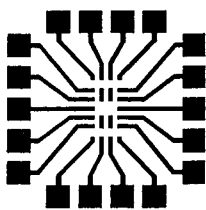




Planning for the Boom at the Local Level

by William Brazeale and John G. Scott



In March 1981, eight government officials from the City of Raleigh and Wake County spent nearly a week in the Santa Clara Valley of California, the area between San Francisco and San Jose that has become known as "silicon valley." They interviewed a wide range of government and industry officials to learn how the microelectronics "boom" in that area during the last 20 years has affected local services. "If mistakes were made there, how can we avoid making the same mistakes here?" asked William Brazeale and John G. Scott, authors of "Report on a Visit by Officials."¹

Much of the report summarizes recent developments in silicon valley and describes how, in many cases, services within both the public and private sectors came to be underfinanced and

Wake County Planning Director John Scott (left) and an assistant examining maps in their Wake County Courthouse office.

overburdened. After reviewing the California experience, the report addresses specific concerns for Raleigh and Wake County officials and citizens to consider. The excerpts from the report below provide an important dimension to the public policy discussions concerning the influx of the microelectronics industry into North Carolina.² Moreover, they illustrate how one locality is attempting to plan for a rapid expansion of industrial development, a process that is taking place in more and more parts of North Carolina.

¹William Brazeale and John G. Scott, "Report on a Visit by Officials of the City of Raleigh and the County of Wake, North Carolina to the Santa Clara Valley, California," May 4, 1981. Limited copies of this report are available from the Wake County Planning Office.

²These excerpts come from the report's "Conclusions" section, pp. 23-34.

William Brazeale is assistant planning director, city of Raleigh. John G. Scott is director of planning, Wake County. Photos by Paul Cooper.

Microelectronics and associated development turned silicon valley into one of the most affluent regions in the nation for the private sector. But the public sector has not fared nearly as well. Although a few of the communities — notably Santa Clara — appear to have managed well enough, others are hard pressed to provide public works and services fast enough to catch up with the boom, let alone

get ahead of it. There are serious problems with solid and liquid waste disposal, the transportation system, fire protection, increasing crime rates and the beginning of slums. Air pollution from heavy traffic is a problem some of the time.

Those in the private sector have concentrated on "their thing," perfecting new devices for which there is great demand, supplying materials to manufacturers, training scientists, building, buying,

How to Use the Land

The recommendations below on land use planning are excerpted from "Comments by Mr. William Brazeale, City of Raleigh Planning Department," Appendix C of the "Report on a Visit by Officials" (see footnote 1 in main article for full citation).

The major problems encountered by Santa Clara County are common to areas experiencing rapid growth. Fragmentation of decision making in Santa Clara County gave rise to: 1) an overall inefficient land use pattern; 2) a tendency to delay decisions on public improvements or attempts to transfer the costs of development to other jurisdictions.

Dispersion — clustering of growth.

Continuation of dispersion of job sites throughout Wake County, located in close proximity to housing, will help to avoid the massive one way commuting that occurs in Santa Clara. In addition, major job centers should be clustered within or close to existing municipalities such that:

- Existing urban facilities such as parks, schools, and fire stations can be utilized;
- Where necessary, urban services can be incrementally expanded to provide for both industrial and new residential developments. Public improvements such as streets which are constructed during development become much more efficiently utilized if rapid urbanization concentrates in the same vicinity.
- Competition among municipalities for tax base expansion into developing areas far beyond existing corporate limits can be avoided.

Development regulations.

Development regulations should be responsive to the changing character of the high technology industries, and help provide incentives for higher density housing that will be needed in the future.

One solution to help relieve the housing shortage in Santa Clara County is to increase housing densities near employment centers. However, rezoning scarce vacant land to higher densities has proved difficult due to the citizen opposition. To avoid the same problem in Wake County, mechanisms should be established to assure that as the demand for high density housing increases, adequate amounts of properly zoned property will be available, especially near employment centers. Similarly, there should be adequate nonresidential zones within each municipal jurisdiction to assure enough available sites for industrial growth. Zoning regulations should be tailored to high quality, indoor oriented fabrication facilities that are characteristic of the semiconductor industry. Regulations should also take into account the potential dramatic increase in the number of employees over short periods of time that could occupy such facilities.

Forecasting and monitoring of growth.

Coordination with existing and proposed industries to accurately monitor employee growth plans is important to provide adequate lead time to construct needed public improvements for the projected population growth. There was a lack of precise techniques to monitor the changing character of semiconductor industries in Santa Clara County during the rapid expansion in the 1970s.

Provision of services outside municipal jurisdictions.

The concept of at least temporarily preserving open space/farm land and restricting urban growth to logical increments within such boundaries was accomplished in Santa Clara County by: 1) the limitation of public utility extensions

or selling . . . Local government officials in silicon valley were not accustomed to systematic inter-governmental coordination or close coordination with industry and were not disposed to give planning high priority in policy, administrative, or operational affairs. Generally they zeroed in on the excitement and economic benefits of enormous growth in the private sector, and overlooked or underestimated effects in the public sector.

Consequently, serious problems have developed.

How can Wake County avoid growth pains and undesirable consequences?

Since land is literally at the bottom of the infrastructure, a general land use plan should be prepared and adopted . . . It is questionable whether we have really considered broad purposes



and connections to areas within urban growth boundaries; and 2) the restriction of lot sizes in the rural or transition areas to 20 or 160 acre minimums.

Unless similar restrictions on urban development are instituted in Wake County, there will continue to be suburban scale development beyond the jurisdictions of cities and towns. Similarly, if major job centers, such as the area surrounding the airport, begin to develop outside the jurisdiction of Wake County towns, provisions must be made for adequate services to such areas, especially regarding transportation facilities for commuters from residential neighborhoods elsewhere.

Transportation.

Thus, it is important that the rate of development not outdistance the availability of adequate roads to serve commuters in the private automobile. The scale and density of employment clusters

in Wake County should be monitored to assure that traffic generated is commensurate with road capacities. Improvements should be made in the same time frame as development occurs. Provisions should be made to assure future construction of major thoroughfares connecting job clusters and residential areas.

Planning for transportation needs involves careful attention to job and home density patterns.

- Scatter employment centers in clusters throughout the County to make more efficient use of roads by helping to more evenly distribute peak hour commuters in several directions.
- Surround employment clusters with high density housing to give workers the opportunity to locate close to their jobs, and to commute over local collectors or minor thoroughfares, rather than relying solely on freeways.

“Disperse places of employment and surround them with residences.”

— recommendation from Silicon Valley

other than the habitual, reflexive desire to “grow and develop” and “add to the tax base.” We observed that the billions of dollars added to tax bases in silicon valley somehow didn’t solve local government problems; however, at least one city did adopt a macro-plan fifteen years ago and abided by it “pretty accurately.” Officials of that city reported that they’re in good shape financially.

Silicon valley people recommended repeatedly that we avoid overly concentrated industry: “Disperse places of employment and surround them with residences.” In other words, don’t repeat their mistakes. Another silicon valley advisement was that local governments work together as actively and cooperatively as possible. Too much provincialism can stifle what is best for the greater metropolitan area. State and local governments should coordinate their efforts and goals, and working partnerships between industry and local government should be established to affect [sic] mutual aid. The Santa Clara County Manufacturing Group was established for just those purposes.

Those recommendations are certainly acceptable, and we note that significant steps along those lines have already been taken here — for example,

regional councils of government, city-county liaison committees,* the proposed State Balanced Growth Policy. Those efforts could and should be improved. In regard to state-local and industry-government cooperation, a snag appears in the form of a need to protect confidentiality in some instances. State agencies go industry hunting. There’s a right time and a wrong time to let governments know about prospects, but local governments should be consulted as soon as possible.

The same type of problem arises in industrial liaison. The idea is for employers to keep in touch with local governing bodies, tell them about expansion plans, changes in the work force, changes in processes that might affect public facilities, etc. Corporations may be understandably reluctant to expose some of such plans. One way to overcome the confidentiality aspect was found in California. A certified public accountant was retained to obtain information from the companies and to release it to local officials without disclosure of sources. Industries were willing to cooperate on that basis. Something similar might be done in Wake County. Among other things we need to know where employees live, especially when a new industry has hired a work force. □

A General Electric microelectronics facility under construction in the Research Triangle Park.

*The Wake County committee is now developing a county-wide planning process.

