.B. Fitch, Mellott Construction, and Constructor's Supply. There will be, in addition to the actual construction, workshops on solar theory, greenhouse design and horticulture, energy conservation, and alternative technologies.

CSAT plans to construct a second greenhouse this fall on a low income residence in the Chapel Hill/Carrboro area. Other projects include local food production and transportation focusing on bicycles and community-owned vehicles. The CSAT meets approximately once a month, and its working groups meet as needed. For further information, contact the group co-ordinator Reggie Greenwood at (919)929-6896.

If the state-wide conference in July is any indication, the next six months will see a proliferation of these community based appropriate technology projects in different communities around the state. Contact either the NCSEA or an existing local appropriate technology group for information about your area.

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New Challenges for Local Economic Development Planners

It is generally the case that an urban or regional planner who is most actively concerned with the impacts which a local economy has upon its citizenry is also least able to affect its development. This is particularly true in the southeastern U.S. region, which is experiencing steady gains in net growth due to the play of larger national and international events seemingly beyond the control of local officials. Growth and development policies tend to be concentrated at the state and federal levels; in this context, concern for specific local economies is expressed in broad terms of "balancing" or managing the growth with heavy reliance upon the top-down strategy of industrial recruitment.

But planners who work in urban and regional settings recognize that this strategy does not often take account of local preferences or initiatives, and that the planner's task is primarily considered that of accommodating the unanticipated increments or decrements of growth which occur under even the most balanced growth policies. Even as balanced growth occurs throughout a state such as North Carolina, many firms cease operations or move elsewhere, stranding their labor force and creating a depression in the local labor market. A prime example in North Carolina is the apparel industry which frequently is located in small, dependent economies throughout the state and typically employs disproportionate numbers of blacks, women, and older workers. This particular problem is one of several which is not effectively handled by relying solely upon the existing state-level instruments for pursuing balanced growth. Local economic planners need other approaches which take explicit account of unique circumstances and the preferences of the community.

The following papers by Redmond and Carlisle are based on findings from two separate studies (Carlisle et al. 1978; Carlisle and Redmond 1978). These studies examined impacts of growth and change at the local level, particularly the effect of plant closings experienced throughout the U.S., community concern for devising local economic development strategies, and the prospects for pursuing a local strategy of community based enterprises. Encouraged by the response to an earlier version of their findings presented to the North Carolina AIP chapter, the authors provide here useful and challenging answers to two highly related questions frequently asked by local economic planners: how can local planners and their constituencies become more active partners in the industrial recruitment strategy? How can planners assist communities which want to develop their unique economies with local resources and local control?

Edward M. Bergman

Roles for Local Planners in Industrial Recruitment

The economy of North Carolina has undergone many changes in the last 20 years. The large increases in employment and population are well known. The exodus of displaced farm workers to the North has ceased and many of the new jobs entering the state are higher paying than those in the traditional manufacturing base of textiles and apparel. Although North Carolina still ranks near the bottom in average manufacturing wages, state officials are optimistic about the future because of many economists' predictions of continued expansion of higher wage jobs. Officials are also encouraged by indications that new industry is locating in the poorer areas of the state, and that convergence of wages and income seems to be occurring among the different regions of the state.

Despite this outlook, some areas of the state will probably continue to lag in income growth, new employment, and other aspects of economic development. In part this will be due to limitations in the state's industrial recruitment, the dominant economic development policy operating in North Carolina. This article considers the weakness of industrial recruitment and suggests ways in which it could be improved. These suggestions will involve new roles for local planners in the economic development process.

As background, it is necessary to examine the more recent trends in the state's economic devel-

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opment. That is followed by a description of the role of industrial recruitment in this process and the changes the present North Carolina administration is proposing to correct the problems of "unbalanced growth." The article then shifts to the local perspective to examine the weakness of reliance upon industrial recruitments as an economic development strategy. Finally it proposes some changes in the recruitment process that could be initiated by local economic planners.

Development of Economies

The recent economic history of North Carolina is directly connected to a larger pattern of economic growth in the United States. Since the end of the Second World War there have been two distinct but related trends in employment and residential location. The first is a movement of jobs and population from central city to suburb. This has occurred in large cities across the country and has contributed to many urban ills. The second is a general shift of employment and population out of the northern states to the south. While the North is still more urban and industrial than other sections of the country, its metropolitan centers have been growing slowly or in some cases declining. At the same time the South and Southwest have been booming. This shift in employment and population is the much publicized "snowbelt-sunbelt" movement.

Most studies conclude that while both employment and population are growing in the South, it is the former which induces the latter (Brunson and Bever 1977). This growth in employment is the result of decisions made by controllers of financial capital to invest in a particular geographic area and production process they believe will earn a substantial return. This investment can mean relocation of an existing plant or the creation of a new one. If many investors see opportunities in the same geographic area, new centers of employment and population develop. These centers will thrive as long as investors are satisfied with the returns their investments bring.

> ". . . industrial recruitment in North Carolina has met with both success and failure."

The large increases of employment and population in North Carolina are the result of this shift in investment capital. In this issue's *carolina forum* the North Carolina Secretary of Commerce lists the specific economic conditions of the state which he believes have encouraged manufacturing investment: ". . . a good highway network; solvent railroads; a labor force willing to work and augmented by a tested industrial training program; . . . a (good) water supply . . . the lowest rate of work stoppages in

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NORTH CAROLINA

Industrial recruitment may include marketing of vacant plants.

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the country . . . the highest credit rating among states . . . taxes competitive in region" (Faircloth 1978).

Industrial Recruitment in North Carolina

Past North Carolina administrations chose to play a minimal but supportive role in the development process, which is consistent with the tenets of neoclassical capitalism. It is thought that this will allow free market competition and the efficient allocation of resources by private enterprise. The major support the North Carolina government has provided is in the form of industrial recruitment assistance and location incentives that effectively reduce the cost of doing business.

The state's Division of Industrial Development has been quite successful in selling the advantages of locating in North Carolina. The state recruiter's job is to examine the production needs of the company such as skilled labor, transportation, utilities, "labor climate" and "quality of life," and recommend suitable areas of the state that can meet those needs.

Location incentives are offered because recruiters and legislators are aware that their state is competing with other states for new investment. They are convinced that incentives are necessary to lure the industry. For the most part, little attention is paid to the continuing debate in the academic community concerning the necessity and effectiveness of these incentives (Kanter and Harrison 1978; Liner 1974). The managers and owners of locating companies make the most of this competition by playing one community against the other to elicit the largest amount of publicly financed incentives.

A recent catalog of the various incentives offered by states listed thirty-eight different types including state sponsored industrial development authorities, loan guarantees for equipment and machinery, and right to work legislation (Smollen et al. 1976). North Carolina has only four financial and tax incentives for industry:

- Privately sponsored development credit corporations;
- Inventory tax exemptions on new equipment;
- Sales/Use tax exemption on new equipment; and
- Tax exemption on raw materials used in manufacturing for tobacco, cotton and peanuts

The state is also considering an inventory tax exemption for certain large inventory, high wage industries.

Other incentives that corporations now expect from the public sector include training for the prospective laborers and utility services for its manufacturing processes. These incentives may require special one-time manpower training programs and expensive water and sewer line extensions to industrial plant sites.

"Balanced Growth" for North Carolina

As mentioned at the beginning of this article, industrial recruitment in North Carolina has met with both success and failure. The failure has been the inability of the public sector to "target" new high paying industry where it is needed. In fact, only recently has the state attracted any type of high paying jobs. The predictions about the future location of high paying industry have convinced state policy makers that some measures must be taken to influence the location of incoming industry to produce balanced growth. Policy makers fear that if industry, especially high paying industry, continues to locate in the metropolitan areas of the Piedmont section of the state, people will leave the mountains and the coast to take advantage of these job opportunities. This movement could adversely affect the demand for public services and the health of local economies across the state.

The state government has held a series of meetings this year, attended by leading businessmen and academics, to discuss means of correcting this problem. The results of these discussions are published in the *Balanced Growth Policy* report, which presents a few proposals to help those communities that have been lagging in employment and income growth. All of these proposals operate within the basic industrial recruitment framework. First, the state recruiters will try to encourage the industrialists to move to these needy areas. Second, the state will supplement this plan by providing some of these localities with economic infrastructure such as water and sewer lines and improved roads. Finally, the local economic leaders will be taught the "how's and why's" of conducting a good selling job of their communities to the incoming industries.

These policies, if adopted, should help communities affect new investment; however, the nature of the recruitment process at the local level limits the effectiveness of these policies.

The Local Perspective

The one limitation of industrial recruitment which has been stressed is that it is a passive approach to job creation. The state does not create employment; it must wait for outside investors to come to North Carolina. This passivity is compounded at the local level. At present most North Carolina localities, both cities and counties, rely on the Division of Industrial Development within the North Carolina Department of Commerce for their industrial prospects. There are two reasons for this.

First, it is very expensive to actively recruit industry. A recent newspaper article highlighted the expenses associated with a full recruitment program. These included research, advertising, entertainment for clients, phone calls, and travel (Guyon 1978). Only a few of the larger cities in the state have the resources to pay for a full-time economic development staff to perform similar duties at a lesser scale. Smaller towns and communities cannot afford this relatively large expense without a guaranteed return. Instead, local recruitment efforts are limited to activities that take place after the initial contact with the locality is made.

The second reason for reliance on the state government is that almost all of the interested industrialists contact the appropriate state office rather than specific localities when beginning their location search. The corporations rely on the state offices to recommend localities which satisfy their production needs. Thus for future economic growth through industrial recruitment, the locality and the planner must depend on the state to direct prospects their way.

A third problem with industrial recruitment as currently practiced is due to the negative response high paying industry may receive at the local level. When the recruiters bring industrial prospects to local areas, they contact Chamber of Commerce representatives or members of economic development committees in most of the cities and counties in the state. These members are usually local businessmen whose interest could be to discourage high paying or unionized industries.

Opposition to high-wage industry, especially in nonmetropolitan areas, is based on the fear that a new industry will create upward pressures on local low-wage scales. It is believed that skilled employees will leave low-wage jobs for the high-wage ones, and that unionization will spread to other plants. Local businessmen and recruiters further support their position against unions with the belief that a non-union "labor climate" is North Carolina's primary attraction to industries.

A few incidents in North Carolina illustrate these points and highlight one additional problem with recruitment as it is now practiced. During the last year in Person and Cabarrus counties, unionized companies that paid substantially higher than average wages were discouraged from locating in the area by the economic development committee. Only after local citizens learned of these interactions and signed petitions supporting the industries' location did public officials reverse their position. In Person County, the company decided to locate elsewhere despite the public support. The citizens of Cabarrus County, however, managed to override the businessmen's objections and persuaded the company to locate. Similar actions by a publicly funded economic development committee in Scotland County were discovered by citizens who sued the committee for misuse of public funds. The citizens were represented by the North Carolina Labor Law Center, and the case was settled out of court in their favor.

"... many citizens are dissatisfied with the way the economic development process works and the decisions it produces."

There are indications in these accounts that many citizens are dissatisfied with the way the economic development process works and the decisions it produces. This dissatisfaction is also demonstrated in the results of a telephone interview of residents of Person County a few months after the incident reported above (Carlisle et al. 1978).

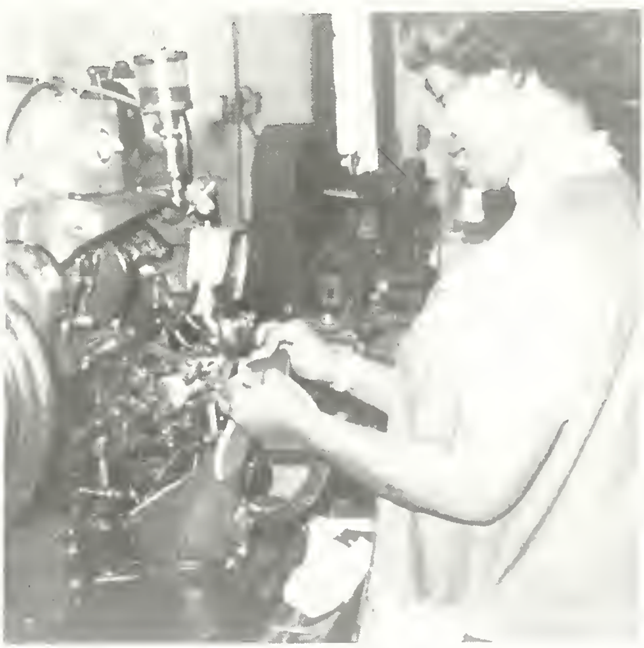
The respondents were asked whether they believed the average county resident had an adequate opportunity to participate in decisions that affect local job opportunities. The researchers were surprised by the evidence of dissatisfaction with the status quo. Fifty-one percent (n=37) of the production workers in lower income households (less than $12,000) said they believed the average citizen did not have an opportunity to participate. Seventy-four percent of the black population workers (n=19) responded similarly. The survey also found that the community supported the actions of the citizens who signed the petition urging the high paying unionized employer to locate in the county.

Of the ninety-three production workers interviewed, 75 percent favored the actions. Ninety percent of the black members of this group responded similarly, as did 76 percent of the lower income households. Even nonproduction workers such as managers, supervisors, and public-employees favored the petition (Carlisle et al. 1978). While this is not evidence that these citizens wanted the company to locate, it is further evidence of the general dissatisfaction with secret economic development practices in Person County.

The final reason for dissatisfaction with industrial recruitment as a means of achieving balanced growth points out another weakness in the local decision making process. As the process is now structured, unionized companies are discouraged, but no further analysis is performed to determine which companies will have an overall positive impact on the development of the community. State officials are beginning to recognize that certain industries are more stable than others or complement existing industries in the state, yet no analytic capacity is built into the recruiting process at the local level to identify these industries. The major concerns of local officials are whether the additional industry will add sufficiently to the tax base and whether it will maintain the local economic structure. If these criteria are met the company will probably be encouraged to locate and possibly be offered a locally funded location incentive. Beyond the immediate interests of the businessmen of the community, no further analysis is made to determine what affect the location decision will have on the overall development of the community.

Changing the Industrial Recruitment Process

The final focus of this paper is to outline ways in which the recruitment process can be changed to facilitate "balanced growth" and economic development to allow the local economic planner a larger role. While only a few local planners now have the title of economic planner, it is clear that manpower,



Increased local control could result in job opportunities tailored to small community needs.

Photo courtesy of N.C. Dept. of Labor

community development, and industrial development planners are each concerned with the local economy in some capacity. The role of the economic planner, however, is still being formed. Specifically, while theories on economic development and methods of analysis have proved to be of value in academic circles, there is still uncertainty concerning how to transform these theories to policy. Yet the economic problems of many localities necessitate that planners learn to effect positive economic change. One obvious channel is through the industrial recruitment process.

The local planner already has the analytic skills and community organizing skills needed for such a role. The planner is equipped to decide whether a company should be offered location incentives or be actively recruited by expanding the benefit-cost analysis to include additional considerations such as:

- the stability of the industry over macroeconomic peaks and troughs;
- the quality of the jobs as measured by wages and working conditions, possibilities for advancement, and use of local labor;
- the effect of the location upon local land use patterns; and
- the possibility of existing local manufacturers supplying production inputs to the locating plant.

Unfortunately, further analysis is precluded until more details about the company are available. Due to the traditional secrecy surrounding the recruitment process, these necessary details are not known until after the location decision has been made. Even the above considerations, if answered, would be quite valuable in determining whether incentives should be offered or firms actively encouraged to locate.

"Participation in the recruitment process by local planners will require a new outlook. . ."

The planner's opinion, however, may conflict with the opinions of local businessmen and public officials. From the accounts of how certain high paying and unionized firms are discouraged from the outset, it is apparent that the planner's analytic skills will not be enough to bring about the economic development of the locality. The planner then has two ways to change the recruitment process. First, he can become a member of the economic development committee or any other traditional recruitment contact and work within the system. The planner could be hindered in this role if he is seen as representing his own interests rather than those of the community. But he would still be effective in making others aware of alternative strategies and long run outcomes of particular development decisions.

The alternative path for the planner is to create an interest within the community in the economic development process. Most citizens are probably unaware of how the resolution of economic issues influences the development of the community. If community members understand how the process works and are organized effectively, they will be able to influence the decisions of locally elected officials.

Participation in the recruitment process by local planners will require a new outlook on the part of recruiters, businessmen, citizens, and planners themselves. The planner should be perceived as someone who influences rather than faci
economic development.

If the planner does decide to assume th
vocacy role, he will be allying himself with g
whose interests do not dominate in the
economy. The personal danger for the plan
that any present influence he has in the pla
process could be lost. Of course, the potentia
for the community is immense, if he should b
cessful. Clearly, if the community gains some
trol over the economic decisions, this control
be extended to other areas of community cor

The process of involving the community and
ing control over the economic development pr
may be slow. Not only will those with power be
tant to give it up, but the community itself mig
unsure of its ability to meaningfully participat
process with which it has no experience. Use o
existing community organizations should be h
in this regard. With hard work and time the e
tion process will be successful.

Eventually a public meeting should be call
discuss issues of importance in the economi
velopment process. Some of these issues inc

- an explanation of how the industrial re
ment process works;
- what the short and long term costs and b
fits of industrialization are to the comm
and
- what alternative strategies to recruit
exist.

It will be worthwhile for the citizens to elect
presentative committee and hold regu
scheduled public meetings. These meetings sh
provide an opportunity for summaries of the representatives' activities and provide a forum for two-way communication with the public. The committee should also prepare reports of its meetings to be made available to the public.

The committee members and the planner should involve themselves in the development process whenever possible. One important task will be to determine the status of recruitment prospects from the local contacts in the recruitment process. All public meetings at which location incentives will be proposed should be attended. The committee members should also attempt to become members of any economic development committees to prevent certain companies from being discouraged.

If there is outright resistance by elected officials or publicly funded economic development committees, recourse lies with the North Carolina Labor Law Center. The Center has handled cases in which citizens have sued economic development committees because public funds were being used to discourage high paying industry.

"The planner should be perceived as someone who influences rather than facilitates economic development."

The planner should step down as director of the community group as soon as possible to avoid any possible conflict of interest. He will still be able to provide advice but will remain at an arm's length from all group decisions and reduce the risk of losing influence in the planning process.

If the community group can directly approach representatives of interested companies, there are a number of questions which should be asked. Some sample questions include:

1. Why are you interested in locating in this area?
2. What publicly funded inducements will you require before you make your location decision?
3. To what degree will public inducements influence your location decision?
4. What will be the total capital investment of your plant in this area?
5. How many dollars in sales do you expect to generate from this plant when it is fully operational?
6. How many people will you be hiring from this area? For which jobs? At what salaries? With what potential for promotion?
7. How many people from other plants in your company will work here?
8. What are your short term expansion plans?
9. What are your long term expansion plans?
10. Where will your company buy its production inputs?
11. Will you consider buying local inputs whenever they are cost competitive?
12. Where will your company borrow its capital?

Follow up questions should be pursued with companies that decide to locate elsewhere to ascertain why they made that location decision. The citizens' committee should contact other communities that have dealt with the same company as much can be learned from their experiences.

The danger of this approach is that companies might perceive a hostile business climate and decide to locate elsewhere. Unfortunately, there is little evidence to evaluate this concern. If the company should decide to locate elsewhere on this basis alone, one might seriously question the company's long run interests in the community. However, if the questioning process is successful and the company decides to locate in the area, the community will know what to expect from this company in the future.

Conclusion

This article has analyzed the industrial recruitment process in North Carolina because it is the dominant economic development strategy of the state. It is not the intention of this article to suggest that recruitment is the only relevant strategy because alternative strategies were not considered. On the contrary, the types of strategies outlined by Rick Carlisle in the companion article are both viable and necessary. However, since industrial recruitment is the dominant strategy at present and the main strategy in the proposed balanced growth policy, it should be carefully examined to determine if it can be improved.

The improvements suggested here can be implemented by local economic planners. There is no guarantee, however, that the planner will be successful in his new role due to the nature of recruitment as a passive approach to job creation and the resistance of local businessmen to this new role. There may be some resistance from planners themselves in adapting to the active role required. It is important to note that the end result could be the economic development of needy areas of the state along with added control by the local community members over an important aspect of their lives.

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New Strategies for Local Economic Development

In the preceding article, Michael Redmond notes several objections to the industrial recruitment process as currently practiced. Briefly summarized, these objections are:

(1) industrial recruitment is essentially a passive strategy, dependent upon public inducements to private decision makers;

(2) lacking the qualities desired by managers making locational decisions, some communities fail to attract new industry;

(3) the recruitment process is often dominated by a few groups within the community that may not reflect wider community interests.

Some methods are then suggested for improving industrial recruitment as an economic development strategy.

While job creation through attraction of outside capital can be an effective development tool, even an optimally designed industrial recruitment strategy is not appropriate for all areas, all situations, and all times. Job creation efforts can be expanded to include internal development — encouragement of local potential for job creation. Furthermore, the local planner must be prepared to provide support to job retention efforts as well.

The economic vitality of a community is dependent upon a complex set of inter-relationships, and no single tool in the planner's kit is suitable for all problems. Unless the economic development planner is able to design new tools, or adapt existing ones, the planner may be forced to stand by helplessly as the community suffers from economic dislocations.

Using Available Resources

Currently, the tools available to implement new approaches to economic development are rather limited. Federal and state programs to assist local economic development are still primarily oriented toward creation of infrastructure to improve the environment for industrial recruitment. Financial and technical assistance to communities that demand a different solution remains small in comparison. Creative approaches have been developed, however, through adaptation of existing programs to new uses.

Existing business in a community often feels, with some justification, that its contributions and needs are overlooked in the scramble to attract new business. These needs may be inimical to economic development, as when local business opposes recruitment of higher paying industry to avoid wage competition or the threat of unionization. Still, locally-owned businesses, whether privately or community owned, can provide resources upon which to build. Timely assistance to locally based business can prevent costly loss of employment. This may mean nothing more than providing the same type of assistance to existing business that new industry receives. Bringing the local businessman who needs capital for expansion together with private or public lenders can result in small but important job expansion.

The Small Business Administration, Farmer's Home Administration, and the Economic Development Administration all provide several types of short and long term financing to assist community economic development. The local planner can play a crucial role by educating local businesses about these programs and easing the application process. In some programs (such as EDA Title IX), the local

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public sector must act as a conduit for federal funds to reach worthwhile private projects.

Innovative Approaches to Economic Development

Some communities have attempted more innovative approaches to job creation and expansion. The Comprehensive Employment and Training Act (CETA), which combined several manpower and training programs, is primarily designed to provide individuals with skills and education to take advantage of existing employment opportunities. Training costs are subsidized by the federal government, and a public service jobs component is included to directly combat high levels of unemployment. Where local demand for labor is low, or employers are reluctant to hire CETA trainees, CETA training and placement programs will be ineffective. The public service jobs component often faces local opposition as unproductive "makework." In these situations, a few communities have realized the potential for combining job creation and job training programs, ignoring the artificial barrier that tends to separate manpower planning and economic development planning.

The Massachusetts State Manpower Services Council has proposed the use of CETA funds to generate local enterprises, thus creating both employment and training opportunities while establishing new businesses. Within North Carolina, the Triangle Housing Development Corporation uses CETA funds to help operate a non-profit housing rehabilitation enterprise which provides needed housing services in rural areas while training carpenters. The Division of Community Employment of the North Carolina Department of Natural Resources and Community Development is now developing a similar program. While such programs are not widespread, the existing models demonstrate that available funding can be adapted to better serve community economic development needs.

> "Worker or community ownership offers exciting potential as an economic development strategy; there are also great challenges."

Another exciting challenge to economic development planners is the potential for assisting in the development of community-based enterprises. Community-based enterprise (CBE) is a loose, somewhat ill-defined term used to refer to a variety of enterprise forms, including cooperatives, worker-owned firms, community development corporations, or stock corporations with broad based community ownership. Basically, CBEs are enterprises whose capital is owned by community residents and with some provision for worker (or wider community) participation in the decision making process within the firm. Although there is much latitude concerning what constitutes a community-based enterprise, examples range from the worker owned firms in New Jersey and Indiana (Okonite Company with 1500 employees and South Bend Lathe with 500 employees) to Allied Plywood in Virginia (19 employees) and family owned farms throughout North Carolina (New Jersey IDA 1976; Ryan 1976; Knight 1977).

CBEs

Community-based enterprises can stimulate economic activity in communities where industrial recruitment offers little chance of success. Although plant closings are widely known to be a problem in northern states, net growth in aggregate employment within North Carolina obscures the effects of plant closings. A sizable body of literature, including several studies carried out in the South, documents the severe impact of a plant closing on workers and the wider community. Prolonged unemployment, decreased worker and community income, declining local retail sales, and loss of local and state tax payments typically follow (Haber, Ferman, and Hudson 1969; Lumpkin 1934; Dorsey 1967). Additional evidence reveals psychological and health costs as well. Increases in hospital admissions, alcoholism, depression, and assorted medical problems have been reported (Slote 1969; Kasl and Cobb 1968; 1970; Strange 1977). Perhaps most debilitating are the feelings of depression, loss of self-esteem, and anomie that follow the sudden transition from a valued employee to "unwanted worker," in Foltman's phrase (Foltman 1968). Political alienation and disruption of community social networks can follow (Aiken, Ferman, and Sheppard 1968).

Manpower planners have found that traditional training programs and employment services do little to avert long term unemployment or the lower quality of reemployment that often follows a plant shutdown (Stern 1972; Young 1963). Employee relocation programs have not fared any better. Workers are strongly attached to their communities and view relocation as an undesirable alternative (Whitman and Schmidt 1966; Wilcock 1960).

Worker or community buy out of a closing firm not only saves jobs, but creates a community-based enterprise with its additional benefits. CBEs present the opportunity to achieve development objectives beyond increased employment, such as equitable distribution of benefits, utilization of local resources and talents, employment stability, and generation of increased citizen involvement in the economic life of the community. When all the stockholders in a firm live in the community and the ownership of stock is broad based, the firm is more likely to take community needs into account in the internal decision making process.

Worker-owned firms in particular are gaining increased recognition as an important element in an overall economic development strategy. While conscious recognition by planners of the development potential of worker ownership is relatively new, the concept of worker ownership is well established in the U.S. economy. Spurred by mill closings in the 1920s, over twenty-five worker-owned plywood firms were established in the Pacific Northwest between 1920 and 1955. Sixteen of these remained in operation as worker-owned firms in 1977, and they generally reported higher productivity levels than conventionally owned firms (Bernstein 1977). The Employees Retirement Income Security Act grants special tax advantages to firms that establish Employee Stock Ownership Trusts to contribute corporate stock as part of an employee pension plan. The planner's interest, however, is in instances where the Employee Stock Ownership Trust mechanism has been used for 100 percent worker ownership of corporate stock. (For further discussion of this point, and citation of useful articles, see Carlisle et al. 1978.) A national survey conducted by Peter Hart Research Associates found that 66 percent of the American public would prefer to work in a company where the stock is owned by the employees (Rifkin 1977).

Worker or community ownership offers exciting potential as an economic development strategy; there are also great challenges. Experience demonstrates that worker buy-out is not a simple process. A successful worker purchase or community purchase demands the ardent efforts of many different institutions. First of all, financing must be arranged, which usually requires convincing commercial lenders that the perceived risk is worthwhile. State or federal government financial support may also be needed. The employees and community residents must be shown both the advantages and the risks of purchasing or initiating a particular business. If worker-owners are to enjoy the normal benefits of ownership, including decision making power in the firm, then training sessions may be needed to permit full and informed participation. Successful worker purchase attempts have required time periods ranging from six months to two years. Timely and informed intervention by economic development planners could shorten this period. Awareness of existing financial and technical support opportunities and quick action by the planner to secure this support can greatly improve the chances of successful worker or community ownership. Where such support has not existed purchase attempts have failed, or dissatisfaction has followed as the benefits of ownership and opportunities for participation fell short of expectations (Husock 1977; Tannenbaum 1977).

Expanding Technical and Financial Assistance

Where local economic development planners lack expertise in these areas they could draw upon existing support institutions for guidance. Such technical support programs are not widespread but their prevalence has been increasing in recent years. Existing models for technical assistance programs include the Industrial Cooperative Association and the American Friends Service Committee in Cambridge, Massachusetts; the Exploratory Project for Economic Alternatives in Washington, D.C.; and the New School for Democratic Management and Economic Development Law Project in California. Both the Industrial Cooperative Association and the Exploratory Project are currently involved in assisting worker and community groups in purchase attempts. The New School offers classes in different parts of the country on management and operation of community-based enterprises. The Economic Development Law Project provides useful information on the legal aspects of community development. A group in the Department of City and Regional Planning of the University of North Carolina at Chapel Hill has recently begun developing a team to provide technical assistance to worker or community groups in North Carolina. Other possible sources of assistance include various university and state government programs for assisting small business, which can offer advice on aspects of operations common to all enterprises.

The Community Soap Factory is an example of a successful worker-owned firm.

Photo by Dan Levin

A second major role for government in supporting community-based enterprises is financing. Public financial support of community-based enterprises is important because community members, particularly in low-income areas, are rarely able to raise sufficient funds to finance enterprise development. Private sector institutions, such as commercial banks, are often reluctant to lend to nontraditionally organized enterprises. Private lenders have been willing to participate in a financing package once community support is evident and some state or federal participation is assured. One state level model is the Massachusetts Community Development Finance Corporation. With an initial legislative appropriation of $10 million, the agency is authorized to purchase capital participation instruments in enterprises owned or controlled by community development corporations. State senator John Dunlop has proposed a California state bank that would participate in the financing of community-based enterprises. State industrial revenue bonds can also be used to help finance community-based enterprises. New Jersey's bond program provided a portion of the capital needed to finance conversion of the Okonite Company to worker ownership, saving 1500 jobs when the plant was scheduled to close by previous owners.

No federal legislation now exists that is designed to assist community-based enterprises. (Community Services Agency grants to community development corporations are not specifically for community-based enterprises.) A bill introduced in March of 1978, however, calls for federal financing to convert closing plants to worker or community ownership. Funds would be available for economic feasibility studies, financing of the purchase, and provision of working capital (Voluntary Job Preservation and Community Stabilization Act, H.R. 11222). Hearings on this bill may begin in the fall of 1978.

"Industrial recruiters, economic planners, manpower planners, community development corporations, and other groups often act in virtual isolation."

Several existing federal programs have been used to finance community-based enterprises. The Farmer's Home Administration guaranteed 90 percent of a $3 million commercial loan that allowed workers to purchase a textile mill in New England that was scheduled for shutdown by its parent firm (Harkavy 1977). In at least one instance, the Small Business Administration has approved loan guarantees to permit the financing of a community-based enterprise (Behn 1977). The definition of eligible small business varies according to the type of industry, ranging from 250 to 1500 employees for manufacturing industries. To be eligible for an SBA loan, the borrower must demonstrate inability to obtain adequate financing at reasonable rates. (For a discussion of the various FmHA and SBA loan programs, see Hayes and Smollen 1976, or contact the appropriate offices directly.)

The program that has been most frequently used in recent years is the Economic Development Administration Title IX program. Title IX authorizes grants to local government in areas suffering from economic dislocation; the grant must be used to implement an adjustment strategy. The local government can then grant or loan these funds to worker or community groups in order to finance a community-based enterprise. As the funds are repaid, a revolving fund is created that can finance additional economic development projects. Although the explanation is greatly simplified, this basic model was adopted by South Bend Lathe in Indiana, Okonite Company in New Jersey, and Allied Plywood in Virginia. This model was suggested, but never implemented, for the proposed worker purchase of Steinthal Corporation in Roxboro, North Carolina (Carlisle et al 1978).

While Title IX has been effectively used in several instances, it does present some drawbacks. Only political subdivisions that meet EDA "distress" criteria are eligible for grants. Each specific state or local project must be approved by EDA, often a time consuming process. Also, it is not certain whether use of Title IX funds would be approved to create new community-based enterprises (rather than purchase closing firms).

Suggestions for North Carolina Economic Development Policy

The overall objective of North Carolina economic development policy—balanced growth, to bring jobs where people live — is a laudable one. It must be acknowledged that recruitment of private industry has provided thousands of new jobs for North Carolinians. In a high growth economy, industrial recruitment is certainly one appropriate strategy. Industrial recruitment alone, however, is not likely to achieve the state goal of balanced growth, nor can an industrial recruitment strategy solve all economic adjustment problems in North Carolina communities.

Enterprise managers make locational decisions in order to maximize profits, not to meet public welfare objectives. Where the economic calculus of the firm and the welfare calculus of the state and its communities coincide, the locational decision will be mutually beneficial. While new jobs will always benefit someone, there is no reason to believe that these private decisions will meet state policy preferences. Nor is employment assured for the less skilled, older workers, or the underemployed. Sole emphasis upon industrial recruitment also ignores the great costs of plant closings, the citizens' desires for an increased voice in economic development and decision making, and the preference for a range of development strategies.

A recent survey of production workers in Person County, North Carolina demonstrates public support for a mix of development strategies. When asked where aid to employment expansion should be directed, 24 percent said aid to existing business, 58 percent said aid to new business, and 10 percent suggested both strategies. Seventy-three percent of those interviewed believed that government should take an active role in helping employees buy a plant that is closing (Carlisle et al.1978). Familiarity with a variety of development tools will enhance the ability of the planner to respond to a variety of community economic needs and desires.

Although North Carolina should retain an active program to encourage new investment in North Carolina, a state policy should be developed to assist local planners in responding to diverse community situations. Industrial recruiters, economic planners, manpower planners, community development corporations, and other groups often act in virtual isolation, to the detriment of the total economic development effort. State government can assist local economic development planners by integrating these efforts. North Carolina state government should propose a ninth policy objective for discussion in addition to the eight listed in the recent proposal of the State Goals and Policy Board. North Carolina government can encourage local community initiative, participation, and self-reliance by supporting the development of community-based enterprises.

POLICY: Community-based enterprises can contribute significantly to the economic and social development of North Carolina communities. State government will therefore assist the creation of community-based enterprises by developing sources of financial and technical support.

Community-based enterprises can increase the ability of communities to respond to a variety of development needs. CBEs increase local ownership of business, increase jobs and incomes, stimulate community participation in economic development, provide needed goods and services, and reduce the dependency of North Carolina citizens upon permanent government support. CBEs can fill a major gap in state development strategy where conventional enterprise is unable or unwilling to respond.

In view of the potential of CBEs for community development, the state will: (1) explore methods of expanding the availability of financial and technical assistance to community-based enterprises; (2) encourage the participation of private lenders, federal government, and other groups in a comprehensive support strategy; and (3) consider the creation of a state development finance agency to accept and use federal funds, guarantee and participate in private loans, and provide direct state loans, if feasible and necessary, to support community-based economic development.

This suggested addition to the state's balanced growth policy would complement current strategies, moving North Carolina closer to the goal of bringing jobs to where the people are and giving all North Carolinians a voice in directing community development.

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Commentary: An International Perspective

Analyzed from an international perspective, the distribution of industrial activities has been greatly affected in the past twenty years by the growth of major corporations, most of them American-based multinationals. These giant firms, often able to impose their will upon newly independent nation states or backward regions of industrialized countries, have transformed the geography of industrial location in their constant search for cheap labor, new markets, and favorable "business climates."

The experience of regional planning in France is a case in point. Originally conceived to overcome the predominance of the Paris region and to facilitate the spread of economic activity and the growth of underdeveloped regions, the regional policy of the French government has opened up many backward areas to foreign investment, thus increasing their dependency upon decisions made almost entirely without any legal input. Jobs have been created, regional incomes have increased, new segments of the population have entered the labor force, but this is not enough to term the regional policy a complete success.

The contradiction between a firm's locational prerogatives and the concerns of planners for an equitable distribution of the benefits of industrial development has always been a source of frustration in a capitalist society. The era of the multinational corporation has greatly added to this frustration. It can now be felt even at the national level where governments are often incapable of regulating firms that have learned to use their multiple nationalities and their available capital as effective bargaining powers.

A good deal of the post-war growth of the southern United States can be seen in a similar light. Rich in cheap, non-union labor, offering potential markets, the "Sunbelt" has attracted many industrial locators and recently a good many of these newcomers have been multinational corporations. According to David E. Gillespie (*Raleigh News and Observer* Aug. 2, 1978), "North Carolina has 150 foreign firms now operating within its borders. There are ninety-five manufacturing operations among the 250 separate plants, outlets, and offices from Manteo to Murphy. The total foreign investment exceeds $1 billion. In the Southeast, North Carolina is joined in that select circle by South Carolina and Alabama."

Dependency, however, is not the only negative feature of the state's policy, and Michael Redmond points out some other important limitations of an industrial recruitment strategy, especially for those small communities most in need of new economic activities. Besides his well taken objections, it is hard to see why the industries locating in North Carolina should continue to forego the traditional economic advantages of larger metropolitan areas to meet the state's balanced growth objectives. Labor intensive activities geared to the production of finished goods for export rarely constitute a sound base upon which to found a policy of self-centered development. These industries remain turned to the outside world, thus minimizing their impact on the local economy. While they may meet to a certain extent the goal of balanced growth as defined by Secretary Faircloth, such growth remains of a dependent nature, leaving the people of North Carolina at the mercy of the locational decisions of large firms which are made increasingly footloose by the homogenization of markets, production processes and consumption patterns.

In such a context, Rick Carlisle's paper offers an interesting and innovative alternative. Community-based enterprise (CBE) should be encouraged as a way of spreading industrial growth and enhancing the level of awareness and control of local communities. People seem indeed more and more eager to regain control over the decisions affecting their lives. Besides insuring greater local control, the community input associated with a community-based enterprise can also minimize the social tensions resulting from a policy of industrial development bringing rewards to a few privileged citizens at the expense of the welfare of the many. In that sense it offers the promise of democratizing the industrial recruitment process.

A CBE strategy raises some serious questions which Carlisle's paper does not directly address. Although such a strategy seems attractive from a social welfare point of view, it leaves unanswered the question of the economic performance of such firms and consequently long-term viability. CBEs would not only have to find markets but would have to remain competitive with large firms able to enjoy economies of scale and all the benefits of strategic planning. To stay healthy in such an environment, CBEs would then have to adopt the traditional measures of capitalist management. This would lead to decisions based on economic considerations alone which are not always easy to explain or justify to community stockholders who may have welfare preoccupations in mind. The record of small cooperative experiments in an environment that remains dominated by monopoly-capitalist firms is not encouraging. But some of these potential problems can be eliminated by using the CBE as a vehicle for political mobilization of local communities. Such communities would then be able to organize themselves into a powerful political lobby and to influence the general direction of the state industrial policy.

In order to avoid the overconcentration of industry in areas, balanced growth as proposed in the *forum* article can lead to a dependent industry structure and reduced local control. On the other hand, community based enterprises are more likely to achieve a goal of locally centered self-balanced growth and to rank better on an equity and social welfare index. But it is not clear that they would be efficient enough to compete with products put on the market by bigger firms. This dilemma between efficiency and equity has long been a key feature of regional planning. It is compounded by the growth of the large corporation as the most powerful agent of economic development. Today, the goal of balanced growth is a popular one; it is not clear to me, however, that it can be meaningfully met without a major transformation of our economic structures so that the welfare of all will take precedence over the profit of a few powerful corporations.

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Impact Taxes: The Opportunity in North Carolina

Municipalities need better ways to allocate the costs of new growth to the appropriate people. New residential construction frequently places a great demand on existing municipal services and facilities, burdening city finances when inflation and increased expectations about the quality of services have already stressed municipal resources. Capital expenses such as roads, water and sewer lines, and new buildings particularly drain existing revenue sources. So do increased expenditures for police and fire protection, recreation, schools, and library service. Cities have traditionally dealt with such demand by raising property taxes, increasing their bond indebtedness, or instituting benefits charges such as special assessments and subdivision exactions.

But increased property taxes are increasingly unpopular and in some ways unfair. To the extent that increased local costs are generated by new residents, older residents are penalized when property tax revenue is used to finance new services. Bond debts paid from general tax revenue cast a similar burden on old residents; they pay the taxes but have no need for the services occasioned by new growth. Benefits charges are attractive because they shift the burden of costs to the users and beneficiaries of the facilities and services. However, traditional benefits charges may be limited by state law to specified purposes and thus are not a totally satisfactory fiscal solution.

Impact Taxes — Another Financing Device

Another way to distribute the costs of new growth is to establish an "impact tax." An impact tax is a fee charged to new construction to pay for its cost to the community. Impact taxes have been established in different forms in at least three states — Florida, Nevada, and California. The taxes differ among these states according to the construction activities taxed, the impacts paid for by the taxes, and the similarities of the taxes to more traditional financing devices. However, the taxes have a common purpose: to allocate more equitably the costs of new construction.

Impact taxes could be valuable in areas of North Carolina where rapid growth is overtaking the ability of communities to establish and expand services and facilities. These areas include coastal and mountain communities experiencing recreational second home development as well as cities with rapidly expanding suburbs. This article describes the different forms of impact taxes currently used by other states and the legal issues that might arise upon their use in North Carolina. The effects of such taxes on housing, the environment, and city growth are also addressed.

Residential Construction Tax

A tax established in Nevada illustrates one form of impact tax, the "residential construction tax." Nevada, by state statute, has established this tax on new residential subdivisions.[1] The statute authorizes municipalities to tax new subdivisions to raise revenue for parks, playgrounds, and recreational facilities. The statute does not limit the amount of the tax to be charged, but the tax is to be spent "insofar as it is practical and feasible to do so, for the benefit of the immediate area from which it was collected." Such a tax relieves the entire community from establishing or improving recreational facilities solely because of the needs of new residents.

Municipal administrators will recognize that this kind of impact tax is very similar to a fee-in-lieu of subdivision exactions. Municipal subdivision regulations often require that new residential subdivisions dedicate lands or improvements, such as streets or water mains, in return for permission to subdivide land. Where subdivisions are too small to contribute a significant amount of land, or where improvements are not planned for location in the immediate area, municipalities may attempt to charge a fee rather than exact the land or improvements. Fees-in-lieu, however, are not favored by state courts, particularly if the fees are not specifically

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authorized in state subdivision enabling statutes or if there is inadequate assurance that contributing subdivisions will receive some special benefit. Nevada's impact tax resolves these problems by being specifically authorized and by setting a legislative standard that subdivisions be benefitted "insofar as practical and feasible."

As one fiscal arrangement, a North Carolina city might consider the Nevada type of "residential construction tax." The Nevada type of tax would present two difficult issues in North Carolina: statutory authorization, and the standard of use to which the fees may be put. Unlike Nevada, North Carolina does not specifically authorize such a tax. Neither does the state authorize its equivalent, the fee-in-lieu. However, cities may require the dedication of land for parks in return for permission to subdivide.[2] Such land dedication requirements have been the basis for some state courts to allow fees-in-lieu where the fees are not specifically authorized by statute. The modern, minority view is that fees-in-lieu can be inferred from state statutes which require land dedications where fees would be used for the same purposes as the dedications. This is true in Wisconsin, where fees may be exacted to finance parks and schools "made necessary by the influx of people into [new] subdivisions."[3] If North Carolina were to follow the modern example, fees-in-lieu would be permitted for recreational purposes. This inference may be aided by the broad rule of construction written into the North Carolina statute regarding cities and towns:

> The provisions of this chapter and of city charters shall be broadly construed and grants of power shall be construed to include any additional and supplementary powers that are reasonably necessary to carry them into effect.[4]

"An impact tax is a fee charged to new construction to pay for its cost to the community."

Many states also follow a liberal standard for the use of subdivision exactions and fees, requiring simply a "reasonable relation" between the use of the subdivision fees and the subdivision that was taxed.[5] North Carolina courts have not addressed this issue. It is possible, however, that a more strict relation will be required as in Illinois, where subdivision exactions must be to the special benefit of the subdivision.[6] This strict standard precludes consideration of total municipal needs and thus is limiting for impact tax purposes. This standard might, for example, require that facilities be located within the subdivision and may not provide for the extra costs of services and administration generated by such facilities which are administered centrally by the municipality.

Impact taxes help cover the costs of extending public services to new development.

Photo by Rob Nichols

There are other potential problems with an impact tax based on the fees-in-lieu concept. North Carolina courts may invalidate the tax on two additional grounds upon which similar development permission fees have been found invalid in other courts. First, an impact tax which is measured in terms of the value of the property to be developed might be characterized as a property tax. Such a tax attached to building permits in Florida has been found to be an invalid property tax.[7] A fee measured by the value of property does not necessarily have to be classified as a property tax; a clear basis in other legal authority, such as subdivision regulation, will help to prevent this classification. If characterized as a property tax, a North Carolina impact tax would also be invalid on constitutional grounds of uniformity[8] and as unauthorized by statute or special municipal election.[9] Second, the tax might be characterized by the court as an invalid revenue raising license fee. When a city licenses for regulatory purposes, such as when building permits are issued, license fees are permissible only to the extent that they pay for the administrative cost of the license. In many states, building permit fees used to offset the public costs of development have been determined to be invalid uses of city regulatory power to raise revenue.[10] Giving permission to a developer to subdivide is considered to be a part of a municipality's regulatory power, although the grant is not normally termed a "license." If the court were to equate subdivision permission with building permission, it might similarly find that regulatory power was impermissibly used for revenue. This argument has been used to oppose inference of fee-in-lieu from land dedication requirements.

Water and Sewer Connection Tax

A second kind of impact tax has been established in Florida. The Florida Supreme Court in 1976 approved the use of a fee charged upon new water and sewer connections which would pay for system expansion made necessary by the new users. In *Contractors and Builders Association v. City of Dunedin*, the court said that "we see nothing wrong with transferring to the new user of a municipally owned water and sewer system a fair share of the costs the new use of the system involves."[11] In accepting the Dunedin tax, with its limited purpose, the court made clear that the allocation of costs is to be carefully calculated. Expansion is not to be financed entirely from new charges if old users will also benefit from the expansion. In this instance, old users must also contribute their share.

The Florida impact tax is similar to a "user fee," a traditional financing tool for municipally-operated facilities. In the case of water and sewer facility use, municipalities commonly charge a larger, up-front connection fee as a part of the user fee. Unlike the impact tax, however, user fees and connection fees are not generally used to cover the cost of facility expansion. Rather, municipal bonds may be issued to finance the construction, or special assessments may be made on the property owners whose property is to be benefitted. The impact tax is also different from connection charges and special assessments in the standard by which the fee is assessed. The Dunedin impact tax is based upon the resident's use of the facility. Special assessments are based upon the increase in the value of property after the improvement. Connection charges are not determined by any particular standard required by law, except that of "reasonableness."

> "The [impact] taxes have a common purpose: to more equitably allocate the costs of new construction."

North Carolina cities may consider an impact tax such as that approved by the Dunedin court as another fiscal alternative. Indeed, sewer and water connection charges are used extensively in North Carolina and often substitute for special assessments in paying for water and sewer facility improvements.[12] Utility rates and user charges are mostly left to municipal discretion if the operation is a public enterprise. By statute, public enterprises are to be operated within "reasonable limitation," while rate schedules may vary according to "classes of service."[13] It is unclear if the same strict cost allocation required in the Dunedin case between new users and old users would be required of an impact tax in North Carolina. The practice in North Carolina has apparently been to use the fees liberally for general municipal benefit. Profits of one public enterprise have in fact been used to finance other public enterprises. W. J. Wicker of the North Carolina Institute of Government attributes low property tax rates found in some medium sized North Carolina cities in the 1960s to their use of electric service fees as general revenue.[14] Another common financing policy is to use surplus charges on water service to finance sewerage service.

Business Privilege License Tax

A third type of impact tax is used in California.[15] The tax is levied on the construction business and is typically determined according to the number of bedrooms in each new residential building. Taxes up to a maximum of $1000 have been placed on each dwelling; this revenue is used to finance a wide range of municipal services related to the new development. The tax has also been levied on commercial and industrial construction based on square footage of the constructed building.

California's tax is recognizable as a kind of "business privilege license tax" which municipalities commonly levy on businesses for the privilege of doing business within the city's jurisdiction. In most jurisdictions, license tax revenue is treated as general revenue with no restrictions placed upon its use. In the case of the California impact taxes, the funds are usually placed in special accounts for financing activities related to the new construction. These impact taxes have a major advantage over the other impact taxes discussed. The California taxes are more flexible as they can finance a range of services and improvements. The Nevada tax finances only recreation-related improvements, while the Florida tax finances water and sewer construction. In contrast, the impact tax in the California city of Rancho Palos Verdes is generally reserved for "serious economic and environmental problems created by the occupancy and construction of [commercial, industrial and residential] facilities within the city."[16] The tax does not have to be spent for the direct benefit of those taxed. This flexibility allows for a more relaxed allocation of costs and benefits.

In North Carolina, an impact tax based on the California type of business privilege license fees appears to be a promising device. North Carolina cities are given broad authority to levy privilege taxes on all businesses, trades, or occupations carried on within their municipal boundaries except as limited by law.[17] State statutes limit privilege taxes by prohibiting municipalities from taxing certain businesses, and by limiting some taxes to certain dollar amounts. It appears that North Carolina state statutes limit privilege taxes on construction so as to preclude the California kind of construction tax. However, a similar "subdividing tax" is a possible alternative.

The state construction tax now in effect is levied by the state on contractors and construction companies, as set forth in Section 105-54 of the General

Capital expenditures to provide services to new subdivisions can burden current residents.

Photo by Rob Nichols

Statutes. Cities are limited to an annual levy of ten dollars on contractors. The state levies a two part tax. The first tax, an annual hundred dollar "contractor's bidders tax," is levied on any construction business that offers or bids to construct any improvement or structure whose cost exceeds $10,000. The second tax is a "contractor's project tax" levied at the award of a contract and graduated according to the contract price or cost of the project. The project tax ranges from $25.00 to $625.00. Subcontractors are exempt while employed by a contractor who has paid the tax.

It may be argued that exempting subcontractors from state license taxes opens the door for municipal taxation of subcontractors as an alternative to taxation of general contractors. Municipalities are not specifically prohibited by statute from levying taxes on subcontractors. However, the state's subcontractor exemption is likely to be regarded as part of an integrated regulatory scheme for construction taxes, and therefore as precluding a municipal subcontractor's tax. A separate ground for challenging a subcontractors' tax would be that classification between subcontractors and other construction companies is not a reasonable classification for purposes of an impact tax and violates equal protection guarantees. In fact, contractors could be seen as the more reasonable objects of a municipal impact tax because they are responsible for organizing and supervising construction and thus bear responsibility for attendant growth.

Municipalities have two other alternatives in pursuing this type of impact tax. The first is to lobby for a change in the state law which would enable municipalities rather than the state to levy construction taxes. The second, and more immediate alternative, is to levy a tax on the business of subdividing. Cities, under the privilege tax statute, are given broad authority to tax "businesses, trades, or occupations." A major issue regarding a subdivision tax is whether the activity of subdividing can be considered a business, trade, or occupation under the statute. The term "trade" has been defined by the North Carolina court as "any employment or business embarked into for gain or profit."[18] The element of profit is certainly present in most subdivision activity. The question of whether the activity is a business would seem to be simply a matter of fact, ascertainable by criteria set forth in an impact tax ordinance.

California courts appear ready to accept the premise, for the purpose of impact taxes, that subdividing can be a business. This understanding has evolved because of the courts' increasing familiarity with the impact tax concept. The following experience illustrates problems that an impact tax in North Carolina might meet. In the early 1960s, the city of Santa Ana, California, charged an impact tax payable at the time of subdivision platting. The tax was overturned, partially on the finding that subdivision was only incidental to the larger activity of development construction and could not therefore be taxed separately.[19] A later case involving Santa Clara, California, relied on the Santa Ana case to strike down a fee on the business of "subdivision, building and development" levied at the time of subdivision platting or building permission.[20] California cities were careful, following these cases, to impose impact taxes only on construction and then only at the time of occupancy or the issuance of a building permit. An important factor in these cases was the courts' insistence on characterizing the tax, even when specifically nominated as a tax, as an inappropriate use of regulatory powers under the state Subdivision Map Act. Because the taxes were levied at the time of subdivision, the courts equated the tax with fees-in-lieu. Fees-in-lieu, unlike privilege license taxes, cannot be used for general revenue purposes and were thus held invalid.

Later California courts have been more careful to distinguish between taxing and regulatory powers. The same court that disapproved the Santa Ana tax has since upheld a construction tax payable upon receipt of a building permit. The court recognized that issuing the building permit at the same time as levying a tax did not make the tax a regulatory device, but was simply a reasonable time for the payment of the tax.[21] In the latest California case, it was argued that the impact tax in Rancho Palos Verdes was a prohibited subdivision exaction, or that it was an invalid license fee because it was levied at the time a building permit was issued. The argument was specifically dismissed.[22]

The distinction between regulatory and revenue purposes, regardless of the time the tax is charged, will be essential for the acceptance of a subdividing tax in North Carolina. The revenue basis of the tax in the statutory power to levy a privilege license tax must also be understood. North Carolina courts may accept the separate classifications of subdivision and construction more readily than the California courts. For one thing, businesses that might otherwise be considered included under the general classification of another business may be taxed separately and simultaneously in North Carolina. For example, merchants have been taxed simultaneously on the business of selling second hand clothing and the business of general merchandising. Because one business concerns itself with land and the other with improvements on the land, a similar distinction in the case of subdividing and construction might also be upheld.

Constitutional Issues

At least two other legal issues should interest municipalities considering an impact tax: the constitutional issues of due process and equal protection. These issues may be said to center around a concern for fairness in the use of the tax. The tax itself is based on the notion that community financing of new residents can be inequitable to old residents. However, it is possible that the "cure" will be more harmful than the "disease," especially if the tax is not structured to allocate costs as fairly as possible. Constitutional acceptability of the tax will depend on the court's perception of the general fairness of the tax. The court will also be influenced by the details of tax application. By keeping constitutional standards in mind, cities can better assure themselves of a fair and acceptable tax.

Due Process

An important constitutional consideration is that of due process. An impact tax must not be unreasonable, arbitrary or capricious, or confiscatory, or it will be found to be in violation of due process rights given in state and federal constitutions. The determination of what meets the due process requirement differs somewhat between courts and techniques. In the absence of relevant case law in North Carolina, due process requirements for impact taxes are difficult to predict. The general test in regulatory matters is that the objective of the regulation must be reasonable and the means used be reasonably related to achieving the objective. User fees and subdivision exactions have their basis in the municipal power to regulate and will come under this test. The reasonableness of different means of subdivision exaction has been variously interpreted. For example, in many states subdivision exactions may take the form of a fixed percentage of lands. In other states, this method has been found to be an inadequate reflection of needs specific to new developments.[23] A fee-in-lieu, then, may or may not be acceptable if based on fixed values, such as the value of subdivision property. The means chosen in Dunedin to assess user fees were found reasonable because charges borne by new connectors were restricted solely to their future use. The due process test for privilege taxes is more liberal: the tax must simply have some fiscal relation to benefits given by the city. This standard provides more flexibility in fashioning an impact tax.

> "By keeping constitutional standards in mind, cities can better assure themselves of a fair and acceptable tax."

A due process taking will be found if either taxes or regulation are confiscatory. What is confiscatory is, again, a matter of judicial judgement. Land dedication exactions have been found to be a taking where the value of lots after dedication dropped by 40 percent.[24] However, these occasions are extreme and a lesser decline may be quite acceptable. A taking argument was presented in the case of the Rancho Palos Verdes tax, but was dismissed because the tax added only one to two percent to the sale price of a home.

Equal Protection

A second major constitutional issue is that of equal protection. To satisfy equal protection requirements, impact taxes must not discriminate between persons similarly situated, and classifications must be based on real differences and have some relevance to the purposes for which classification is made. As in the due process analysis, the equal protection questions center around what is "fair" to those affected. Classifications by municipalities have been given some deference in state courts. For example, a privilege tax burdening residential construction at a higher rate than commercial or industrial construction was found not to be discriminatory in California. The classification was considered justified for the reason that residential construction imposes greater burdens on police and fire protection and other services.[25] Likewise, in Rancho Palos Verdes, the fact that contractors paid smaller license fees than developers did not create an equal protection problem, nor did the distinction between construction of new homes (which was taxed) and expansion of old homes (which was not). The different degrees of impact on municipal services in these cases were considered significant enough to justify different treatment.

On the other hand, the Supreme Court of Utah has decided that license taxes associated with building permits unconstitutionally discriminate between old and new residents. The court conceded that new residents increase the cost of governmental services, but disapproved use of a license fee to solve the problem. The court recommended that raising service costs would be more acceptable.[26] The distinction between old and new residents was approved by this same court one year later, however, for sewer connection charges.[27] In this case, it appears that the device and not the distinction primarily concerned the Utah court. If municipalities clearly justify distinctions made between taxpayers, and supplement their arguments with data, it seems unlikely that equal protection will be a major stumbling point.

Impact taxes may be subject to stricter judicial scrutiny if the taxes involve suspect classifications or fundamental interests under the traditional federal equal protection analysis. Suspect classifications include classifications based on race and, in some cases, wealth; fundamental interests include the right to travel. Impact taxes discriminating between races or income groups, or interfering with migration, may therefore be disfavored under a constitutional analysis. An exclusionary effect might be anticipated from a tax which significantly increases housing costs. Higher housing costs will discourage lower income residents, who are frequently minority racial groups as well, and will also have a chilling effect on migration. However, results of litigation regarding exclusionary housing make it unlikely that impact taxes will fail because of possible exclusionary effects.[28] The Supreme Court has ruled that racially discriminatory effects of governmental action are not sufficient to find an equal protection violation. Instead, a racially discriminatory intent must be found. This ruling places a significant burden of proof on plaintiffs alleging discrimination. Narrow standing requirements for right to travel complaints have made it difficult for potential residents to acquire standing to sue, even if they are willing to go to court to be able to secure housing. If standing is acquired, lenient court review may result in upholding a measure that places "reasonable restrictions" on that right. On the other hand, some states have shown concern about exclusionary practices. The New Jersey court requires municipalities to consider the "regional general welfare" when regulating land use and housing. The California court has noted with concern the exclusionary possibilities of subdivision exactions,[29] and North Carolina courts may show a sensitivity to the problem.

Planning Considerations

Legal considerations give some guidance about how to structure an impact tax to meet the requirements of fairness and sufficient legal authority. A number of other consequences that might flow from the tax should also be considered. These consequences can be beneficial or detrimental to municipal planning efforts.

De-emphasis of Property Taxes

Impact taxes may help decrease municipal reliance on property taxes as a revenue source. This effect results directly from the impact-tax objective of requiring new residents to pay for new services. If those services are normally paid from property taxes, the impact tax can substitute for property tax expenditures. American cities in 1975-76 relied upon property taxes for more than forty percent of municipally generated revenues. In North Carolina, property taxes supply 77.4 percent of all local taxes. The success of the California referendum on "Proposition 13" makes evident the political dissatisfaction of taxpayers with property tax burdens. An impact tax can provide some assistance with that burden; however, it must be recognized that impact taxes are limited in the extent that they can replace property taxes. Property taxes pay for a wide range of services and improvements, while impact taxes such as user fees and fees-in-lieu are useful for specific, limited services and improvements. The impact tax, in the form of a privilege tax, could be used for more purposes, but it is not expected that total revenues from the privilege tax could be a major source of revenue as compared to other sources.

"It is also important that cities act with concern for the equitable allocation of the tax."

Leveraging Funds

Available revenue from all impact taxes might nevertheless be used to leverage other available funds and may, therefore, be of increased usefulness. For example, impact tax funds may be used to match federal or state grants, and, by being a substitute, free general municipal revenues for other general municipal projects. While financing new services, revenue from a privilege tax may be used simultaneously to further other municipal policies. For example, revenue might be used to improve services in neighborhoods needing revitalization if the neighborhoods are adversely affected by the new development. Municipal services, particularly capital improvements, can be used to guide growth to certain locations within the city or to encourage certain types of growth such as high density housing. The revenue may also be used to buy open space to improve or preserve the physical environment of the city.

Indirect Regulatory Consequences

The impact tax will have indirect regulatory consequences through its influence on private development decisions. The tax may affect housing costs and the type of housing made available. This is because housing costs are greatly influenced by the cost of land, which is in turn influenced by the profit expected by the subdivider who sells the land. Subdividers will attempt to maximize their profits by raising the price of land to what the market will bear. They will also attempt to pass the cost of a subdivision tax or subdivision exaction to the consumer by adding it to the cost of the land. If the subdivider is not able to pass along the tax or gain the profit that he desires, one of three results may occur. First, the businessman may reduce his expected profit and sell anyway. Because subdividers are often heavily financed in their acquisition of land, they are interested in selling quickly to minimize holding costs; in this case, a reduced profit is a likely result, with an absorption of the tax. The second result might be that the subdivider will withdraw land from the market, which will increase the cost of the land as it becomes more scarce in relation to demand. A third result might be the simple tacking on of the tax to the land costs — if the market will bear the costs. With increased land costs, housing density might likewise increase.

If housing costs rise, the tax may be responsible for an exclusionary effect discussed above. This effect should be of concern to the municipality not only for legal reasons and reasons of equity but for planning reasons as well. If the city employs people who are not able to live within its boundaries, the effects of increased commuting may include greater congestion, transportation, and environmental costs as well as a sprawl pattern of development.

The impact tax may have other environmental effects. By delaying or discouraging subdivision development, the tax may help to preserve open space within the municipality. This is especially true for marginal lands where the developer cannot expect to gain a large profit for either market reasons or land conditions. The tax, however, is at most a delaying factor which may allow a municipality time to implement more effective open space preservation techniques. The tax may, in fact, place more pressure for development on choice agricultural lands by withdrawing marginal lands from the market. The tax can also help to preserve open space by encouraging higher density development. Perhaps the largest environmental benefit would result from municipal spending of tax revenues to provide public facilities and services. This spending can supplement other techniques, such as special assessments, user fees, and municipal bonding, and add to the quality of such services as sewerage, water, and solid waste disposal. Rancho Palos Verdes has labelled its impact tax an "environmental excise tax." Tax revenue is placed in a special fund to improve the "ecology of the city, or any distressed or environmentally endangered portion thereof."

> "However, it must be recognized that impact taxes are limited in the extent that they can replace property taxes."

Finally, the impact tax can be expected to influence the city's growth patterns. The tax will do this less directly than other growth management control devices. For example, the location of growth through such techniques as zoning, capital improvements programming, and transportation planning can be very directly influenced. The rate of growth is also directly influenced by management techniques of development timing and the scheduling of public improvements. By increasing land costs or delaying development as previously described, the tax affects the rate of development. Increased land costs may also direct the location of growth to the boundaries of the municipality or other particular locations, such as agricultural lands. The influence of the tax in this manner, however, is greatly determined by market considerations. The consistent and complementary use of more direct growth management techniques will increase the effectiveness of the tax as a growth management device.

Conclusions

Impact taxes can be beneficial in financing the costs of new development in North Carolina, but their advantages and disadvantages must be weighed. The most flexible of the impact taxes are privilege license taxes, which can fund many types of municipal expenses with no requirement that the tax specially benefit the development taxed. Privilege license taxes are also specifically authorized by North Carolina statute. However, municipalities are preempted from levying a privilege tax of more than ten dollars on construction and must therefore test the use of a proposed tax on the business of subdividing. User charges might also be the basis of a different form of impact tax, such as that levied on new connections to water and sewer lines. User charges are mostly limited to paying the costs of the facility used, but in North Carolina user charges have been employed to finance other municipal services without court challenge. This device may not be as flexible in practice as a privilege tax, but would be on the safest legal grounds when used in a limited manner similar to the Dunedin tax. Fees-in-lieu are useful to pay for park and recreation needs created by new subdivisions. Besides being limited in scope, fees-in-lieu carry the risk of being unacceptable to North Carolina courts, especially if the fees are not limited to benefitting the subdivision concerned.

Municipalities may wish to use each of the different forms of impact taxes; one is not exclusive of the others. The taxes may also be used to supplement other types of benefits charges, such as special assessments and traditional subdivision exactions. In this way, a fiscal "package" may be prepared to account for all the costs of new development.

It is important that cities act with awareness of the consequences of impact taxes on other municipal policies concerned with housing, environment, and city growth. It is also important that cities act with concern for the equitable allocation of the tax. Taxes should not be allocated to unfairly burden new residents. New growth can indeed have beneficial effects for the entire community, and these effects should be recognized in the total growth cost computation. For example, new residents may bring new business to support the economic base of the city and region, and new residents will eventually contribute their share of property tax revenue to city coffers.

Taxes should also be spent for the type of impacts new residents create. The process of determining those impacts and allocating costs requires research into fiscal and other impacts of development. Guidance for this research is available in planning literature.[30] The experience and fiscal records of cities themselves will also be valuable aids to the process. Finally, the process of allocating costs through impact taxation requires political decisions about the types of impacts for which new residents are held accountable and the extent to which they will be taxed. Planners, attorneys, and other municipal administrators can help assure that such political decisions are fair and informed.

Notes

1. Nev. Rev. Stat. secs. 278.4983-4987.
2. North Carolina Gen. Stat. sec. 160A-372.
3. Jordan v. Village of Menomonee Falls, 28 Wis.2d 608, 138 N.W.2d 442 (1965), *appeal dismissed*, 385 U.S. 4 (1966).
4. North Carolina Gen. Stat. sec. 160A-4.
5. Various standards for the relation of subdivision exactions to subdivision benefits are discussed in Heymand and Gilhool, "The Constitutionality of Imposing Increased Community Costs on New Subdivision Residents Through Subdivision Exaction," 73 *Yale Law Journal* 1119-1157. *See also* Comment, "Subdivision Exactions: The Constitutional Issue, the Judicial Response, and the Pennsylvania Situation," 19 *Villanova Law Review* 782.
6. See, *e.g.,* Pioneer Trust and Savings Bank v. Village of Mt. Prospect, 22 Ill. 2d 375, 176 N.E.2d 799 (1961), where the test used was that exactions must be "specifically and uniquely attributable" to the subdivision. The test was interpreted to mean that land dedication could not be required for school sites if school needs were partially attributable to the needs of existing residents.
7. See, *e.g.,* Vendetti-Siravo v. City of Hollywood, 39 Fla. Supp. 121 (1973); Tavis Development Corp. v. City of City of Sunrise, 40 Fla. Supp. 41 (1973); Broward County v. Janis Development Corp., 311 So.2d 371 (Fla. App. 1975).
8. North Carolina Constitution, Art. v, sec. 2.
9. Ibid., Art. ii, sec. 4.
10. See, *e.g.,* Daniels v. Borough of Point Pleasant, 23 N.J. 357, 129 A.29d 265 (1957); Merrelli v. City of St. Clair Shores, 355 Mich. 575, 96 N.W.2d 144 (1959).
11. Contractors and Builders Association v. City of Dunedin, 329 S.2d 315 (Fla. 1976).
12. Warren J. Wicker, *Materials on Municipal Government in North Carolina* (Chapel Hill: Institute of Government, University of North Carolina), 1969.
13. North Carolina Gen. Stat. secs. 160A-312-314.
14. Wicker, *Materials,* pp. 96-98.
15. See, e.g., Modesto, California Code secs. 8-2.701-1707 (1964); San Jose, California Code Art. xvi (1973); Oakland Municipal Code ch. 5, Art. xxvi.
16. Westfield-Palos Verdes Company v. City of Rancho Palos Verdes, 73 Cal. App.3d 486 at 492; 141 Cal. Rptr. 36 (Cal. App. 1977) at 40, n.2.
17. North Carolina Gen. Stat. Sec. 160A-211. *See also* a useful publication on the municipal business license tax which explains the statute, provides a sample ordinance, and contains the results of a survey of actual use of the tax in North Carolina in Gray, *Business License Taxation by North Carolina Cities and Towns: 1976 Edition* (1976).
18. Lenoir Drug Co. v. Town of Lenoir, 160 N.C. 571, 76 S.E. 480 (1912).
19. Newport Building Corp. v. City of Santa Ana, 210 Cal. App.2d 771, 26 Cal. Rptr. 797 (Ct. App. 1962).
20. Santa Clara County Construction and Homebuilders Association v. City of Santa Clara, 232 Cal. App. 2d 564, 43 Cal Rptr. 86 (Ct. App. 1965).
21. Associated Homebuilders v. City of Newark, 18 Cal. App. 3d 107, 95 Cal. Rptr. 648 (Ct. App. 1975).
22. Westfield Palos Verdes Company v. City of Rancho Palos Verdes.
23. Frank Ansuini, Inc. v. City of Cranston, 264 A. 2d 910 (N.J. 1970).
24. East Neck Estates, Ltd. v. Luchsinger, 61 Misc.2d 619, 305 N.Y.S.2d 922 (1969).
25. Associated Homebuilders v. City of Newark.
26. Weber Basin Home Builders Association v. Roy City, 26 Utah 2d 215, 487 P.2d 866 (1971).
27. Home Builders Association of Greater Salt Lake v. Provo City, 28 Utah 402, 503 P2d 451 (1972).
28. For a discussion of constitutional aspects of exclusionary housing, see Godschalk et al., *Constitutional Issues of Growth Management* (1977).
29. Associated Home Builders of Greater East Bay, Inc. v. City of Walnut Creek, 4 Cal.3d 633, 94 Cal. Rptr. 630, 484 P2d 606 (1971). The same problem is alluded to in the dissenting opinion in Jenad, Inc. v. City of Scarsdale, 18 N.Y.2d 78, 271 N.Y.S.2d 955, 218 N.E.2d 673 (1966).
30. See, *e.g.,* Keyes, *Land Development and the Natural Environment* (1976); Muller, *Economic Impacts of Land Development* (1976); Muller, *Fiscal Impacts of Land Development* (1975); Council on Environmental Quality, *The Costs of Sprawl: Literature Review and Bibliography* (1974).

North Carolina's Housing Finance Agency: Can it be More Effective?

President Carter's national urban policy address included, for the first time, provisions for the participation of state governments in an attack on our nation's urban ills.[1] Historically, states have not dealt with urban issues and have left these problems to be confronted by local and federal governments. The national urban policy reflects the realization that "state governments have both money and power which can be marshalled in the battle to bring suitability and vitality back to our cities."[2] While the federal budget deficit has continued to escalate to a 1976 high of $66.5 billion (U.S. Department of Commerce 1977) state governments maintained an historical trend of budget surpluses (Albright 1976). In addition, state constitutions and statutes are the origin of all municipal powers relating to urban development, taxation, and annexation. Consistent with these determinations, the President has proposed that federal incentives be provided for states to implement comprehensive urban policies and strategies.

North Carolina and forty-one states already have one mechanism in place for implementing strategies consistent with the proposed national urban policy: a state housing finance agency (HFA). However, the degree of past effectiveness and the potential for performing a critical role in implementing national policy varies widely among HFAs.

This article examines the potential for North Carolina's HFA to take on an expanding role in addressing this state's housing problems. First, a brief history of North Carolina's agency is chartered. Following that, the agency's performance is evaluated. The article concludes with proposals to increase the agency's capability to meet the state's housing needs.

Nature of State HFAs

With respect to housing, states have, until recently, limited their roles to the enactment of enabling legislation permitting local governments full participation in federal housing and community development programs. In response to the 1968 Housing and Urban Development Act, which gave state HFAs preference in the allocation of housing subsidy funds and allowed HFAs to finance deep interest subsidy in housing projects without Federal Housing Administration (FHA) mortgage insurance, states began to become actively involved in the provision of housing to needy residents. HFAs were created to deliver new supplies of housing at below-market rents by acting as mortgage bankers, making and servicing low-interest rate, long-term mortgage loans, and administering and coordinating federal housing subsidy programs.

Another incentive for state HFA establishment came in 1974, with the creation of the federal Section 8 Housing Assistance Payments Program. This program "sets-aside," or reserves, funds specifically for use by state HFAs. In 1976, the HFA Section 8 set-aside amounted to $225 million or one-quarter of the program's total budget (Hance and Duvall 1976).

The mid-seventies also saw a major economic recession, which limited the amount of capital available for housing construction and contributed to a sharp rise in shelter costs. State HFAs came to be seen as a mechanism to prevent or respond to credit tightenings in the housing market. An HFA

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provides a state with its own secondary housing market and can spur economic development through the additional jobs and revenue it can generate. HFAs were also seen as having beneficial impact on states' building trades and construction industries.

Not surprisingly, most HFAs were presented to state legislatures as costless entities designed to funnel federal subsidies to communities requesting assistance, provide cheap mortgage money during times of tight credit, and stimulate building industries. By and large, HFAs were not politically accepted as a state effort to provide shelter for low-income residents.[3]

The Housing Corporation

North Carolina's first state level endeavor in publicly assisted housing came in July, 1969 when the legislature passed the North Carolina Housing Corporation Act. The act created a public corporation within the Department of Administration governed by a nine-member board of directors. The corporation was charged with functions consistent with other HFAs in existence at the time and could: purchase federally insured mortgages; make or participate in the making of federally insured construction and mortgage loans; provide technical assistance to builders and developers; advise people seeking to improve their housing; and promote research and development in the low-cost housing field. A separate Housing Development Fund (HDF) was also created and could provide temporary development cost loans to qualified builders, sponsors, and developers of low-income housing; provide loan assistance to qualified families to help meet down payment and other closing costs on home purchases; and provide, under special conditions and with participation of private lenders, uninsured loans to cover land development and construction costs of lower-income housing projects.

"By and large, HFAs were not politically accepted as a state effort to provide shelter for low-income residents."

Corporation bonds were not to be general obligations of the state and carried relatively little security. The legislature appropriated only $300,000 for a general reserve fund. Unlike many other states, North Carolina did not pledge its moral obligation to the corporation's bonds. The corporation's revenue bonds were to be secured only by federal insurance, a capital reserve fund from the bond proceeds, the small general reserve fund, and the corporation-financed housing. In addition to the $200,000 appropriated for start-up costs, the corporation was designed to be economically self-sufficient based on the point spread between the lower tax-exempt bond interest rates and the higher rates which the corporation would charge (Stegman 1972).

The Housing Finance Agency has provided mortgage financing for low-cost single family homes.

Photo by Rob Nichols

During its four years of existence, the Housing Corporation issued no bonds and financed no housing. The requirement that its operating costs be covered by the spread between bond and mortgage rates, in combination with the higher rates the corporation would have had to pay due to its infancy and relatively unsecure bonds, kept the corporation out of the long-term bond market (Stegman 1972).

The Housing Finance Agency 1973

In 1973, after eliminating the housing corporation, the legislature created a new housing finance agency. The North Carolina Housing Finance Agency could: participate in any federally assisted lease program for lower-income people, providing that the locality where such a project to be located requests and approves; make or participate in the making of loans to sponsors of residential housing; and establish an existing mortgage purchase program and a forward commitment program.

Because the agency was designed to operate with maximum participation by the private sector, and because the legislature believed that an inexperienced agency could not administer construction loans or a Housing Development Fund (Report of Legislative Committee 1973), these functions were not retained in the new legislation.

The HFA was placed within the Department of the Treasurer to take advantage of its strong relationship with private financial institutions and the investment community. The relationship between the Department of the Treasurer and the HFA was not designed to be permanent. The department was to nurture the agency during its early years, and after demonstration of its capacity for independence and broader functions, the agency was to be relocated (Report of Legislative Committee). The agency board of directors was also altered. It was expanded to twelve members and included legislative representation for the first time.

Another significant alteration approved by the legislature was the establishment of a general reserve fund. This was necessary to assure the marketability of agency bonds at rates sufficiently low to serve low-income residents. A bonding capacity of $100 million was sought because, based on other states' experiences, that amount represents the minimum level of activity producing a cost-effective operation in terms of staff, overhead, and marketing costs. Such a bonding capacity would have required a minimum reserve of $8 million (Report of Legislative Committee). A compromise was reached which resulted in the agency receiving a $4 million reserve fund and a bonding limitation of $40 million. It was felt that once the HFA successfully utilized its initial bonding capacity, it could return to the legislature for an increase (Currin 1978).

The HFA was also permitted to use up to one-half of the annual interest earned from the reserve fund account for operating expenses. This was in addition to funds it would receive from the point spread on its mortgages. The agency could also purchase privately insured and uninsured mortgages, as opposed to the previous legislation requiring federal insurance. Authority to establish a mortgage insurance program was granted, but an initial insurance fund was not capitalized by the legislature. Finally, the new act included language which established the purchase or rehabilitation of single-family homes as an agency priority.

> "It is obvious that the legislature took away some of the corporation's powers in return for provisions which would make the agency operable."

1977 Legislative Amendments

During the summer of 1977, legislation was approved to transfer the HFA from the Department of the Treasurer into the newly reorganized Department of Natural Resources and Community Development (DNRCD). The purpose of the bill, proposed by Governor James B. Hunt, was to locate the agency in a department whose major focus is community development.

The approved compromise bill transferred the HFA to DNRCD, but retained bond approval authority with the Local Government Commission in the Department of the Treasurer. A futher change saw the Secretary of DNRCD become an *ex officio* member of the HFA Board of Directors with the power to fire but not to hire the agency's executive director.

With these changes the HFA must now operate in one department, whose mandate is to provide socially desirable services to the state's poor, and simultaneously satisfy another department's objective of protecting the fiscal credibility of the state. The transfer of the agency to the DNRCD was a political and bureaucratic move that required extensive fence mending when completed. HFA activities were brought to a near standstill for almost one year.

North Carolina's HFA: Evaluation Criteria

Because North Carolina's HFA must walk a very narrow line between two very different objectives, low income housing delivery and fiscal credibility, performance standards should be established for each of these categories. First, the agency must initiate and maintain its credibility in the bond market. Without such credibility the agency cannot be effective. Financial credibility can be measured by: the financial stability of its housing programs (number of mortgage defaults); the security backing its bond issues; the successful utilization of all of its bond proceeds in a timely manner; the professionalism and capability of its staff; and the quality of the track record established in the investment community (bond ratings and interest rates) for future bond offerings.

Secondly, and just as importantly, the HFA must satisfy a public purpose test. Without serving a socially desired public purpose, the agency has no authority to expend public monies in the form of tax-exempt bonds, general reserve funds, or Section 8 federal rent supplements. Satisfaction of public purpose objectives can be measured by: the number of dwelling units constructed or financed compared to the need; the socio-economic characteristics of the program recipients; the participation in the creation of a statewide housing plan and the targeting of agency programs to implement such a plan; the depth of the housing subsidy delivered and the costs of such subsidy; the importation of out-of-state mortgage capital; the amount of federal subsidies captured, and an aggressive approach towards the establishment of innovative programs to meet the state's housing needs.

Evaluation of The 1976 Bond Issue:

In July of 1976 the North Carolina HFA floated a $16.16 million bond issue with an effective yield to investors of 6.75 percent. The bonds received an excellent Aa rating by Moody's because they were secured by FHA/VA mortgage insurance, a general reserve fund, and a capital reserve fund. This rating, combined with North Carolina's tradition of fiscal conservatism, resulted in an additional benefit to the agency in the form of a $420,160 bond discount assigned to the issue by the underwriter (Saloman Brothers 1977).

The proceeds from the bond sale were used to fund an existing and forward commitment mortgage purchase program for 650 single-family homes. As determined by the agency, an eligible applicant for a loan was limited to a gross annual family income of $12,850 or less. There were no geographic targeting requirements included in the program. The maximum term of the mortgage was 30 years with a maximum principal of $30,000. The loan-to-value ratio was effectively 97-100 percent after all associated fees and points were accounted for. Interest rates to the mortgagors varied between 7.5 and 7.75 percent.

The agency's first bond issue was a success from a financial perspective. Although some difficulties were encountered in closing all the transactions within the six month commitment period, the entire committed mortgage amount was eventually purchased. The bond rating was sold and the bonds were marketed at two points below the market rate. The bonds were perceived to be so secure by underwriters that they assigned nearly a half-million dollar discount to the issue. To date the agency has had to foreclose only eight mortgages out of 650 (Currin 1978), a very successful foreclosure rate of just over 1 percent. A competent staff continues to administer the program. With the 1976 bond issue, the HFA established a sound track record with the investment community, paving the way for future bond offerings by the agency.

"During its four years of existence, the Housing Corporation issued no bonds and financed no housing."

Because the HFA must fund its operating expenses from the mortgages that it purchases, the 6.75 percent cost of borrowing translated into a mortgage interest rate of 7.5 percent to 7.75 percent. This rate was approximately one point below market rates at the time. The monthly debt service on the average loan of $22,400 at 7.75 percent over thirty years is $160.50. That debt service is $16 less per month than a conventional loan would have cost at the market rate; this equals a 9 percent HFA subsidy resulting from its tax-exempt financing. Given a standard rent-to-income ratio of 25 percent, the subsidy lowered the annual income requirement for ownership of a similarly priced home by only $800. The real benefit of this program was not the monthly subsidy, but the low down-payment requirements and the availability of mortgage money for moderately-priced homes.

The agency was able to have an impact on a relatively low-income population group for a homeownership program. The median income of an agency borrower was $5,000 below that of an FHA Section 203(b) borrower (N.C. HFA Report). The typical agency borrower was a young family, with little available equity entering the homebuyers market for the first time.

The inefficiency of tax-exempt bonds in general, however, can be illustrated with North Carolina's first bond issue. The first payment due on the bonds was $195,000 of the principal and 3.75 percent interest on the entire $16.16 million (Saloman Brothers 1977). This amounts to an addition to the aggregate investors' incomes of $606,000. Assuming that all of the investors are in the 50 percent tax bracket, $303,000 of revenue was lost to the U.S. Treasury. Put in other terms, it cost American taxpayers $466.15 to subsidize one single-family North Carolina HFA home buyer $188.75 over the past year.

Another potential problem is that the agency initiated its mortgage purchasing program without the benefit of a generally accepted statewide housing plan. Therefore, the agency's first bond issue did not require any geographic targeting. As a result, HFA mortgages were originated by private financial institutions, not necessarily by where the greatest needs were, but consistent with conventional private sector mortgage activity. Loans could have been made that were counter-productive to the planning and development activities of other state agencies such as economic development, transportation, and agriculture.

The HFA's bond issue successfully attracted long-term debt capital from outside of the state, with approximately half of the bonds sold to out-of-state investors (N.C. HFA Report, 1977). The HFA's actions resulted in a net increase of $8 million in mortgage monies to the state. Because there are only limited federal housing programs for single-family home purchases, the HFA was not able to leverage any federal housing subsidies. As a result, tax-exempt subsidy of HFA financing was the only subsidy available under the program.

"Target groups are in need of housing services precisely because they have been underserved by the private sector in the past."

Evaluation of Other HFA Programs

The North Carolina HFA is a Department of Housing and Urban Development (HUD) designated statewide public housing authority for the purpose of administering Section 8 federal rent supplements. The HFA has a cumulative set-aside of nearly $3 million in Section 8 New Construction/Rehabilitation contract authority. The agency does not finance Section 8 projects, as most HFAs do; it merely administers them. This involves soliciting and assisting the development of housing proposals. The criteria for HFA project selection includes financial feasibility, availability of permanent financing, location, size, design, and compliance with HUD requirements. The HFA can only select projects upon the request and with the approval of the local government. The agency has some limited control, therefore, over the geographical location of Section 8 developments. The agency's policy, based on its perception of the state's needs since it has no formal housing plan, is to select small projects in rural areas of the state where technically qualified local Public Housing Authorities (PHAs) do not exist (Pou 1978).

Thus far almost 100 percent of the agency-sponsored Section 8 projects have been for the elderly. This is a result of national program deficiencies that make elderly projects disproportionately more popular than family ones. Elderly housing is easier to syndicate, has higher fair market rents, and is, therefore, easier to develop. In addition, elderly housing does not stir local opposition which would prevent North Carolina HFA involvement.

Because the HFA does not directly finance Section 8 housing, it is not maximizing the use of the federal subsidy. If the agency made permanent loans at tax-exempt rates to Section 8 housing developers, rents in those projects would be lowered. The HFA would use less of its contract authority in subsidizing the difference between 25 percent of each tenant's income and their unit's rent. This would free additional Section 8 funds and permit more of the state's low-income residents to benefit from the program. If the HFA financed projects, the HFA would have more control over the projects' impact on the state's needs through location and tenant selection criteria. The making of Section 8 construction loans to developers would be even more desirable, as discussed later.

"Without serving a socially desired public purpose, the agency has no authority to spend public monies . . ."

The HFA also administers the Appalachian Housing Fund, which was established with a grant from the Appalachian Regional Commission. The fund is designed to stimulate the development of low and moderate income housing in the western region of the state. The HFA acts as the technical review agency for all fund applications and awards grants or loans based on staff recommendations. The fund provides assistance for project planning loans, site development grants, off-site improvement grants, and technical assistance grants. The fund has utilized housing sponsors in conjunction with HUD's 202 program for the elderly and the Farmers Home Administration's rural housing programs. Loans are the favored vehicle of assistance to maintain the revolving nature of the fund. The agency is applying for an additional grant from the Appalachian Regional Commission to increase the size of the fund and the agency's flexibility in using it.

Additionally, the HFA is involved with the State Energy Conservation Loan Guarantee program. Regulations for the program have only recently been circulated. Private financial institutions are responsible for placing the loans, which the agency will guarantee against default. Because of the small amount ($1200) of the maximum loan to be guaranteed, savings and loans have shown no interest in the program. A few commercial banks have indicated some interest but the response has not been overwhelming.

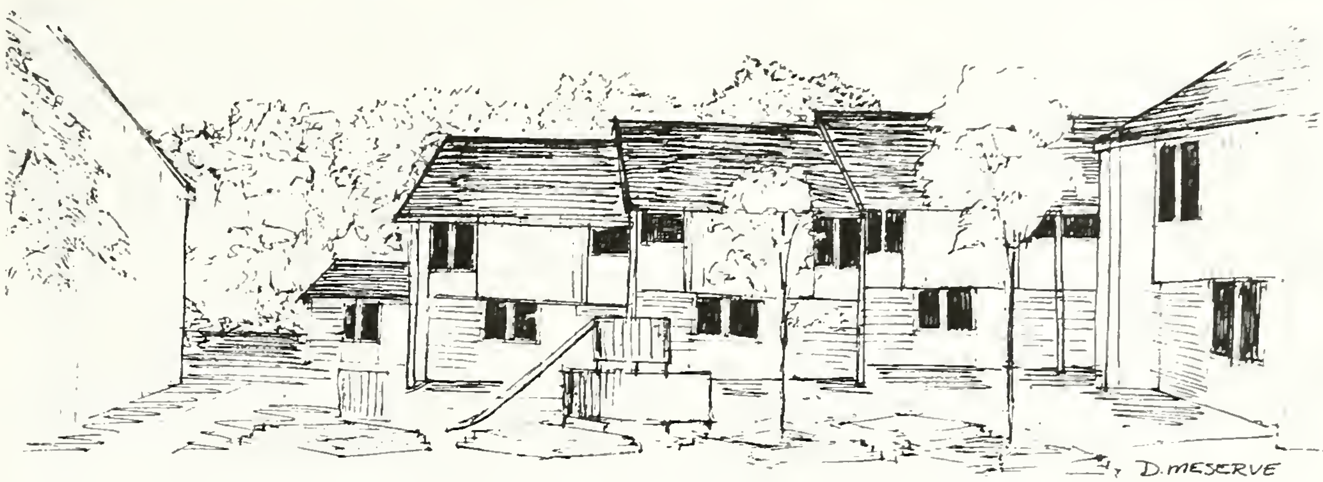
Other Constraints on Operating Performance

One constraint on operating performance is the current method of financing internal operating costs. The agency is caught in the dilemma of needing to expand its volume of activity to generate additional operating income, but not having the staff to do so. The current HFA staff of seven is financed with 50 percent of the interest accruing from the general reserve fund. The one point spread between the bond interest being paid and the mortgage rates purchased covers a three-eighths of one percent servicing fee to the originator and the agency's overhead resulting from the program.

Because the agency utilizes the private sector to implement its programs, it must pay servicing fees. If it bypassed the private sector and dealt directly with developers, it could charge fees for services rendered, and in turn increase its administrative capacity. With increased staff capacity, it could expand its program and serve a larger number of low-income people. Restricting itself to a single-family purchase program, which requires a point spread to operate, leaves the issue of an expanded agency staff at the discretion of a fiscally conservative legislature.

A second constraint is the legislature's preference for strong private sector involvement in HFA activities. In the enabling act the legislature declared that the private sector had not ". . . been able to produce, without assistance, the needed construction of decent, safe and sanitary residential housing at low prices or rentals which persons and families of lower income can afford or to achieve the urgently needed rehabilitation of much of the present lower income housing."[4] It also states that "loans shall be made only upon the determination by the agency that mortgage loans are not otherwise available wholly or in part from private lenders upon reasonably equivalent terms and conditions."[5] The act proceeds to create powers for the HFA which can be implemented only through the private sector—the same sector which the legislation acknowledges has not done the job. Ironically, the HFA finds itself in a position responsible for satisfying the needs of those unserved by the private sector, with only the vehicle of the private sector to carry out such a mandate.

The remainder of the article addresses this



Various subsidies are possible for multi-family public housing projects.

Drawing by Don Meserve

dilemma. The HFA can initiate some changes to expand its role in meeting the state's housing needs without legislative action. But other, more fundamental changes will require the legislature to recognize the benefits of an aggressive HFA and create, through amendment, such an agency in North Carolina.

Proposals Not Requiring Legislative Action

A statewide housing plan, consistent with and adopted by all branches of the state government, is desperately needed by the HFA to assure that its activities conform to and support state and local efforts at land use, environmental, transportation, and economic development planning. Because of the absence of clearly established and agreed upon priorities, the HFA's minimal impact has not necessarily been targeted to the greatest of North Carolina's housing needs. Such a plan should be more comprehensive and specific, and have wider political acceptance, than the current '701' Housing Element Draft.

To carry the needed political clout, authorization for the preparation of a housing plan must come from the Governor's Office. The HFA has neither the staff nor the mandate to prepare such a plan, but the agency should have significant input into the plan's preparation. The Community Housing Division within DNRCD is the most logical office for the drafting of a housing plan. The Division should perform largely a coordinator's role, soliciting proposals from all other branches of government. This will assure a final product which has broad-based appeal and one in which the HFA can play a significant role in implementing.

The housing plan should identify target population groups and locations. These targets can be identified based on local Housing Assistance Plans and regional and statewide housing and population characteristics. In addition, means of housing delivery, building types, construction techniques, and relevant design criteria should be assigned to each target population. These statistics should be collected with recognition of trends in economic development, transportation improvements, industrial location, and future job centers. Factors such as opportunities to encourage additional public and private investment should also be weighed. Those areas which are racially or economically restricted must be identified for public intervention. Finally, this information should be integrated into the State's overall land use and capital improvements planning to prevent areas from being overbuilt or neglected.

The HFA should use the housing plan to establish high priority population groups and geographical areas, and give preferential treatment to the development of low-income housing for those targets. Such actions as accelerated processing and preferential access to agency programs and federal subsidies would encourage development for the targeted needs. The first step toward implementation of the statewide housing plan is the attachment of priority locational requirements to all future agency bond issues and financing activities. As long as the agency restricts itself to single-family mortgage purchase programs, it will be difficult to target subsidies. Under those programs the HFA is dependent upon the private sector to deliver HFA programs. Target groups are in need of housing services precisely because they have been underserved by the private sector in the past.

This inability to meet the state's housing needs through the private sector is the major reason why the agency should utilize its authority to make direct loans to developers and sponsors of low-income housing. This would allow the agency to bypass private financial institutions and finance low-income housing in neglected areas of the state. In addition, by lending directly to developers of low-income housing, the agency could make mortgage money available at approximately the same low rates that the HFA borrows at in the tax-exempt bond market. This can be done by charging developers servicing fees rather than paying such fees to financial institutions. The agency could fund its operating costs by collecting fees for such services as site evaluation, appraisal, financing, and servicing the loan. The developer can include these fees in the mortgage amount and thereby minimize their impact on the cost to low-income occupants. Several federal housing programs, both multi-family and single-family, could be combined with HFA direct loans to developers to deliver low-cost housing to needy North Carolinians.

"The history of North Carolina's Housing Finance Agency has been characterized by the Agency's inability to achieve its full potential."

As discussed earlier, by making direct permanent loans to developers of Section 8 multi-family housing, the HFA could stretch the benefits of its annual set-aside to more low-income households. Direct loans would put the agency in a position to better target its housing subsidies and lower the costs of development. The agency could pool Section 8 development and go to the bond market with one large bond issue. This would cut the administrative costs of bond preparation and, more importantly, allow the HFA to spread its risks over a number of projects. Portfolio diversification would permit the agency to finance a range of projects, from rural to urban, moderate-income to low-income, new construction to rehabilitation.

Without a multi-family loan program, the agency will not be in the position to capture its fair share of federal subsidies. For example, under the recently formulated Neighborhood Strategy Areas (NSA) program, HUD has allocated nationally 20,000 units of Section 8 Substantial Rehabilitation. Of that amount, one-half will be set aside for use by state HFAs having multi-family loan programs in place (U.S. Conference of Mayors 1978). As a result, North Carolina's HFA currently will not qualify for any of this set-aside (Zimmer 1978). In addition, if the agency were aggressively financing the traditional Section 8 program, it might receive greater amounts of left-over contract authority at the end of each fiscal year. Initially, HUD must allocate Section 8 contract authority based on a statutorily defined fair share formula. Each year the amount that is not utilized by various states and agencies is redistributed based on demand and past performance (Cahoon 1978). If North Carolina can develop an efficient and productive track record for financing Section 8 projects, the state would be in a position to receive additional subsidies.

A single-family program that North Carolina should consider, which is underutilized by most HFAs, is the federal Section 235 interest subsidy program. By utilizing this program, the HFA could accomplish what it has done under its mortgage purchase programs but at an increased subsidy to low-income homeowners. The agency should make direct loans to developers or sponsors of Section 235 housing. With the combined subsidy of agency tax-exempt financing and federal interest subsidies, the HFA could assist more lower income households. It would also be able to lower development costs and stretch the federal interest subsidies just as was outlined in the Section 8 proposal. An added benefit would be the agency's ability to target this single-family program to priority groups and areas; the HFA cannot do this under its present mortgage purchase program.

In addition to making direct permanent loans to developers of Section 8 and Section 235 housing, the agency needs to make construction loans for these projects. Without the ability to make construction loans, the agency is still dependent on private financial institutions to assist in the delivery of its programs, although not to the degree that it is without permanent financing. By making construction loans, the agency would increase the benefits of lowered development costs and leveraged federal subsidies discussed above. The agency could expand its staff through the increased servicing fees resulting from the originating construction loans.

The HFA does not have the explicit authority to make construction loans. This authority, available to the Housing Corporation, was eliminated in the 1973 HFA act. On the other hand, in *Martin v. N.C. Housing Corporation,* the N.C. Supreme Court acknowledged that construction loans were an important part of an integrated program to produce low-income housing.[6] The question of the HFA's ability to make construction loans is probably political rather than judicial. If the agency can increase its activities to the point where it has the track record, staff capability, and political base of support required to make construction loans, it may not need specific legislative authority to perform that function.

If it is determined that the agency is not authorized to make construction loans, as outlined earlier, the legislature should pass specific legislation to enable the HFA to make these loans. This authority would allow the agency to carry out its legislative mandate — to fill the low-income housing void left by the private sector.

Proposals Requiring Legislative Action

At the end of Fiscal Year 1978, North Carolina has accumulated a state budget surplus of $183 million (Dorman 1978). In May of 1978, the state legislature took actions to expend that surplus during the 1979 fiscal year. Unfortunately, while the legislature chose not to allocate any of the surplus to the state's only housing delivery mechanism (the HFA), the state's housing needs continued to grow. According to the latest projections, by 1980 31 percent of North Carolina's households will have inadequate income to support a standard dwelling unit. Approximately 300,000 units of substandard housing are expected to exist by 1980 (N.C. Division of Housing 1977). With this degree of housing need, some of the state's surplus should have been appropriated to housing and particularly to the HFA. A surplus in the state budget is not uncommon in North Carolina, and in Fiscal Year 1979 the surplus could reach $160 million (Wheeler 1978). In the future, the legislature should allocate some of the surplus budget to the HFA. The following proposals would require appropriations of $9.2 million which, in turn, could be leveraged into hundreds of millions of dollars in housing benefits to the state.

First, the legislature should appropriate four million dollars to the general reserve fund as it indicated that it would in 1974 if the agency properly used its initial four million. If the HFA offers another single-family mortgage purchase bond issue this fall, as expected, it will have exhausted its statutorily established bonding capacity. By increasing the agency's general reserve fund to eight million dollars and expanding its bonding authorization to $100 million, the legislature will permit the agency to continue to serve the housing needs of the State.

"Without a multi-family loan program, the agency will not be in the position to capture its fair share of federal subsidies."

To allow the HFA more flexibility in delivering programs, the legislature should also permit the agency to use up to 100 percent of interest accruing from its general reserve fund for its operating costs. Currently, the HFA can only use 50 percent of the interest. Such action would free approximately $175,000 of idle funds for HFA use. This interest accrues annually from funds appropriated in 1974 and would require no further appropriations. These funds could supply the agency with operating expenses for programs that benefit very low-income residents and cannot be self-supporting.

Second, to permit the agency to expand its activities to direct loans to developers and implement the proposals outlined below, the legislature should make a one-time operating fund appropriation. A direct appropriation of $200,000 would enable the HFA to expand its administrative capacity and start-up additional programs and services. Since these programs would be largely self-supporting in terms of operating costs, only an initial appropriation is needed. All or part of this appropriation could be repaid depending upon the success of the agency's programs.

Third, to initiate the HFA's authority to establish a mortgage insurance program, the legislature should appropriate four million dollars for a mortgage insurance fund. With this fund the HFA could establish a program modeled after Maryland's program. For example, the agency could fill the gaps left by FHA and private insurance programs. A range of middle-to-low-income mortgages, with varying loan-to-value ratios could be insured. This would result in a sound and diversified portfolio of mortgages to cover the risks of other agency activities. These activities should include mortgage insurance for rehabilitation, economically integrated multi-family projects, urban neighborhoods, rural regions, and energy conservation. Integration of the Energy Conservation Loan Guarantee program with the general mortgage insurance fund would permit the agency to offer better terms with less risk.

Finally, the legislature should reinstate the Housing Development Fund (HDF) included in the original Housing Corporation. One million dollars would allow the agency to develop a statewide program along the lines of the Appalachian Housing Fund. This could further assist those areas and groups not adequately served by the private sector. Such a fund could provide loans and grants for predevelopment costs, technical assistance, and downpayment or equity assistance. This would permit the development of non-profit groups, unserved by the private sector, to sponsor their own housing developments. The HDF could develop the professional capabilities of group sponsors to take advantage of other HFA and federal programs.

Conclusion

The history of North Carolina's Housing Finance Agency has been characterized by the agency's inability to achieve its full potential. In comparison to other states and this state's housing needs, North Carolina's agency has achieved only minimal results. Despite its low production record, the agency has achieved some positive objectives. It has established a good track record for future bond offerings and has successfully administered its own financing program and a federal subsidy set-aside. These are important achievements for a young agency and are necessary for future expansion.

The state's housing needs still persist. The HFA is the state's primary instrument for direct involvement in subsidized housing development. The agency's public purpose mandate necessitates expansion of its role and powers beyond the satisfaction of purely investment community objectives. The agency must significantly address the state's housing needs. The agency must also fully utilize all its present authority to initiate its own programs and to capture federal subsidies for the state's benefit.

The state government is in an excellent position to assist the agency's improvement and expansion.

Recent budget surpluses and the likelihood of future surpluses indicate that North Carolina has financial resources available to address its significant housing problems.

Some may note that political realities in North Carolina indicate little likelihood that significant state commitments to housing will be forthcoming. There are three responses to that argument. First, the HFA thus far has had very little impact on the state's housing needs and therefore has garnered very little political support. If the agency can expand its operations and thus its impact, it can broaden its political support. As the ill-housed become aware of the HFA's ability to provide low-cost housing, they will demand more. Also, as financial institutions and the construction industry observe the agency's ability to attract out-of-state mortgage capital and increased federal housing subsidies, they will support its expanded role.

Secondly, as the state's population continues to grow, and housing costs continue to climb, more residents will require the benefits available to them from an expanded HFA. Finally, the federal government, with its expanding budget deficit, appears ready to turn over many of its responsibilities for social services to the states. This is especially true in the field of housing and community development. The President has promised increased incentives for states to accept a larger burden in this field. As the federal government alters or diminishes its involvement in housing, North Carolina will be left with serious and wide-spread housing problems. An HFA that can capture available federal subsidies and leverage them as far as possible will have broad political support. These factors may precipitate a change in the political climate which will permit the expansion of the HFA's capacity to provide housing services to North Carolina's ill-housed.

Notes

1. Because this paper deals with housing, "urban ills" as it is used here refers to housing problems. In addition, the term includes both urban and rural housing for the purposes of this paper.
2. Jimmy Carter, *The President's Urban and Regional Policy Group Report: A National Urban Policy,* March 1978 (Washington, DC: US Government Printing Office).
3. As Stegman (1974) notes, this is an important issue to keep in mind when evaluating an HFA's success at achieving legislative objectives. It was often the case that HFA bills were designed to assist low-income households but were approved by legislatures only after much rhetoric was voiced concerning the financially self-supporting nature of the proposed agency.
4. North Carolina General Statutes, Chapter 122A as amended.
5. Ibid.
6. Specifically, the court said (Martin v. N.C. Housing Corporation, p. 56) that,"temporary loans from the HDF for development costs are the first step in an integrated program, the second step being a construction loan, and the third step being permanent financing."

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Patricia J. Jenny

Downtown Revitalization in Small North Carolina Communities

The decline of central business districts (CBDs) has become an issue in large metropolitan cities and small towns across the nation. As the shape of American cities has changed, the retail, industrial, commercial, and residential functions of downtowns have faced increasing competition from population and investment shifts to outlying areas. The causes of downtown decline are found in the gradual and complex evolution of suburban land use patterns and the American consumers' choice of a suburban life style. As people moved out of urban areas, assisted by the automobile, public highway and housing programs, or the lack of overall community land use policies, downtown or main street business centers have been left behind.

North Carolina communities share in these national trends. Because much of the state's population lives in small cities, the focus of this article is on the struggle of downtowns in small cities to survive as viable commercial centers. In North Carolina, the rapid changes in the agricultural economy of the state have been an additional cause for altering the functions of downtown business centers in small towns. During the past twenty years, the majority of small farms have been consolidated into major agricultural land holdings, and the total number of farms has decreased dramatically. Downtowns in many small cities, therefore, no longer function as the agricultural service centers for the small farms in their region.

Interest in forestalling the death of small city downtowns exists across the state. The desire to save downtown springs, in part, from an emotional need to maintain a symbolic identity for a community. The character of a small city is defined largely by the unique fabric of a main street where institutions, stores, and restaurants are concentrated. The downtown also represents the historic origin of the municipality. Despite the fact that many functions have been removed from downtown and scattered over a wide area, the desire to preserve the unique character of a small city, as exhibited in the historic center, has sponsored many downtown revitalization efforts.

Additionally, the movement to renovate CBDs arises as a reaction to the increasing development of small town sprawl. In many towns, the concentration of existing infrastructure downtown, consisting of public roads, sidewalks, lights, water and sewer lines, and private investment in retail and office space, are deteriorating as unappealing shopping strips and fast food chains develop on the fringe.

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This article documents the overall assessment of downtowns by local officials and businesspersons and describes a cross section of processes and treatments used to revitalize downtowns in North Carolina.

The first section briefly summarizes the results of a questionnaire identifying the basic problems in North Carolina downtowns and programs adopted to date. In the second section, case histories of revitalization efforts in four communities illuminate the factors and relationships involved in a renewal process of a small city.

Community Assessment of Downtown

A questionnaire was distributed in November of 1977 to local public officials and Chambers of Commerce across North Carolina in order to determine the perceived conditions of downtown business districts in the state. Four hundred seven questionnaires were mailed out to the managers and clerks in the 449 cities under 25,000 in population across North Carolina. Questionnaires were also sent to directors of the Chambers of Commerce in seventy-three cities under 25,000 in the state. A response rate of 38 percent provided usable returns from 160 separate communities.

Local officials' and businesspersons' perceptions of the strength of downtown centers were requested as indicators of community evaluations of CBDs. Survey results, as shown in Figure 1, demonstrate that downtowns in small cities in North Carolina have retained a positive position since 1970. Over one-third of the respondents claim that their local downtown is somewhat stronger or much stronger than it was in 1970. Twenty-eight percent of the respondents feel that their CBD is about the same relative to 1970 conditions.

Local assessment of the stability of a small city downtown is correlated both with its distance from a metropolitan area and its age. The downtowns located within a Standard Metropolitan Statistical Area (SMSA) are more likely to have gained in strength since 1970. Furthermore, decline of central business areas is less likely to have occurred in newer cities than in those incorporated over 100 years ago.

Population size and rate of growth also impact the stability of a small city's downtown in North Carolina.

Figure 1

The Status of Downtown Compared to 1970

Status of Downtown	Number of Communities	Percent
Much Stronger	11	6.9
Somewhat Stronger	50	31.3
About the Same	45	28.1
Somewhat Weaker	30	18.8
Much Weaker	17	10.6
Not ascertained	7	4.4
TOTAL	160	100.0

Those cities from 6,000 to 15,000[1] population indicated most often that their downtowns were stronger than in 1970. In addition, communities with large population increases since 1970 responded that their downtown gained strength more frequently than those with slower growth rates.

The most serious problems existing in small North Carolina downtowns according to survey findings are the lack of evening entertainment, the competition from retail shopping centers on the outskirts of downtowns, and the deterioration of buildings. On the other hand, the social problems commonly associated with downtowns in large cities, such as fear of crime and racially segregated shopping areas, are not considered problems by respondents from small cities. The condition of infrastructures such as sidewalks, landscaping, or lighting is infrequently mentioned as a problem.

The final part of the questionnaire listed fourteen programs which North Carolina communities may have undertaken to revitalize their downtowns.

As Figure 2 shows, the revitalization programs most frequently undertaken are small in scope and involve only basic municipal services such as lighting, parking, or landscaping. The more sophisticated and complex programs, such as special tax districts or loan programs, have been utilized in fewer cities. Almost one-third of the respondent communities, however, have enacted plans for revitalizing downtowns.

Case Studies of Revitalization Programs in Four North Carolina Communities

Although the results of the survey provide an overall description of the problems in small downtowns of North Carolina and indicate the types of approaches undertaken to stabilize the status of downtowns, the case studies of four communities allow a more in-depth examination of downtown revitalization procedures in the selected communities. This information identifies the constraints imposed on any revitalization program and indicates which approaches are most effective in the context of a small city.

The case of Smithfield documents one of the first community efforts in the nation to upgrade a deteriorating downtown and is a good example of how coordination of existing community organizations can result in positive improvements. Although outside technical assistance was sought in Whiteville, the Chamber of Commerce has led the way in maintaining the predominance of downtown Whiteville in Columbus County.

The study of Hendersonville shows the success of organizing grass roots community support to revitalize a decaying downtown. Finally, the case study of Hickory describes efforts of a larger community that utilized the federal urban renewal program to upgrade a deteriorating CBD. Although each community faces a unique situation, this cross section of four cities provides a variety of approaches which

Figure 2

Downtown Revitalization Programs Undertaken in North Carolina Communities

Program	Percent of Communities Which Have Used Program
Improved lighting	60
New/expanded parking	36
New landscaping	33
Reconstructed sidewalks	31
Downtown revitalization plan	29
Facade improvements for structures	17
Historic preservation	17
Change in traffic circulation patterns	15
Expanded housing opportunities	15
Economic development corporation	14
Revised CBD zoning	14
Creation of auto-free mall	7
Loan program	2
Special tax incentives for rehabilitation	1

can be adapted to other communities in North Carolina.

Smithfield, North Carolina Population 7,420

Smithfield downtown revitalization began in the early 1960s in response to general physical deterioration and the lack of offstreet parking. Efforts were initiated by merchants through the Chamber of Commerce, and the cooperation of the Smithfield city government was immediately secured. Downtown efforts grew out of an industrial development program instituted by citizens to address the large exodus of population from the declining agricultural economy of Johnston County.

An "idea tour" was sponsored by this group through North Carolina, Tennessee, and Virginia in order to gather information from other cities which were undertaking downtown programs, and to gather support and stimulate interest within the community. At the time of these efforts, downtown Smithfield was the only retail center for the city and its immediate environs. Although there was not an immediate threat of competition, the anticipation of new retail shopping centers provided a partial impetus for downtown revitalization.

The heart of downtown revitalization in Smithfield was the *Smithfield Plan*. This plan evolved incrementally during the meetings of a Downtown Committee of some forty-two members, set up jointly by the Chamber and the city. The actual administration of the renovation projects was accomplished by the volunteers serving on the Downtown Committee. No staff or budget was established, but the services of both the Chamber and city staffs were utilized when necessary.

A key component of the process in Smithfield was the support gathered from other community groups. Most of the project ideas emanated from contact with the community through the newspaper and radio station. The forty-two member committee coordinated the media communication and selected which project ideas to implement. Civic groups were given the responsibility to undertake one specific project. This series of projects not only upgraded the physical enviroment, but also served to focus community attention on the downtown center.

Coordination for each project was achieved through an informal process by which each retailer and property owner was contacted and requested to cooperate by funding his or her own improvements. Group pressure was sufficient in most cases to enlist the participation of an unwilling owner. Funding was entirely private, with the exception of municipal assistance for sidewalk repair or refuse collection on vacant lots.

Downtown Smithfield merchants are beginning to organize forces once again to initiate efforts to upgrade the physical environment of the CBD. An Appearance Commission established in 1974 has implemented several beautification projects within the CBD and immediate surroundings. There appears to be more interest currently in utilizing any public monies which would be available. A design project by two North Carolina State University graduate students has served to renew interest in the process of rejuvenating downtown.

The focus of the twenty-five downtown improvement projects during the late 1960s in Smithfield was the erection of canopies over the sidewalks. Accompanying the installation of canopies were efforts to stimulate painting and other rehabilitation within the CBD. Demolition of abandoned warehouses was a major change in the streetscape of downtown Smithfield, accomplished through the leadership of the Downtown Committee and cooperation of local property owners. New sidewalks were installed by the city, and landscaping projects were undertaken by several civic clubs.

During the 1970s, the development of off-street parking has been a major undertaking. A group of downtown merchants formed a corporation for the purpose of acquiring properties for use as parking lots. At the end of ten years, the corporation's property reverts to the city. This use of land for parking can serve as a land bank device to provide an inventory of land for attracting new businesses to downtown Smithfield.

All of the persons interviewed assessed the downtown revitalization program in Smithfield as successful. There are several indicators of this perceived success in Smithfield. First, investment in new construction by financial institutions on the main street, Market Street, indicates a policy on the part of the banks to stay in downtown. This attitude is also shared by the large retailers, as evidenced by the decision of the major department store to invest in a new structure in downtown. Second, there is a very low vacancy rate in the smaller stores within the central business district. Third, the merchants interviewed indicated a gradual growth in retail sales over the past decade. The presence of new shopping centers has not caused any decline in sales within downtown. Fourth, the process of promoting interest in downtown improvements developed by the Downtown Committee has continued to stimulate individual upgrading efforts by merchants.

The success of any future efforts will be assisted by the fact that Smithfield is a county seat and county government continues to expand in the downtown area. Additionally, the postal service and municipal library have new facilities in the downtown area, forming a strong institutional basis for commercial revitalization efforts.

Whiteville, North Carolina
Population 5,560

Downtown redevelopment efforts in Whiteville began in the mid-1960s with the development of off-street parking through the purchase and demolition of abandoned warehouses by the Chamber of Commerce. As a result of these activities, parking for 600 cars was created behind the row of stores along Madison Street, the main street of Whiteville. Along with the development of parking, the Chamber also sponsored the replacement of overhead wires with underground utilities, the installation of new lighting, and the construction of new sidewalks. A plan sponsored by a state planning grant for more comprehensive redevelopment, including a mall, met local opposition and was not implemented.

These efforts are viewed locally as a means of maintaining Whiteville's prominence as a retail center in Columbus County and not as revitalization of a declining downtown.

The Chamber of Commerce has taken a leading role in stimulating downtown reinvestment by constructing its own offices on Madison Street and initiating other community projects. These projects have been augmented by individual investments in store rehabilitation and modernization. Financing for new sidewalks and lighting consisted largely of private contributions through voluntary assessments. In some cases, the city provided municipal employees to implement the projects.

A good working relationship with the Cape Fear Council of Governments (COG) has provided the Whiteville Chamber and city government with an excellent source of technical assistance. The COG has made the city aware of sources of financial assistance through various grant programs. The Chamber has been successful in raising matching funds from citizen and civic groups.

In 1976, the Chamber approached the Cape Fear COG for technical assistance. In response, the Cape Fear COG staff arranged a contact with the Community Advisory Service Team of the National Council for Urban Economic Development (CUED). The CUED team visited Whiteville in April 1977 and prepared a revitalization study for the downtown. This study represents the current plan for downtown improvements in Whiteville.

The impetus and leadership for downtown revitalization remains, however, with the Chamber of Commerce. Specific projects which have been designed by the CUED team are currently being planned and pursued by the Chamber in stages. At each step, the opinions of the local merchants and citizens are sought, thus maintaining a high level of participation by the interested community. Priorities have been set through public meetings, and fund raising activities are underway for the revitalization projects.

> "Chamber leaders point to strong community support as the key to maintaining the stability of downtown Whiteville."

The process of downtown development has been formalized considerably. A written document published by the Cape Fear COG outlines plans for three phases of improvements as advised by the CUED study. Phase I of Whiteville's downtown effort calls for developing rear parking lots into plazas, with upgraded rear store entrances. The city has applied for a matching grant from the National Endowment for the Arts to cover the costs of working drawings. Phase II is improvement of the area around the Seaboard Railroad Depot and redevelopment of the depot itself, and Phase III calls for removal of parking from Madison Street and extension of the sidewalks.

The majority of local merchants and officials have supported downtown development efforts. New plans resulting from the CUED study are not accepted totally, but there is firm belief on the part of the Chamber that these ideas can be implemented. Chamber leaders point to strong community support as the key to maintaining the stability of downtown Whiteville.

There are several potential obstacles to the continuing health of the CBD retail center. First, there is the presence of new commercial developments, including a plan for a regional mall. This perceived competition has hastened downtown development efforts on the part of the Chamber. Second, few public institutional anchors exist within the CBD. Even though Whiteville is a county seat, the county government offices are located about five miles from downtown. However, future projects include the construction of a new post office on the fringe of the CBD and the possible reuse of the old post office as municipal office space.

Loss of business to outlying shopping centers has been a problem for some revitalization efforts.

Most likely, downtown redevelopment will continue to be coordinated by the Chamber. No city staff exists currently for providing leadership. The support provided by the city has expanded in the last ten years, and a close working relationship is likely to continue between the Chamber and the municipal government. Cape Fear COG's continuing assistance in securing grants and technical assistance aid also will be crucial to the successful implementation of Whiteville's plans for physical renewal of the central business area.

Hendersonville, North Carolina
Population 7,280

As early as 1947, a group of merchants in Hendersonville initiated efforts to stimulate a reinvestment program for downtown. Professional plans were requested by the downtown business community and completed in 1954 and 1965 in repeated attempts to enlist city government support. However, neither the municipal officials nor the majority of merchants were prepared to fund a downtown renewal program until the mid-1970s.

By early 1974, the physical deterioration in downtown had reached serious proportions despite increasing retail sales. These physical deficiencies included overhead wiring, a lack of convenient parking, and seriously dilapidated facades. In part, this continued deterioration was due to a large number of absentee landlords who were not willing to invest in the long-term maintenance of downtown store buildings. The downtown problems were exacerbated in Hendersonville, as elsewhere, by the successful development of strip retail centers on the downtown fringe. The exodus of shopowners and closing of stores had resulted in nine vacancies in the central business district by 1975.

In 1974 there was a dramatic 20 percent devaluation of downtown real estate in the countywide property value reassessment. This devaluation was in direct contrast to 40 percent and 50 percent increases elsewhere in the county. After the devaluation, the city and downtown business community became aware of the serious possibility of the death of downtown Hendersonville.

Downtown revitalization in Hendersonville resulted from the efforts of a group of businesspersons seriously committed to avoiding the death of the central business district. In the spring of 1972, a meeting of all downtown merchants was held at the Chamber of Commerce office. A core group of persons successfully convinced these Chamber members to separate the functions of downtown redevelopment from other Chamber activities by establishing a Merchants' Association. In a short period over 200 members joined the new association, the association was incorporated, and a manager was employed. The Merchants' Association played a vital role in initiating, implementing, and funding the Hendersonville downtown renewal.

In 1973 the Tennessee Valley Authority (TVA) Townlift Program was brought to Hendersonville by the city government. TVA Townlift offers free technical advisory teams to downtowns within the TVA area. A three-phase plan for downtown revitalization was designed for Hendersonville, including development of more parking and general beautification of the CBD. A group of involved merchants set up a tour through fifty to sixty communities in the Southeast to gather more ideas.

During 1974, the leadership of the Merchants' Assocation undertook a massive campaign of community education through a series of over 100 meetings with civic groups and blocks of individual merchants within the downtown. Audiovisual materials were used to convince the audiences that a reinvestment program would lead to a significant improvement in the downtown area.

Apart from the grass roots organizing and educating, the core group of downtown merchants also pursued official political support from the city government. A crucial success on this front was the formation of a Downtown Committee. The committee served to gather necessary support from city government. Furthermore, as the quasi-public body responsible for downtown improvement, the committee has handled public debate on specific projects. The appointed membership met weekly for over two years to implement the series of projects.

In 1974, North Carolina passed enabling legislation allowing the establishment of special tax districts for special public purposes. The Merchants' Assocation had been so successful in grass roots organizing among merchants and property owners that, at a meeting attended by about 100 persons in December 1974, only three voted in opposition to the establishment of a special tax district in the

> "The study of Hendersonville shows the success of organizing grass roots community support to revitalize a decaying downtown."

Hendersonville central business district. The City Council could hardly override such public support and voted to establish the district.

The tax district has functioned well in providing the funds necessary for revitalization of downtown Hendersonville. A supplementary annual tax is added to all properties within the CBD in order to finance debt service on the Main Street project loan.

Hendersonville downtown revitalization has been a three-phased program. The first phase was the development of badly needed parking by the Hendersonville Parking Corporation, an organization established by a group of downtown merchants. This corporation identifies available land appropriate for parking and takes out options on these properties. The city can either lease the land from the corporation or acquire it outright.

The second phase of the program has focused on a creation of a downtown shoppers' park along Main Street. Initially, there was a lively public debate over the proposed change. In November 1974, however, initial work was begun on the project and was completed in the fall of 1977. The project included the placement of utility wires underground, redesign of the traffic pattern to a serpentine pattern, extension and redesign of sidewalks, and the installation of planters as part of a total landscaping project.

The end result has been a remarkable beautification of Main Street, especially when the trees and flowers are in full bloom. All of the design work for this construction was donated by professionals, but the city contributed a large amount of construction labor and oversaw most of the work. A fulltime gardener was hired by the city, and half of the salary is paid by the downtown tax district funds.

The third phase of the program is rehabilitation of facades and buildings. A group of retired architects has volunteered its time to assist any merchant or landowner. To date, this phase has not been fully operational, although there are individual examples of investment.

It is generally believed in Hendersonville that the downtown renewal program is responsible for saving the downtown. Indicators of this success include filling nine vacant stores and arresting further physical deterioration. Public opposition has largely disappeared in the past few years now that physical improvements and landscaping are being completed.

What exists today on Main Street in Hendersonville is a downtown with renewed life and potential. The retail needs that Main Street serves are separate from those served by outlying shopping centers. The strip centers contain the large discount-type stores that do not serve the same market as the smaller specialty shops and major department stores on Main Street.

Downtown Hendersonville most likely will continue to evolve as a center for the expanding Henderson County area. This region has become a retirement center, largely attracting permanent retirees from the Northeast and Midwest. Future plans include the construction of a civic/multipurpose center near or in downtown, the replacement of overhead traffic signals with cantilevered signals, and the construction of walkways from Main Street to off-street parking located behind individual stores.

The Downtown Committee remains functional and will oversee these plans. It is conceivable that downtown functions will expand to include some residential use of the second stories, which is made possible by a recent amendment to the zoning ordinance. Through very effective leadership by a highly dedicated group of citizens, Hendersonville has turned around the decline of Main Street and downtown. There is every indication that future development of a viable andvalued downtown will continue to evolve.

Hickory, North Carolina
Population 21,860

By the mid-1960s, the central business district in Hickory had become the major government, financial, and retail shopping area of a steadily growing, seven-county region surrounding Catawba County. In spite of this prominence, new shopping centers on the fringe and development along U.S. 64-70 were posing threats to the economic health of downtown. Problems of inconvenient access, lack of parking, seriously deteriorating structures, and a generally unsightly appearance contributed to the city's decision to undertake a major urban renewal program in the central business area. This decision was made jointly by downtown merchants and the city government. In 1965, an Urban Redevelopment Commission was established to administer the planning and implementation of the renewal program.

Downtown revitalization in Hickory has been the result of a federally funded and controlled program allowing massive physical transformation of the downtown. Under the regulations governing U.S. Department of Housing and Urban Development (HUD) urban renewal programs, Hickory pursued a ten year process coordinated by the Urban Redevelopment Commission staff. By the time the Redevelopment Commission disbanded in 1976, $6 million of public monies had been invested in major public infrastructure and property acquisition and demolition.

In direct contrast to the revitalization and downtown development programs of most smaller North Carolina cities, urban renewal provided not only a much higher level of funding but also mandated a public process of planning and implementation. Planning studies were completed by outside consulting firms pursuant to HUD requirements. Public participation was formalized through public hearings and joint city-private sector committees. By 1969, plans for the redevelopment of the seven-acre CBD were approved by HUD, and the program was funded in 1970.

When federal funding for the downtown projects ceased, the Catawba County Chamber of Commerce picked up the lead role in revitalization efforts by establishing a Downtown Task Force. This task force consisted of fourteen members from the public and private sectors. During the next eighteen months, the Downtown Task Force administered a public opinion survey to determine community attitudes toward the new downtown in Hickory, prepared a brochure for dissemination through the Chamber to prospective businesses, and designed a slide and sound show describing the impact of the downtown urban renewal projects in Hickory.

The present phase of downtown revitalization in Hickory is characterized by decentralized decision-making which presents a sharp contrast to the earlier municipal leadership. Currently, individual private reinvestment is taking place, but the downtown is being transformed from a major retail center to a business and financial center. In response to this long-term functional change, new approaches to the downtown planning and development process will be necessary.

The initial project in Hickory's downtown redevelopment was the removal of the Southern Railroad switching operations from the central downtown. During the course of urban renewal from 1970 to 1974, sixty-eight properties were acquired and demolished within the CBD. Another 101 properties were inspected for rehabilitation, and about 75 percent were actually rehabilitated. The traffic circulation pattern in downtown Hickory was redesigned, streets were widened, and off-street parking was increased by about five times.

In 1976, construction began on Union Square Common, a very attractive mall with newly designed sidewalks, landscaping, and lighting. The remainder of the renewal projects, including linear parking spaces, were completed with second year Community Development program funds.

A number of individual merchants have modernized their facades in response to the substantial public investment in downtown financing. In addition, there has been large-scale investment and commitment to downtown Hickory by the major financial institutions in the community. Most recently, several entertainment facilities have been established, and downtown bars and restaurants have

Extensive use of public and private investment for the Hickory Mall gave the downtown a new look.

Photo by Pat Jenny

opened during the evening. The old city hall is being converted into a performing arts center with funds from a federal Economic Development Administration Public Works project. This activity represents a significant shift from downtown Hickory's established character as a retail center which closed at 5 p.m.

One indicator of the success of Hickory's downtown redevelopment is found in the fact that $3 million in private money has been expended for rehabilitation and $10 million for new construction within the central business area. A second indication is the vastly improved physical appearance of downtown. Hickory now has an attractive and interesting CBD. Third, many of the urban renewal tracts are being successfully redeveloped into office space for new businesses.

"... the retail dominance of downtown Hickory has been severely challenged by the presence of outlying shopping centers and the construction of a regional mall."

On the other hand, the retail dominance of downtown Hickory has been severely challenged by the presence of outlying shopping centers and the construction of a new regional mall. In fact, three major anchor department stores have left or are planning to leave downtown Hickory. Public opinion surveys indicate a community preference for shopping in the malls or outlying strip centers.

On balance, it appears that downtown Hickory is at a crossroads. There will be no other major public program of redevelopment, and the Chamber of Commerce is ready to turn leadership for downtown projects over to downtown merchants. The Chamber will recommend that a downtown management or development corporation be established, or a professional agency be retained in order to market the new downtown and coordinate new management techniques. Whether downtown Hickory successfully survives this apparent transformation from a major retail center to a downtown center of smaller specialty stores, business/financial institutions, entertainment, and even residential facilities remains to be seen.

Conclusion

As the results of the survey and the case studies indicate, there is considerable interest in strengthening and improving the conditions of central business districts in many North Carolina communities. Although the situation in each city is unique, there are certain conclusions which can be made with respect to the processes and results of downtown revitalization in small North Carolina communities.

In both small and large cities, the level of cooperation between local government and the private sector is a crucial factor. In many small towns with relatively small municipal staffs and low funding levels, local businesspersons have initiated downtown improvement projects. These private initiatives need the support and assistance of local government in the form of coordinated capital improvement projects, applications for state or federal funding assistance, and the use of municipal employees to implement downtown projects.

Where local governments take the lead in sponsoring downtown upgrading projects, it is still necessary to secure the support and interest of the downtown retailers and the business sector. Hickory is one example of cities that have undertaken extensive central business district urban renewal. At this point, enlisting private sector interest in rehabilitation, facade improvements, and other projects is being accomplished through community education activities.

Examples of successful downtown revitalization are found most often in cities where main street physical improvements are a result of larger efforts to enlist community interest in the downtown. Physical upgrading and aesthetic improvements are more effective as tools to stimulate community use of downtown centers than as ends in themselves. As demonstrated in the case studies of Smithfield and Hendersonville, organizing grass roots support and participation are likely propositions in a small North Carolina city.

"The desire to save downtown springs in part from an emotional need to maintain a symbolic identity for a community."

The era of major funding programs such as urban renewal for comprehensive physical rehabilitation has passed. Current sources of financing from the federal government rely on the concept of leveraging; that is, using a public grant or loan to instigate and direct private investment in target areas such as a central business district. On the federal level, financing for downtown renewal programs is available from several agencies. The most prominent sources of finance are the U. S. Department of Housing and Urban Development's Urban Development Action Grants (UDAG) and Community Development Block Grant programs for small cities, or the various programs of the Economic Development Administration of the U.S. Department of Commerce. Because success with these federal programs is largely dependent upon sophisticated grantsmanship, their use in many small North Carolina towns is limited.

Facade improvements, like the canopies in Smithfield, increase attractiveness of downtowns.

Photo by Pat Jenny

Other national organizations which have monies available for commercial revitalization include the U. S. Heritage Conservation and Recreation Service, the National Trust for Historic Preservation, the National Endowment for the Arts, and the Farmers' Home Administration. Each of these agencies emphasizes different approaches to the task of revitalizing a downtown area. As shown through the case studies, communities must tailor the opportunities provided by these agencies to their own needs and situation.

On the local level, there are many methods of raising funds and organizing a community for downtown revitalization. These include the creation of a special tax district, the establishment of a community development corporation, and parking authorities. It is clear from the case studies that the utilization of existing civic clubs and merchants' organizations can result in significant change in small town central business areas without elaborate administrative frameworks.

Use of existing buildings is a theme of the 1970s revitalization efforts. This approach of adaptive reuse is promoted and encouraged by the funding agencies. Furthermore, rehabilitation fits into a scheme of rejuvenating community interest in a downtown and can be accomplished with incremental financial outlays by private downtown property owners.

In the long run, the functional changes occurring in North Carolina downtowns must be acknowledged. Many central business districts continue to have strong retail bases, especially where anchor department stores have remained downtown and in cities that serve regional trade areas. However, the growth of outlying strip shopping centers together with new investment in financial and business offices downtown signals a new era for the central business district.

Several recommendations emerge from this study. First, the future viability of central retail centers may depend on developing the strengths of specialty stores and shops which can serve community needs not met by large discount centers located on the periphery. Second, the commitment of banks and businesses to downtown is evident in many North Carolina communities and should be encouraged. Third, the maintenance of government and civic institutions in downtown is highly desirable. Post offices, libraries, and city and county government offices must be encouraged to reinvest in downtown when their space is outmoded. Finding new uses for obsolete public agency space can be an effective method of maintaining viable centers.

Most importantly, it must be recognized that the process of rejuvenating a main street business district is not a simple one. Given the substantial changes in life style, consumers' tastes, subsequent land use patterns, and small town economics, few communities will be able to resurrect the vitality of downtown present in the pre- or early automobile cities of seventy years ago. The facilities and services of an older downtown have been scattered across wider areas, and a downtown revitalization program will not reverse these trends.

"Use of existing buildings is a theme of the 1970s revitalization efforts."

Nevertheless, there is a considerable amount of redirection which can be effected in order to save the tremendous physical, economic, and symbolic resource of a downtown center. This study of efforts in North Carolina has demonstrated the level of commitment and resultant successes. There are many reasons for averting the death of downtown centers. Some of the most important of these are to preserve a community identity which can only be captured by the uniqueness of a downtown center; to circumvent the waste of deteriorated buildings and infrastructure in the central core; and to promote a more energy-efficient pattern of land uses, avoiding the ugliness and waste of sprawl happening even in smaller North Carolina cities. The key to the success of this movement will be found in programs that can capitalize on the changing functions of downtowns and can utilize these changes for the benefit of the whole community.

Note

1. All population figures in this article are based on 1975 estimates for the state of North Carolina.

Energy Conservation and Older Housing

Since the beginning of this decade, we have been witnessing the end of an age of profligate energy use. Energy (especially oil, gas, and coal-generated electricity) is costing consumers more and more. Homeowners, in particular, have added concerns. While buyers of new homes may insist on more energy-efficient designs, owners of existing structures face increasing energy bills.

By retrofitting the existing housing stock with better insulation and more efficient mechanical equipment and appliances, a significant reduction in energy consumption (and energy costs) can be achieved. Retrofitting can save 10 to 40 percent of residential energy consumption in the United States, according to a Federal Energy Administration study (AIA Research Corp. 1976). Since the residential sector accounted for approximately 22 percent of the fuel and electricity consumed in this country in 1973 and since existing buildings will constitute more than 70 percent of the total floor space in 1985, (Hyatt 1977, pp. 284-85) residential retrofitting may be important in the nation's total energy picture.

At the same time that energy conservation has become a national objective, the preservation or conservation of the nation's built environment (commonly referred to as historic preservation) has become an objective of government at all levels. This second objective should be considered when attempts are made to improve the energy performance of existing homes, particularly those built prior to World War II, since many methods of retrofitting may be harmful to the design and fabric of existing buildings.

Historic preservation (the preservation or conservation of architectural, historic or cultural resources of local, state or national significance) has long been a national concern. The first major Congressional initiatives in the area of historic preservation were the Antiquities Act of 1906 and the Historic Sites Act of 1935. The National Historic Preservation Act, enacted in 1966, symbolized the evolution of the preservation movement from concern only with individual properties of undisputed national historic significance to concern with neighborhoods and properties of local importance as well as with nationally significant sites.

Significance for the preservationist no longer refers to an association with persons of paramount importance, such as senators, military heroes, or distinguished architects. According to the guidelines for the National Register of Historic Places, the quality of significance "is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association." Under these guidelines, significance may be present in an area even though the components of that area lack individual distinction (Advisory Council on Historic Preservation 1974). Thus, nearly every town in North Carolina probably contains at least one significant residential neighborhood as well as numerous significant individual residences.

Since energy and historic preservation are both concerns of declared national policy, the problem is one of improving energy efficiency without damaging the architectural or historic integrity of an older structure. The goals of energy efficiency and historic preservation are not necessarily conflicting; and yet, several means of increasing energy-efficiency have a potentially harmful impact on properties worth conserving for historic, architectural, or cultural reasons.

Two primary areas are causes for concern: energy improvements which have a damaging effect on the original materials with which they come in contact, and energy improvements which require the alteration of any historic materials or distinctive architectural features (Smith 1977).

Many materials and processes currently used to weatherize buildings have not been fully tested; it may not be known how long a product will last nor whether it will react with adjacent materials and cause irreversible damage. In spite of the immediate energy savings which may be available from the use of new products, it is advisable for

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owners of older properties to use only time-proven conservation devices until thorough performance testing and evaluation of the new products have been undertaken.

Energy Characteristics of Older Buildings

Although older homes are commonly maligned as excessive energy consumers, it is unclear whether well-maintained older homes do indeed consume more energy than their more recent counterparts.

Since many older buildings were built prior to the era of cheap and easily usable energy sources, these buildings were frequently built with relatively heavy building materials and tight-fitting window and door sashes to give them sufficient weather resistance (Harrison 1976). Traditional heavy construction had good insulating properties, and its high "thermal mass" acted to dampen out diurnal swings in temperature, a property especially beneficial during hot summer days (Steadman 1975).

Older homes were usually built with greater concern for proper siting than is found today in many developments. Like many antebellum Southern homes, late eighteenth and early nineteenth century houses in the coastal town of Beaufort, North Carolina were oriented toward the sun and prevailing winds so as to provide an adequate air flow of cool air during the hot summer months (Heritage Conservation and Recreation Service 1978). Full one and two-story porches and wide eaves which shaded living quarters and aided ventilation were common. In Beaufort, rather than ventilating attic spaces with dormer windows which would allow heat gain and glare from direct sunlight, a group of early houses had systems of openings in the porch ceilings to provide ventilation (Little-Stokes 1978). Elsewhere in North Carolina cupolas were commonly used for aiding air flow during summer months since the ceiling openings created updrafts within the interior spaces.

One device used during the Victorian era to keep houses comfortable was ceiling fans, which were used in conjunction with the characteristic high ceilings. High ceilings made for cooler rooms in summer, and fans provided cooling breezes. Since, on the other hand, high ceilings required more heat in the winter, the warmer air at ceiling level was recirculated downward by ceiling fans. Useful during both winter and summer, these fans fell into disuse during the cheap-energy era. Now they are being increasingly revived, for reasons of comfort and energy savings as well as nostalgia (Thompson 1977). Since a ceiling fan uses less than one-tenth the electricity of a single window air conditioner, they can provide great savings for owners of older homes (Royal Windyne Limited 1978).

Double gallery porch design provides summertime energy efficiency.

Photo by J. Myrick Howard

Studies of older office and commercial buildings indicate that the preservation of older structures and the conservation of energy are not conflicting policies. In a 1977 study of New York City office buildings, researchers found that when building age and energy use per square foot of space were compared, the *oldest* buildings used the *least* energy (Syska and Hennessy 1977). Buildings built before 1900 used only 95,000 Btus per square foot, whereas those built after 1941 consumed more. These results were attributed to two principal characteristics of the older buildings: they were heated and cooled by outdated mechanical equipment which probably provided a lower level of comfort than newer equipment; and they were characterized by greater wall mass, lower ratios of glass to wall, operable windows, and cavity wall construction (characteristics of older buildings which contribute to the lower use of energy in both heating and cooling cycles).

> ". . . we have been witnessing the end of an age of profligate energy use."

The second study, compiled in 1976 (Hannon et al. 1976), surveyed all publicly advertised new construction and rehabilitation for 1967 in the United States to measure how many Btus of energy were required, on a square-foot basis, to extract, manufacture, deliver and install all building materials. The study concluded that it took 23 percent *less* energy to rehabilitate existing buildings than to build new ones. This lower level of energy consumption was attributed to the fact that most of the building materials and structural systems were already in place and were reusable.

Although these studies are not directly applicable to older homes, since they were studies of non-residential buildings, the underlying reasons for the findings are applicable. First, due in part to climate conscious design, older homes are usually more responsive to their environments and less dependent on mechanical equipment than many new homes; second, in calculating the energy efficiency of a building, one must consider the energy costs of the building's total life cycle. These costs include the energy costs of demolishing any existing buildings; preparing the site (for example, grading and installing utility hookups); and extracting, manufacturing and transporting building materials. With rehabilitation, many of these energy costs are avoided, so a rehabilitated building may actually require less energy usage in its full life cycle.

Insulation

Thermal insulation of ceilings, floors, and walls is "one of the simplest, cheapest, and most effective means of energy conservation available" (Dumas 1976 p. 45). Many houses constructed prior to World War II were built with little or no insulation. In North Carolina, it is estimated that energy savings of more than 21 percent for heating and air conditioning may be easily derived from improved home insulation. Bringing North Carolina properties up to 1971 FHA minimum standards for insulation would result in savings of 33 percent of the energy used within the state for residential heating and air conditioning (North Carolina Department of Administration 1974).

Three inches of insulation in walls and floor and six inches in ceilings can reduce heat loss/gain in residences by as much as 50 percent (Dumas 1976). Fiberglass ceiling and floor insulation, when installed with proper moisture barriers, can be added to nearly any house without damage. However, cellulose insulation with a sulfate fire retardant should be avoided because it will react with water to make sulfuric acid. Instead, cellulose with a borate treatment is preferable (Smith 1978).

Proper installation of wall insulation in an existing structure is much more difficult than installation of ceiling or floor insulation, at least where crawl space is available. The problem with wall insulation derives from the difficulty involved in installing a vapor barrier and providing a ventilation space for the insulation. A vapor barrier is necessary in the winter because the warm air within the heated quarters contains water vapor which will condense on the first cool surface it touches as the warm air works its way out of the house. If there is no vapor barrier, the water vapor will condense on the studs and facing surface of the outside wall. This condensation is no problem if there is no wall insulation because in older houses there is a ventilation space between the inside and outside walls which allows the condensation to evaporate when temperature climbs above the freezing point.

However, if insulation is added with no vapor barrier, the water vapor passing from the interior to the outside condenses on the studs and outside facing surface and is absorbed by the insulation which acts as a sponge. In the first place, the effectiveness of the insulation is greatly reduced. Second, since ventilation may well be inadequate for the insulation, the side wall insulation may contribute to the emergence of dry rot, a fungus which eats wood (Nielsen 1977).

Aluminum siding detracts from the architectural style of this older home.

Photo by Myrick Howard

Whether one is insulating the ceiling, floors or walls, a vapor barrier and ventilation of the insulation is an absolute necessity. The vapor barrier is always placed on the warm side of the insulation; otherwise it is counter-effective. The vapor barrier, commonly aluminum foil or polyethylene sheeting, should be continuous and unbroken (Nielsen 1977).

In an existing house, it is virtually impossible to install an adequate vapor barrier in the side walls without gutting the interior walls, removing the exterior siding and putting it back in place, or adding a new layer to the interior. All of these alternatives are costly and may damage the building fabric.

Fortunately, wall insulation is less important than ceiling insulation since heated air rises. In fact, wall insulation may not be a good energy investment for many older homes, especially masonry structures and one-story frame houses. More energy savings per dollar of improvement may be derived by other means. Most pre-World War II brick structures were built with cavity walls which are thermally efficient. One-story frame houses tend to lose much more heat through ceilings than through walls as their wall area is substantially less than that of a comparable two-story structure. Instead of insulation, the best energy investments for the walls of these houses may be selective brick repointing with a mortar containing no Portland cement, caulking, maintaining an unbroken paint surface on wooden building components, and weatherstripping windows and doors (Smith 1978).

In spite of its ease of application and initial effectiveness, wall insulation blown into existing wall cavities should not be undertaken on an older property without expert advice and carefully monitored installation. All forms of blown insulation are known to collect moisture and cause deterioration of wooden or masonry materials. Seldom is a vapor barrier installed when blown insulation is used, and, since the blown insulation fills the entire cavity between interior and exterior walls, there is no allowance for ventilation (Smith 1977). Besides damaging the structural materials, the accumulation of moisture in the insulation drastically reduces its insulating ability.

Another problem caused by the moisture accumulation in blown wall insulation is exterior paint deterioration. Examples have been reported where paint has peeled from wood siding within two years after insulating with blown fill (Labine 1977). A dilemma then arises: the houses becomes so expensive to maintain that either it goes unpainted or can be afforded only by the well-to-do; or the owner resorts to using an artificial siding.

Artificial Sidings

Artificial sidings, such as aluminum and vinyl, are marketed as energy-saving devices. Some sidings are applied in an insulated form. Yet, "as insulators, per se, both [vinyl and aluminum sidings] are virtually useless" (Nielsen 1977), and with these sidings the long-term damage may far outweigh any short-term energy savings.

When improperly applied, artificial siding is visually objectionable; indeed, it may have a "disastrous effect . . . on the character of visually significant neighborhoods" (Means 1975). Wide siding (with eight-inch laps) changes the visual character and texture of buildings formerly covered with narrow or beaded weatherboard or ornamental shingles. Although narrow siding ("double 4" or "Colonial width") is available, it is not favored by most homeowners because only the wider siding is available in an insulated form. Either type can add considerable depth to broad areas of wall and thus impair molding profiles (Means 1975). Both give a house an appearance of manufactured uniformity, which is inconsistent with its actual age.

Improper installation may also result in the removal or the covering of a building's trim. "If, as frequently happens, all trim is removed and the siding is run to window and door openings (jumping all casings), the architectural significance of the structure may be totally destroyed" (Downing 1977). Only with very careful installation can the visual impacts of artificial sidings be minimized.

"One factor, more than any other, determines the energy consumption of a building — how it is used."

Artificial sidings create other problems, such as possible fire hazards and potential structural weakening of buildings. Providence and West Warwick, Rhode Island, firefighters have claimed that once a fire has started, aluminum siding contains and intensifies the heat, increasing the extent of damage; they also say that the siding acts as a barrier to firefighters, making control of a fire more difficult (Seapker 1977). These claims have not yet been adequately substantiated, and further research may prove them to be incorrect. Until they are clearly refuted, however, owners of older properties should be hesitant to take the risk of possibly damaging their homes, since older houses are frequently irreplaceable resources. On the other hand, vinyl siding presents a better documented fire hazard: vinyl siding releases toxic fumes after the heat of a fire has become intense (Seapker 1977).

Artificial sidings also trap moisture within the building walls and may cause structural rot. The moisture problem is frequently aggravated when artificial sidings are applied for the purpose of covering up decay or structural weakness. It is vitally important to a building's future that structural repairs be made before any artificial siding is installed. If artificial sidings are used at all, only those sidings which have "weep holes" for draining of condensation should be used. Also, owners should avoid placing siding on the eaves and cornice of a house, since those areas provide the first indication of roof or gutter problems which, if undetected, can cause serious structural damage.

A final disadvantage of aluminum siding as an energy saver should be noted. Since aluminum is manufactured by a highly energy intensive process (Dumas 1976), aluminum siding, even if insulating, probably results in net energy losses for society as a whole. Obviously, energy policy should be shaped around more factors than the simple thermal efficiency of each individual building.

Windows

Windows are another building component which require special consideration when thermal efficiency is to be improved. Window performance is important because of the relatively high thermal conductivity of glass (Dumas 1976) and the incidence of solar heat gain through windows. Since windows have a relatively poor performance level (with the exception of south-facing windows during sunny winter days), older buildings with tight-fitting and weatherstripped windows tend to have an advantage over much modern construction. Older buildings usually have a ratio of glass-to-wall of 20 percent or less, while the ratio for many modern buildings is much higher. Also, having operable windows is another energy advantage for older buildings, since no mechanical ventilation is necessary during many spring and autumn days (Smith 1977). Nevertheless, enhancing these thermal advantages in older buildings without harming their structure or appearance requires care.

Once again, visual interests may conflict with energy concerns. Storm windows reduce solar transmission by 10-15 percent (an advantage during the summer) and typically more than double a window's resistance to cold weather conduction heat losses (Dumas 1976). The visual problem arises because the only storm windows which are widely marketed are those with aluminum frames. Unfinished aluminum frames are incompatible with most visually significant properties; they introduce a color, texture, and material which are incongruous. But although aluminum sales representatives tell customers that the aluminum finish will not hold paint, some homeowners have been successful in painting their aluminum storm windows.[2]

"Whether older properties survive depends in large part on how they are viewed by local governments."

Aluminum frames with permanent baked-on colors are also available and are visually preferable to unfinished aluminum. The baked-on enamel finish is, however, available only with the highest grade of storm windows. In addition to the extra expense for the top grade, which is also highly recommended because of superior insulating qualities (Frasch 1976), another problem arises with the enameled frames because only a few colors are available.

Additionally, aluminum frames are difficult to adapt to windows of unusual shapes and proportions, a characteristic of many old houses. Unfortunately, some resulting adaptations of rectangular storm windows have been unsightly.

Storm windows with wooden frames, which once were commercially available (Frasch 1976), would have energy as well as aesthetic advantages. Aluminum frames transmit nearly twice as high a percentage of the total heat transmitted through the entire window as do wooden frames. in the winter (summer), aluminum frames are responsible for about 25 percent of the heat loss (gain) through the window (Dumas 1976). Moreover, as noted above, aluminum is manufactured by a highly energy intensive process. As a result, the use of aluminum for storm windows is unfortunate from an energy as well as visual standpoint, since both the poor thermal performance and the energy intensiveness of the aluminum production imply a significant offset to the overall energy conservation potential of such windows.

The shading of windows by awnings, blinds, shutters, and shades are energy improvements which property owners of older buildings should consider. External shading is significantly more effective in reducing solar heat gain than internal shading; it can block 20 to 30 percent more solar gain than high-quality internal shading (Dumas 1976). Obviously, exterior shading also has a greater impact on the visual environment.

Different varieties of external shading devices are appropriate for different architectural styles. Exterior blinds and shutters, generally used today only for visual enhancement, can be effectively and appropriately used with early styles for one of their original purposes: shading. Cloth awnings, popular during the Victorian period, are also effective since they can be used for shading in the summer to reduce heat gain and then rolled up in the winter when heat gain is desirable. Some available devices, however, are not appropriate for older buildings. Aluminum awnings, for example, present the problem of visual and historical incongruity, and their permanence reduces their effectiveness as an energy-saving device.

Interior shading devices, though less effective, offer the advantages of flexibility and less wear and tear from the elements. Roller shades, old fashioned devices which are regaining popularity, produce a reduction of solar heat gain inside single-pane plate glass windows of 61-75 percent. Venetian blinds, devices used in houses of the colonial period as well as more recently, reduce gains by 36-45 percent and have advantages as lighting control devices (Dumas 1976). Heavy draperies may be used for both reducing summer heat gain and providing extra insulation in winter. The energy-saving devices, exterior or interior, selected for an older building should be compatible with the building's architectural style as well as with the goals of energy conservation. The commercial availability of compatible shading devices makes it possible to attain both objectives without difficulty.

Lighting

Lighting accounts for about 5 percent of a building's energy consumption. Older buildings generally consume less lighting energy than new

Renovations to improve energy need not interfere with historical integrity.

Photo by Bruce Stiftel

Figure 1

Illumination Recommendations for Schools (In Footcandles)

Areas	IES*(USA)	IES*(Britain)	NYC Health Code	Tinker
Classroom	70-150	20-30	30	20-30
Library Reading	30-70	30	30	15-35
Office	70-150	30	—	15-25
Drafting/Sewing	100-150	70	50	40
Washroom/Locker	20-30	7-10	10	—
Laboratory	100	30	—	—

*Illuminating Engineering Society

Source: Dumas 1976, p. 91

The excessive nature of illumination levels used in the United States is highlighted by a comparison of American school standards with those of Britain, the New York City Health Code, and a study of illumination levels by Miles A. Tinker.

buildings because of the older buildings' lower levels of illumination (Smith 1977). By historical standards, contemporary interiors are overlit.

During the past four decades, the recommended illumination standards promulgated by the Illuminating Engineering Society have increased by more than 600 percent; since 1950, the recommended standards have increased by about 250 percent. These standards, which are widely adhered to as operational minima for design in the United States, reflect a philosophy of providing lighting sufficient for very delicate tasks throughout interior spaces (see Figure 1). Fifty footcandles is satisfactory illumination for most purposes except for very fine and delicate tasks, and a reduction in lighting levels from 150 to 50 footcandles results in a 90 percent reduction in energy consumption (Steadman 1975, p. 51).

Local lights, such as desk and floor lamps (as opposed to overhead lighting), are more economical for providing lighting for special tasks and also provide for better individual control of glare and shadows. Not only is energy saved, but studies also show that excessively uniform lighting has a harmful effect on human psychological health since it produces a visually monotonous and unstimulating environment (Dumas 1976). Additionally, rooms with a variety of lighting levels are usually more attractive and inviting.

Conservation of lighting energy can pose problems for owners of older homes. First, the contemporary standards for over-lit interiors provide constant pressure for increased illumination levels in older buildings. Second, the lighting sources most frequently associated with older buildings are the least efficient illuminators and the greatest heat producers. Incandescent bulbs, the lighting source generally thought to be the most compatible with historic properties because of their "superior" color rendering ability and deep historical roots, are by far the least efficient light source. They generate the most heat, thus contributing to the summer cooling load (Dumas 1976).

This conflict between visual interests and energy interests may be resolved in the future by technological improvements, such as the production of bulbs with more acceptable color rendering abilities at lower wattages, and by changes in aesthetic norms as people get used to different lighting sources. For example, the production of fluorescent bulbs which fit standard incandescent fixtures will undoubtedly gain greater use in older homes than fluorescent tubes, since a primary objection to the use of the tubes has been the unsightliness of the available fluorescent fixtures. Meanwhile, owners of older homes should guard against unnecessarily increasing illumination levels.

Areas of Compatibility

The foregoing discussion is not to imply that energy conservation and historic preservation are conflicting objectives. Rather, the point is that special consideration and care must be given to ensure that energy conservation measures do not reduce the architectural, historic, or aesthetic value of the building.

For every area of apparent conflict, there are numerous areas of compatibility. Many energy conservation measures in no way compromise historic or architectural integrity.

One factor, more than any other, determines the energy consumption of a building — how it is used. Common sense would tell one that an efficient light bulb which is always on uses more energy than an inefficient one which is seldom used; the difference depends on the user and not the equipment. The importance of the "occupant factor" in home energy consumption was highlighted by a Princeton University study which showed that during a given period of time a ratio of greater than two to one in energy usage existed between the highest and lowest users in "what would appear to be an identical dwelling" (Spielvogel 1976).

Probably the most effective means of conserving energy is through the utilization of operational controls — controlling how existing equipment is to be used and making plans for selective equipment replacement. First, activity patterns should be examined, and all facets of energy usage quantified. Then, operational steps, such as adjustment of temperature and illumination levels, should be undertaken, and plans for the selective replacement of inefficient equipment made. Operational changes alone may result in a 20 to 30 percent energy savings with no retrofitting and little or no cost (Smith 1977).

An example of an operational change which results in energy savings is a change in thermostat settings. In North Carolina, a universal thermostat reduction of 5°F during heating season would reduce the energy used for heating by 25 percent; a 5°F thermostat increase during cooling season would reduce the energy required for cooling by 35 percent (North Carolina Department of Adminstration 1974). Significant energy savings can also be realized by the downward adjustment of water heater thermostats as well.

Proper maintenance of heating systems is another energy saver. For example, a half millimeter of soot in an oil burner can reduce furnace efficiency by 50 percent (North Carolina Department of Administration 1974). Figure 2 shows that substantial differences exist between the rated and actual efficiencies of American residential heating systems, indicating that many systems are not operating as well as they could be. This is probably because of inadequate maintenance.

Technological advances requiring changes in equipment make further savings a possibility. Electric heat pumps are two and a half to six times more efficient than other electric heating methods (Steadman 1975). Since heat pumps tend to be highly efficient in areas such as piedmont and eastern North Carolina, which are not frequently subjected to

Figure 2

Comparison of Energy Efficiencies of Fossil Fuels and Electric Resistance Heating Systems

	Rated[1]	Actual[2] Residential
Space Heating		
Natural Gas	85%	75%
Petroleum Products	80	63
Coal	70	55
Electric[3]	38	31
(at heater)	(95)	(95)
Water Heating		
Natural Gas	70%	64%
Petroleum Products	55	50
Coal	70	15
Electric[3]	37	30
(at heater)	(92)	(92)

[1] Outer limits of efficiency of available units in substantial use. Electric generation is assumed to be 40 per cent.
[2] Estimated average experience.
[3] These data do not include transmission and distribution losses.
Source: Dumas 1976, p. 57.

temperatures below 20-25°F, the pump offers a conservation potential of saving 1.362 X 10^{14} Btus per year in North Carolina alone (North Carolina Department of Administration 1974). In homes heated by natural gas, the replacement of pilot lights in existing furnaces with electric ignition would save six percent of the energy used in them (Hyatt 77); conversion from a pilot light to electric ignition presently costs about $95. Air conditioners are now being designed which are 40 percent more efficient than the typical unit now in use (North Carolina Department of Administration 1974).

"... nearly every town in North Carolina probably contains at least one significant residential neighborhood. . ."

Future technological improvements will also aid owners of existing homes who make equipment replacements. An electrodeless fluorescent bulb which fits a standard incandescent fixture is presently being refined and prepared for marketing. Although costing about $7.50, this new bulb will pay for itself several times over during its lifetime because the energy needed for lighting is reduced by 70 percent and the bulb has an estimated 20,000-hour operating lifetime compared to 750 hours for a typical incandescent bulb (Energy Research and Development Administration 1976).

By the early 1980s, gas heat pumps should be on the market. Gas heat pumps are two and one half times more efficient than electric heat pumps since they use fuel burned at the site, rather than fuel burned at a central generating plant where energy losses through the expulsion of waste heat are great. Gas heat pumps will provide an even greater efficiency increase over existing gas furnaces (Energy Research and Development Administration 1977).

Conclusion

Planners in the Southeast can have a great impact on the fate of older houses within the region. Whether older properties survive depends in large part on how they are viewed by local governments. If an older neighborhood is zoned commercial or is expected to be the site of major thoroughfares, the housing in that area is doomed. On the other hand, if a city or county makes preservation a priority (in its capital expenditures, its zoning, or the management of its own property), its older housing is likely to be treated with respect by owners, and older neighborhoods will survive.

Local government can also have an impact on whether energy conservation measures are implemented in a way which is compatible with the architectural and historic fabric of a building. Planners who deal with housing should be familiar with the problems of trying to meet both preservation and energy priorities.[3] By being knowledgeable of the problems, the planner can influence and educate members of the public about how to work with older properties.

If a city or county has an historic district commission or historic properties commission, the commission can play an important role by becoming knowledgeable about energy conservation techniques and working with property owners. Since an historic district commission can disapprove inappropriate or incongruous exterior alteration, it can assure that energy measures do not conflict with appearance and historicity when exterior appearances are to be affected. A commission is also in a position of being able to educate property owners and encourage compatible measures, even where there is no effect on exterior appearance.

The owner of an historic property designated by a city or county must give the local historic properties commission ninety days notice prior to making any alteration to this property. During this period the commission can work with the owner to assure that appropriate energy conservation measures are to be taken.

With both an historic district commission and an historic properties commission, the key ingredient for the successful integration of energy and preservation objectives is knowledge. The likely source of knowledge will usually be the staff person for the commission — the planner. The planner who is conscious of the potential pitfalls can be an old house's best friend.

The Southeast has exciting cultural resources to conserve for future generations: buildings responsive to people, buildings designed to be in harmony with their environments, buildings reflecting earlier eras and mores. The challenge for advocates of preservation and for planners is to be cognizant of the future, as well as of the past. In the future, buildings must be more energy efficient than they are today if they are to remain responsive to people and their environment. Older buildings must come to reflect the needs of future eras, or else they will become lost relics of the past. Planners, homeowners, and preservationists should commit themselves to seeing that the adaptation of our cultural resources to meet future needs occurs as smoothly as possible.

Notes

1. It is interesting to note that many of the traditional means of adapting a building to its site are being revived now, especially as architects and builders try to take advantage of the sun's energy.
2. Frasch (1976) suggests several methods to enhance chances for aluminum painting success. One suggestion is to let the aluminum weather before painting it; others are to brush the surface with a wire brush or to wipe it down with an acid such as vinegar prior to painting.
3. Two excellent sources of information are: "Preservation Brief #3: Conserving Energy in Historic Buildings by Baird M. Smith (available free from the Technical Preservation Services Division, Office of Archeology and Historic Preservation, Heritage Conservation and Recreation Service, United States Department of the Interior, Washington, DC 20240) and *Insulating the Old House: A Handbook for the Owner* (available for $1.90 from Greater Portland Landmarks, Inc., 165 State Street, Portland, Maine 04101).

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