

Landscape as Mentor: Repositioning Urbanism in the Suburban Setting

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"... Lighten up... You are practically the establishment now... You are also perpetuating a rather middle-class notion of the good life, just at the moment when genuine alternatives may be advanced."

Alex Krieger¹

".... I am most concerned that the landscape has been rather moot in these presentations.... To borrow a phrase from Donlyn Lyndon, who spoke at a symposium called 'Landscape is Mentor'... Was the landscape a mentor for any of these projects in the way it could have or should have been?"

Warren Byrd²

These excerpts of critical commentary from the 1998 Seaside Debates frame two key issues for community design and planning in the American suburban setting. Notwithstanding his mostly scathing rebuttal of the New Urbanist love fest at the Seaside Institute³, Alex Krieger acknowledges that the basic and positive underlying principles of the movement are nearly impossible to refute. While the Charter of the New Urbanism⁴ posits a number of laudatory goals, the movement has been accused of failing to deliver its promise of a better world. How can the principles (and principals) transcend self-satisfaction and the inadvertent perpetuation of many suburban problems that the proponents seek to confront? Krieger argues for a continued focus on inner-city potential for redevelopment, the messy vitality of "real" urbanism, while more generally advocating a broad and more inclusive vision of multiple urbanisms in contemporary society. His points are well founded, but they leave a void when it comes to the sad reality of ubiquitous exurban sprawl.

When one examines a collection of New Urbanist projects, the impression of homogenization is almost impossible to avoid. In his own critical commentary, Colin Rowe joins Alex Krieger in addressing this problem at the same 1998 conference⁵. In reviewing the proceedings from the Seaside Institute and other critical writings⁶, it would seem that several key issues are

underutilized and underappreciated in the design and planning of the American suburban setting. These involve the role of cultural landscape as a profound signal of community identity, opportunity and positive constraint. These considerations can serve to disrupt the somewhat neutralizing tendencies of New Urbanism, while challenging some of the most pernicious attributes of amorphous suburban growth.

This paper explores the virtues and limitations of New Urbanist sensibilities as tested through a master plan commission for a designated growth area in Albemarle County, Virginia. This 3000 acre area surrounding the small village of Crozet is characterized by a cherished landscape, one that resonates among the citizens of Crozet for its beauty, history, and shared identity. Through the master planning process and strategies, elevating the significance of landscape as determinant and inspiration poses a constructive alternative to contemporary suburban practice. Confronting the "real world" dynamics of master planning and public process with a more sensitive and creative model has proven to be compelling to the citizens of Crozet, the county government, and the development community who will be building most of the new housing, businesses and public amenities. The consultant team included an architect/community designer in the lead role working in close collaboration with a landscape architect and another colleague who is a planning professor. The interdisciplinary approach was one key element in the success of the process in addressing the complex and overlapping issues of this commission⁷.

LANDSCAPE AND CONTEXT

The landscape as source of inspiration, guidance and ethical positioning offers overlooked and under-appreciated potential. To be sure, most New Urbanist projects utilize landscape strategies with streetscapes, water features and parks. The role of "open space" often figures prominently in the relationship of

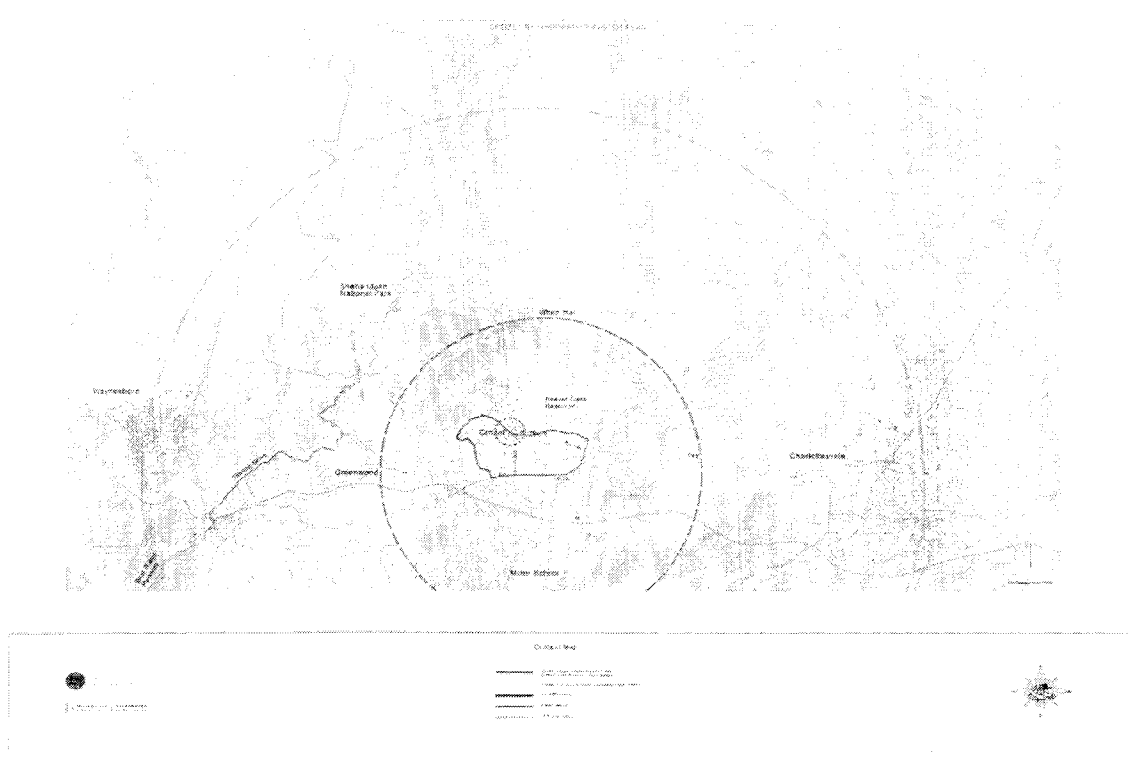


Fig. 1. USGS context.

the much-heralded “center” versus “edge” dialogue. Yet at the more fundamental level of shaping community, the landscape often appears in a rather tepid, limited, and purely supporting role. Our approach views the role of the landscape as central and cultural layers of site permeate the essential identity of new and infill development.

Cultural landscape⁸ addresses a range of issues involving a community’s identity. It is almost an automatic expectation at this point that community design and planning projects must engage the public in some form of participation. Part of the goal of this kind of effort is to find shared principles, many of which address underlying and historic identification within a community. Communities can be enriched when guidance is found in the context of existing historic locations, celebrating icons that give the town its identity.

This paper highlights an example where an interdisciplinary community design, planning and landscape architectural team has attempted to explore the expanded potential of neighborhood-oriented design. Although there are many dimensions to this work, two key elements emerge. The cultural conditions of the place and its landscape identity have formed the fundamental framework for the master plan. Crozet, Virginia is an excellent case study involving the potential of landscape and place in guiding the form and process of development of a suburban area.

CROZET

Crozet, Virginia is located along the base of the Blue Ridge Mountains, twelve miles west of Charlottesville. It is a designated growth area, with a defined growth boundary. This area has been a center of peach and apple growing for nearly two hundred years, with more intensive agricultural development occurring over the past one-hundred and thirty years in conjunction with the construction of an east/west railroad connecting the Tidewater area with the Shenandoah Valley (including a tunnel through the mountain).

In fact, the small town of Crozet was founded with the placement of a railroad Depot in a location where several fruit processing plants had emerged. This industrialized process of agricultural production included several large plants, and eventually refrigerator and freezer buildings to process and store the fruit (including the largest freezer building in the state). While the last large fruit processor moved its business out of town eight years ago, orchards continue to dominate the landscape surrounding Crozet, although their extent is perhaps half what it was at its peak.

This project is the result of a commission that evolved out of the need to define the form of growth and implementation strategies to guide a pattern as an alternative to the “by right” suburban sprawl⁹ that is currently well underway through the aegis of conventional zoning.

At the center of this enterprise is an awareness of and respect for the landscape in this extraordinary place: a landscape that is not only bucolic and beautiful in its rugged rural nature, but one that registers its agrarian past and present. Beyond the working agrarian landscape, the area is characterized by a rolling topography with an interlaced dendritic stream system draining into several key creeks including Beaver Creek to the north of “downtown” and Lickinghole Creek to the south. The beauty of the landscape rests in the unique combination of rolling farmland, tracts of forest, the small streams and wetlands, all set against the backdrop of the Blue Ridge Mountains. Scale is important. Short vistas combine with larger panoramas, establishing a visual framework that is distinctive and much loved by the citizens of Crozet—or Crozetians as they call themselves.^{10,11}



Fig. 2. Blue Ridge Mountains & farms.



Fig. 3. Downtown Crozet Depot.

GUIDING PRINCIPLES FOR THE MASTER PLAN

The following “Guiding Principles”¹² were developed early in the master planning process by the citizens with support from the consultants and county staff:

1. The physical design of Crozet is built upon distinct neighborhoods, a historic downtown area and other smaller centers, which are appropriate in scale and type to the community’s planned growth patterns.
2. Linking us both within the community and to our neighbors, Crozet values multiple transportation options and infrastructure to support ease of access throughout the community. Of particular note, the community promotes pedestrian and bicycle options for alternative transportation choices.
3. Offering diversity, affordability and choice in its housing stock, Crozet attracts people from many social and economic experiences.
4. Crozet values the contributions of locally grown business in providing both jobs and enhanced quality of life for residents.
5. Through a variety of cultivation, recreation, and conservation efforts, Crozet values its natural resource assets.
6. Our families and our individual and shared histories provide the foundation for our identity. Crozet is a place that encourages a sense of community in its diverse activities, institutions and interests.
7. Crozet actively supports its many community facilities and the role they play in the lives of its citizens, and believes that these facilities must accommodate the changing needs of the community as it grows over time.

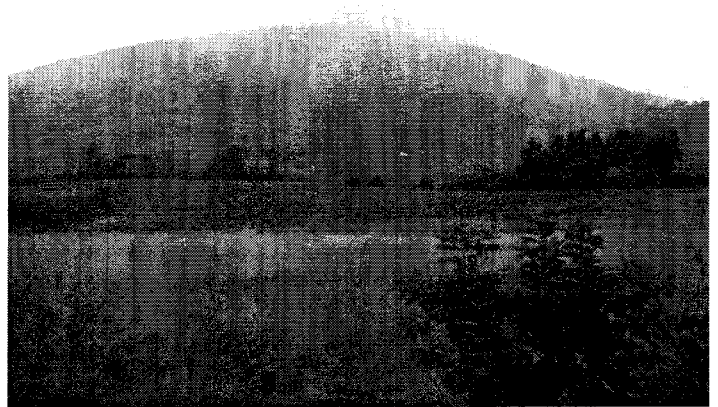


Fig. 4. View of orchards and mountain beyond.

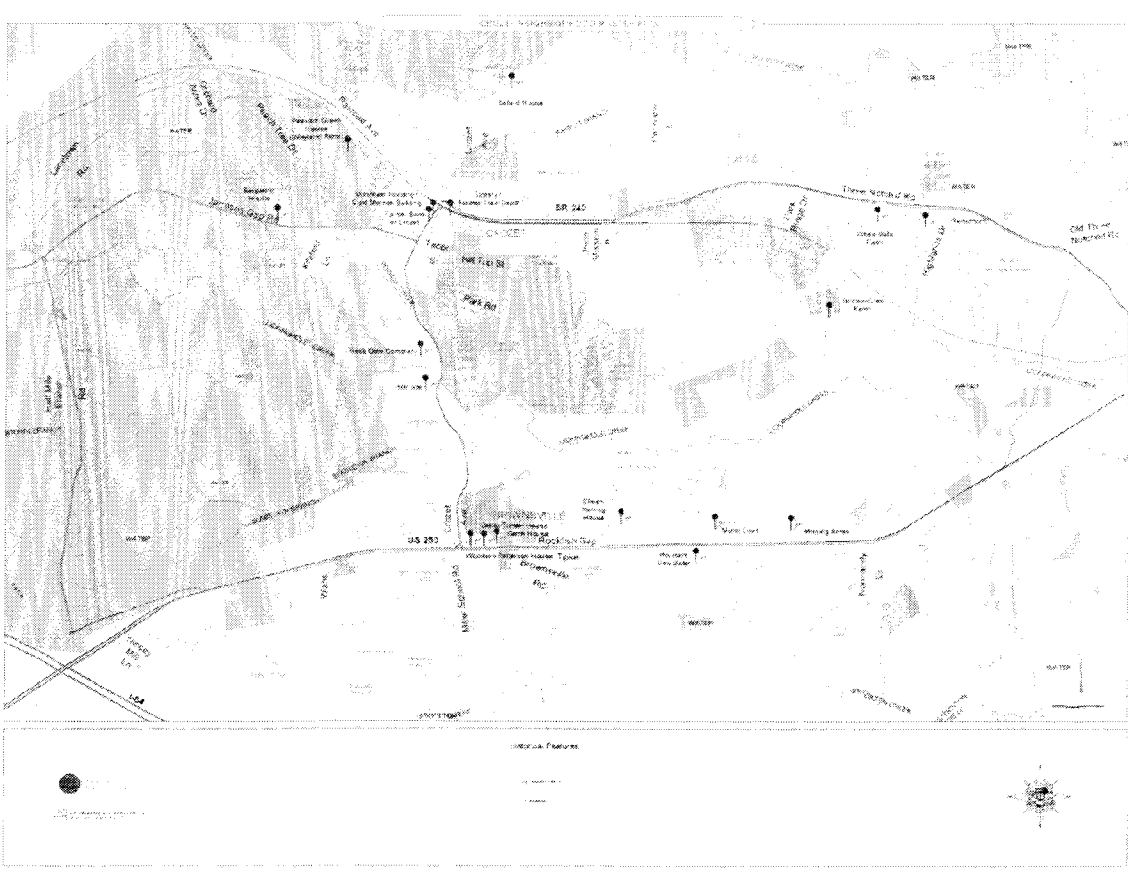


Fig. 5. Historic Orchards circa 1933.

GROWTH MANAGEMENT

The designated growth area rests to the south of downtown Crozet, between two state roads (Route 240 to the north and Route 250 to the south). This is the only area of Crozet that is

serviced by water and sewer, with a water runoff protection basin at the eastern end of Lickinghole Creek.

This watershed includes several existing small neighborhoods, the area's main community park, and substantial areas of farmland that could be developed immediately under current



Fig. 6. Lickinhole.

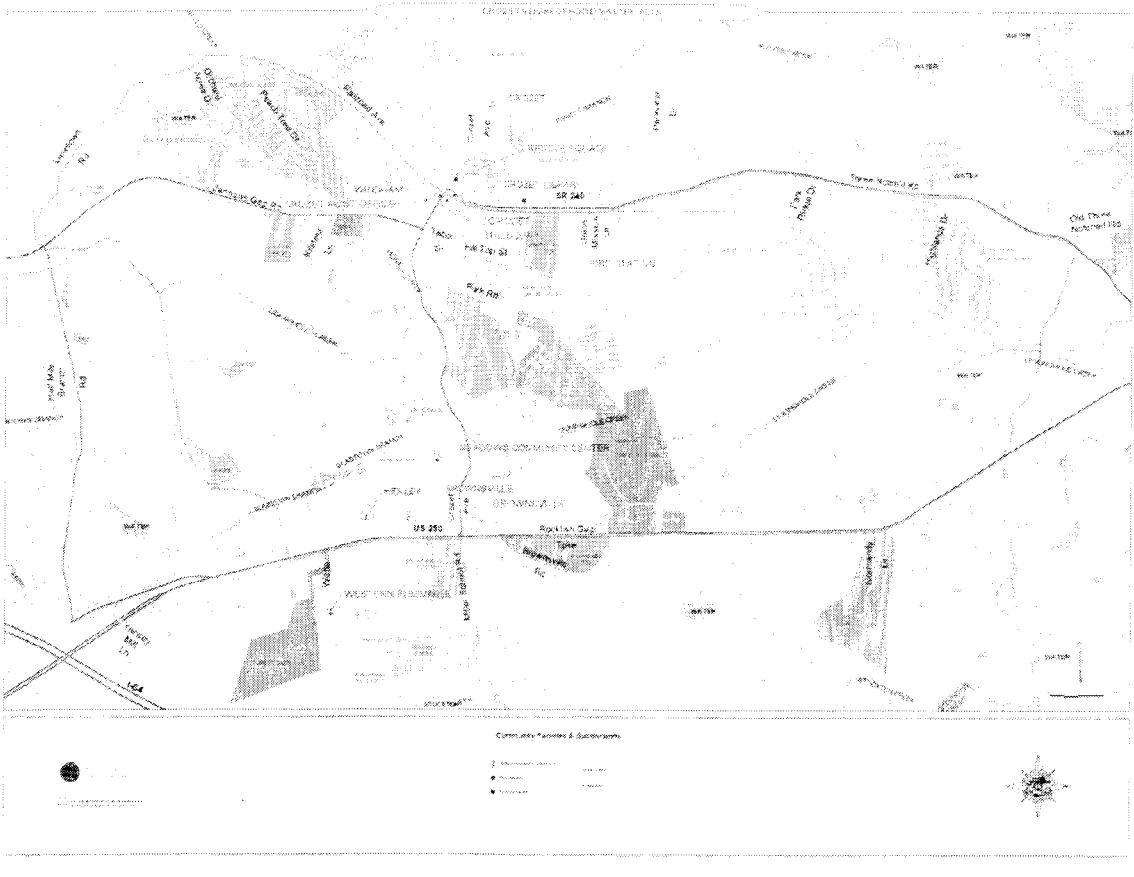


Fig. 7. Existing Neighborhoods.

COLOR	COUNT	SUM_ACRES	DESCRIPTION
2	1	25.8940	Community Service
3	2	101.7880	Parks and Greenways
7	1	52.4060	Institutional
19	2	168.9210	Urban Density
36	1	320.5060	Industrial Service
65	3	16.5740	Neighborhood Service
140	4	2186.3780	Neighborhood Density
197	1	24.3620	Transitional

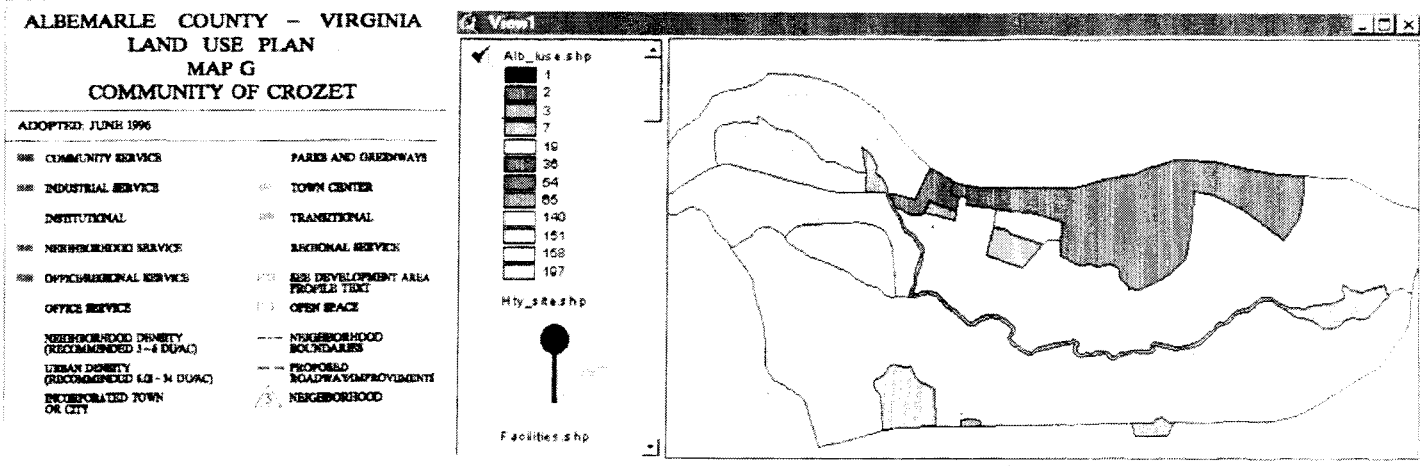


Fig. 8. Existing Land Use - Crozet Comprehensive Plan (before Master Plan).



Fig. 9a. Transportation Diagrams with failing roads under by right build out.

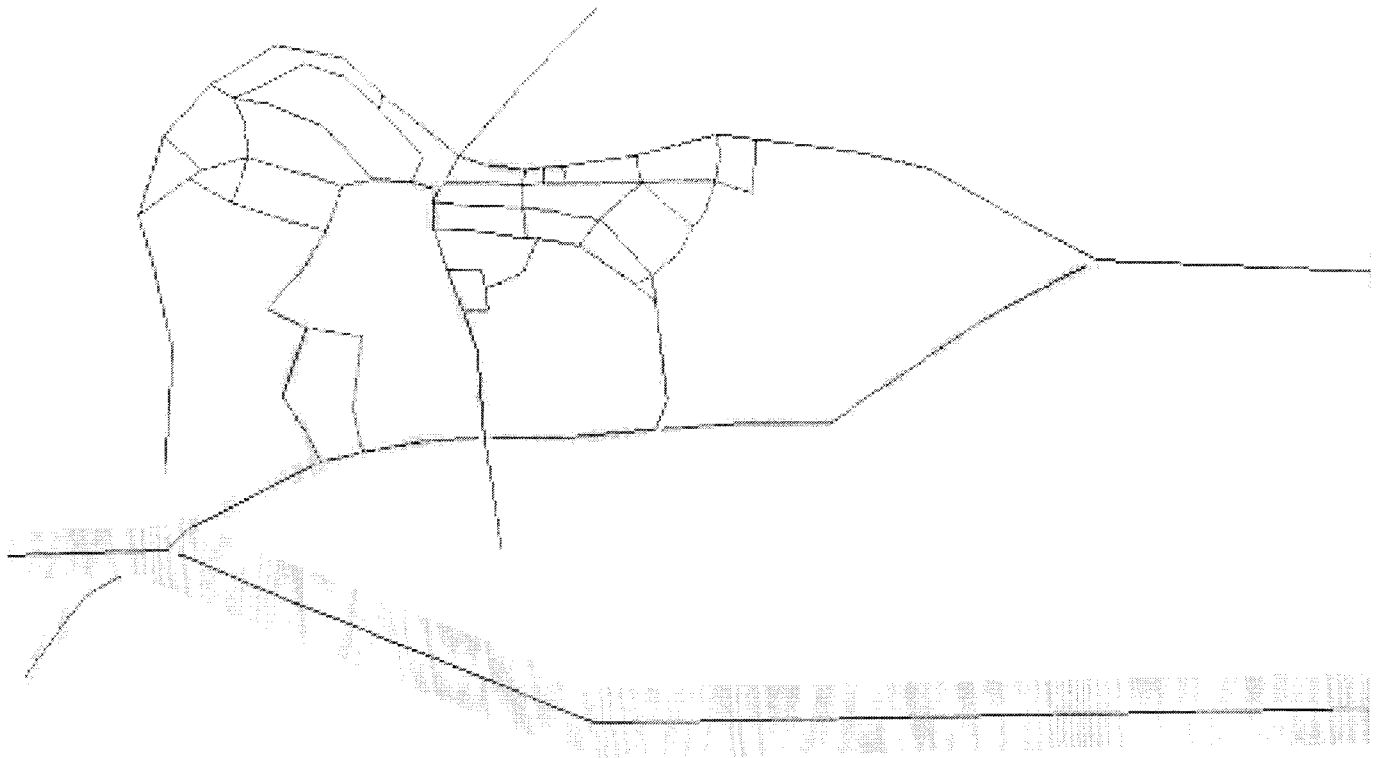


Fig. 9b. Traffic dispersal through Master Plan's interconnected system.

zoning designations (R-1 to R-6 depending on the area). The existing Comprehensive Land Use Plan shows a characteristically dysfunctional segregation of uses and no indication of how individual properties might be developed in an integrated or interconnected manner.

Growth is well underway already in Crozet, characterized by cul-de-sac single-family residential developments with no community amenities (sidewalks, parks, etc.), and no interconnection with other neighborhoods. These “by right” developments are simply adding to the burden of the existing schools and limited roadways in the area, without providing any assistance in addressing the infrastructure and service needs of Crozet at large. While Crozet has been identified for growth for thirty years (dating back to the introduction of water and a sewer interceptor connecting east to the Charlottesville treatment plant), no effective plans for controlling the growth had been put in place until this time.

development, and set in place the general framework for how the process could unfold. The goal is to preserve rural landscapes outside growth areas by channeling development and controlling the form of community design within those areas through Master Plans. Pedestrian-oriented or walkable settings¹³, with compact development, and a mixture of uses form the basis for envisioning neighborhoods as the building blocks of community. The Crozet Master Plan is the first of a series of seven that will be developed over the next several years.

In 2001, Albemarle County adopted the so-called “Neighborhood Model” as part of their Comprehensive Plan.¹⁴ This award winning approach to growth management designated areas for Concurrency.

The idea of developing concurrent support for a community’s growth is easily understood, but seldom practiced. Managing growth by insuring that schools, streets, parks, and social services are in place concurrent with a community’s population growth seems like common sense, but it is impossible to achieve under the current pattern of by-right suburban development. Individual developers are responsible for their individual properties, with only traffic impacts occasionally intruding upon the free exercise of their individual property rights. Many in our suburban society assume that the relatively low cost of building farther and farther out from urban centers accompanies a free ride when it comes to the hidden or not so hidden costs of the public investments necessary to support the added population.

The Crozet Master Plan not only envisions a different form of development – compact, pedestrian-oriented and mixed-use. It also develops an “Implementation Strategy” to show how new development can and must pay for larger community needs including a new neighborhood elementary school built into a new development, streets with sidewalks, bike-lanes, and street

trees, two new public parks for the community and other attributes that would never appear under the normal process of by-right development. To be sure, the public sector (county government, Virginia Department of Transportation, etc.) still has a role in funding certain things. Yet the potential for growth to benefit rather than harm the existing and future identity of Crozet is fundamental to the whole enterprise of the master plan.

To highlight one example of the benefits of a compact, interconnected form of development, the team modeled transportation impacts under a “by right” build-out scenario, where current zoning is built out to capacity with no additional facilities provided versus a master planned scenario of growth. As a result of greater interconnections within the growth area and additional employment and retail opportunities, the traffic impacts are reduced by nearly 50% on average.

Through our strategy, no new roads would need to be greater than 2 lanes or 35 mph, and no existing roads would need to be widened. Not only does this represent a significant cost saving to the county and VDOT, more importantly it speaks to the community’s design to reinforce their much valued quality of life in their small town community. The coordinated set of implementation strategies also allows these facilities to emerge concurrent with the development itself, without waiting for the long process of County Capital Improvement Program funding or VDOT funding, both of which are seriously pinched in the current budget environment anyway.

FORM OF DEVELOPMENT AND THE LANDSCAPE

How can a community grow from a current population of under 3,000 to 12,000 or more while retaining and honoring the underlying conditions of its place? This project draws on the metaphor of seeing landscape as mentor, the source of strength and measured guidance. Honoring the conditions and memory of Crozet begins with careful attention to the historic downtown area. Although infill development is a challenge for many reasons, opportunities for strengthening the center form the focus of the master plan at several levels. At the level of policy, we determined early on that no large scale commercial development should take place along the outlying state roads, because these would have the effect of drawing economic and social vitality out of the downtown area. This strategy meshed very well with a parallel concern about retaining Route 240 and Route 250 as scenic by-ways rather than allowing them to turn into the ubiquitous strip shopping corridors that can be found elsewhere in communities throughout the United States.

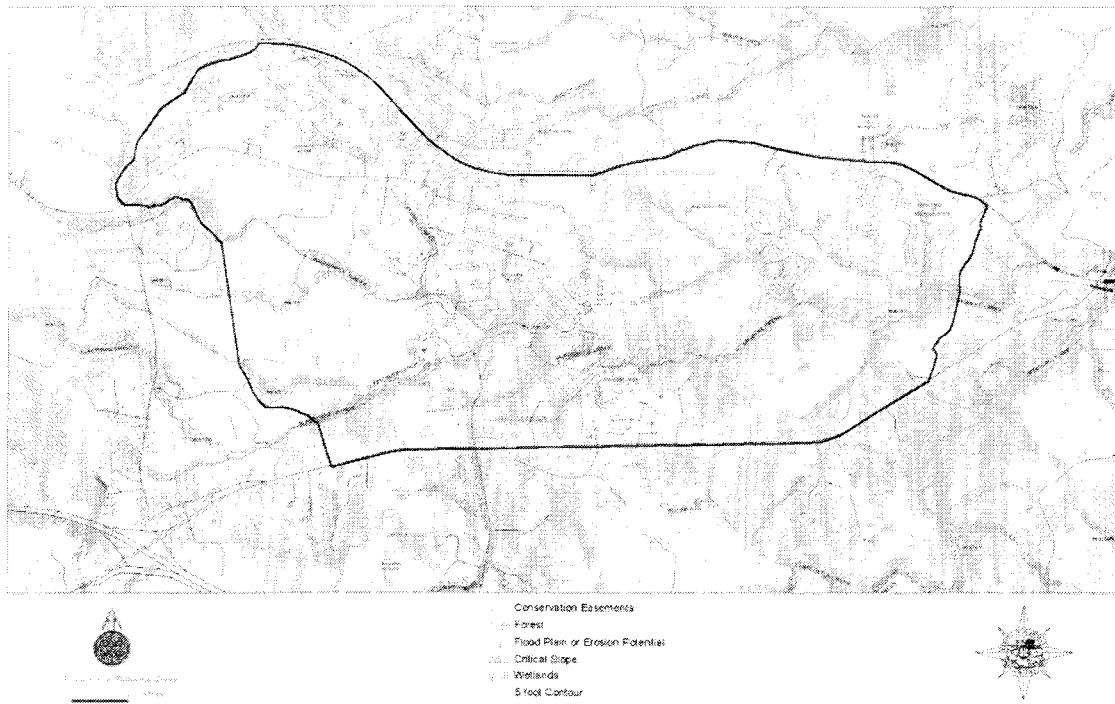


Fig. 10. Natural systems.

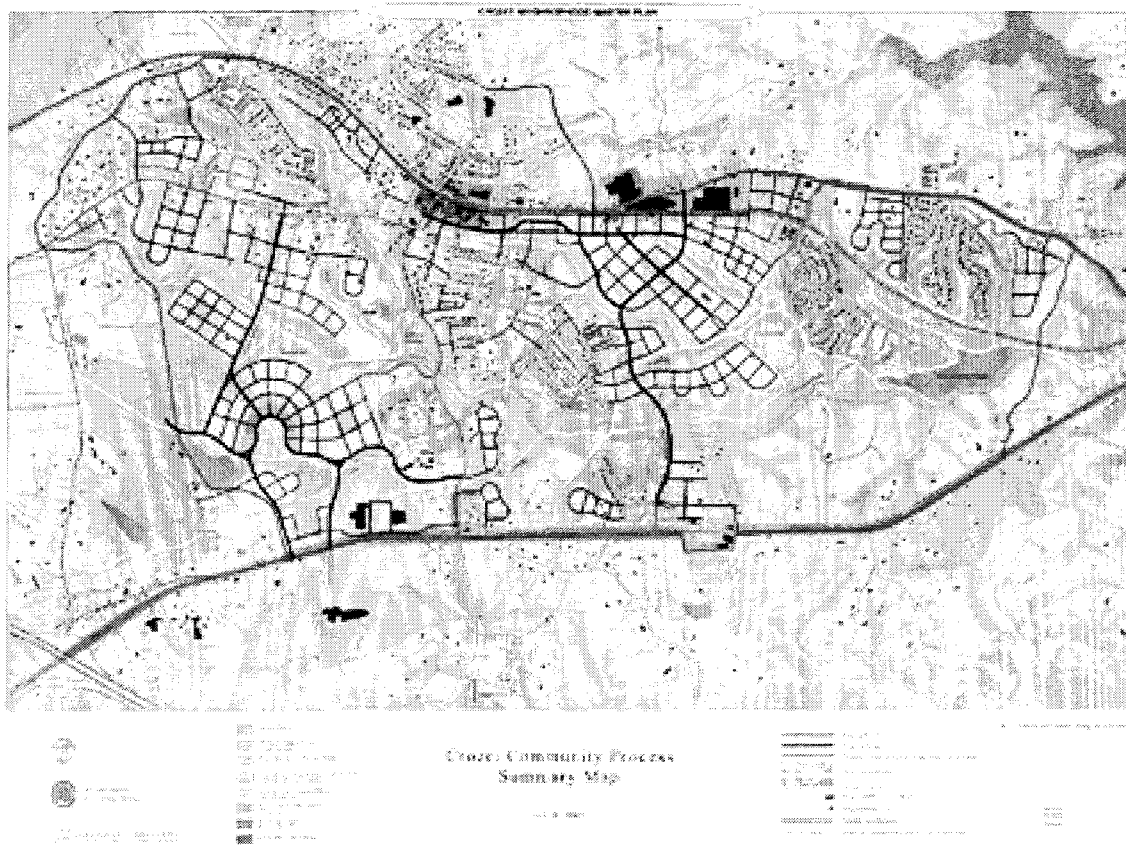


Fig. 11. Master Plan.

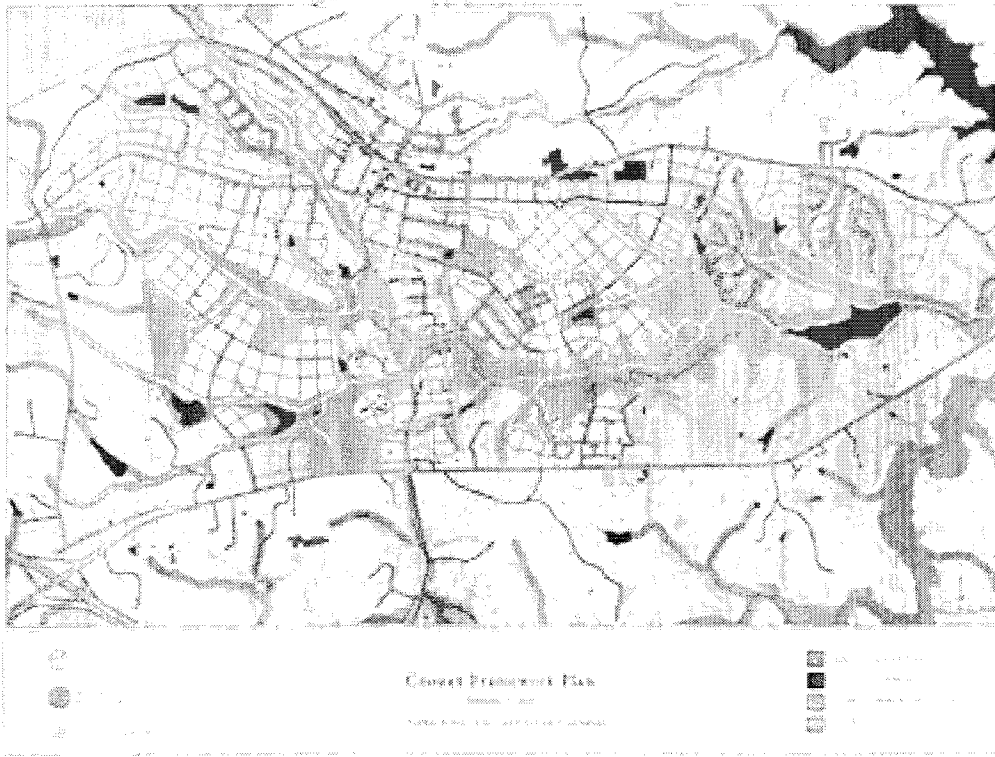


Fig. 12. Green Infrastructure.

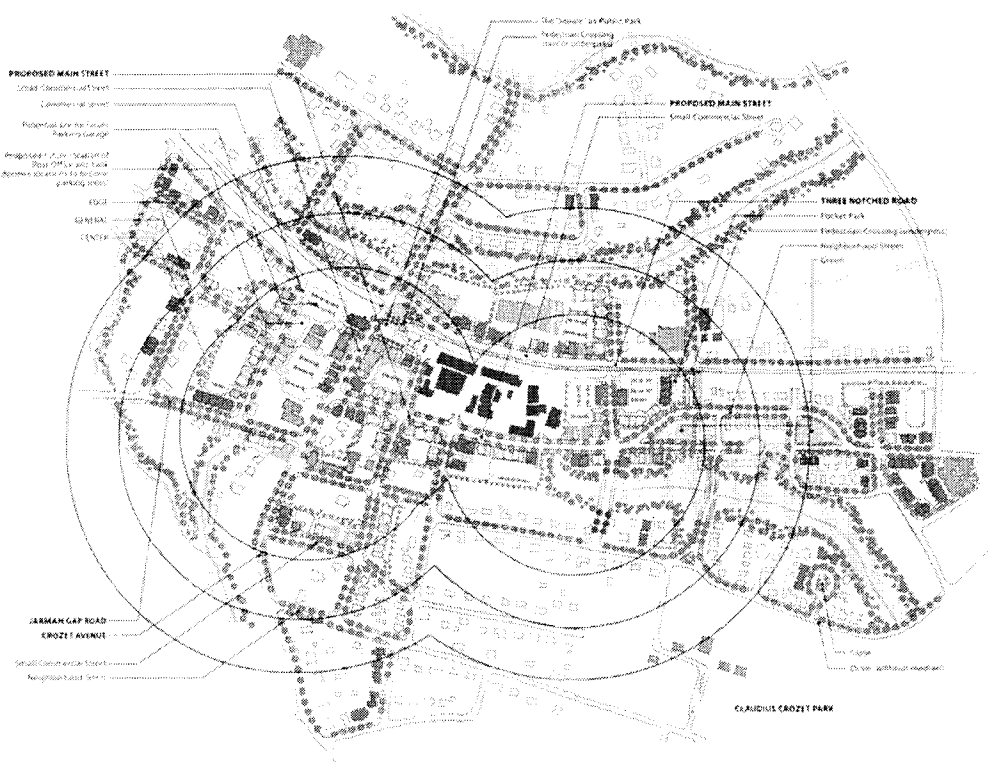


Fig. 13. Downtown infill.

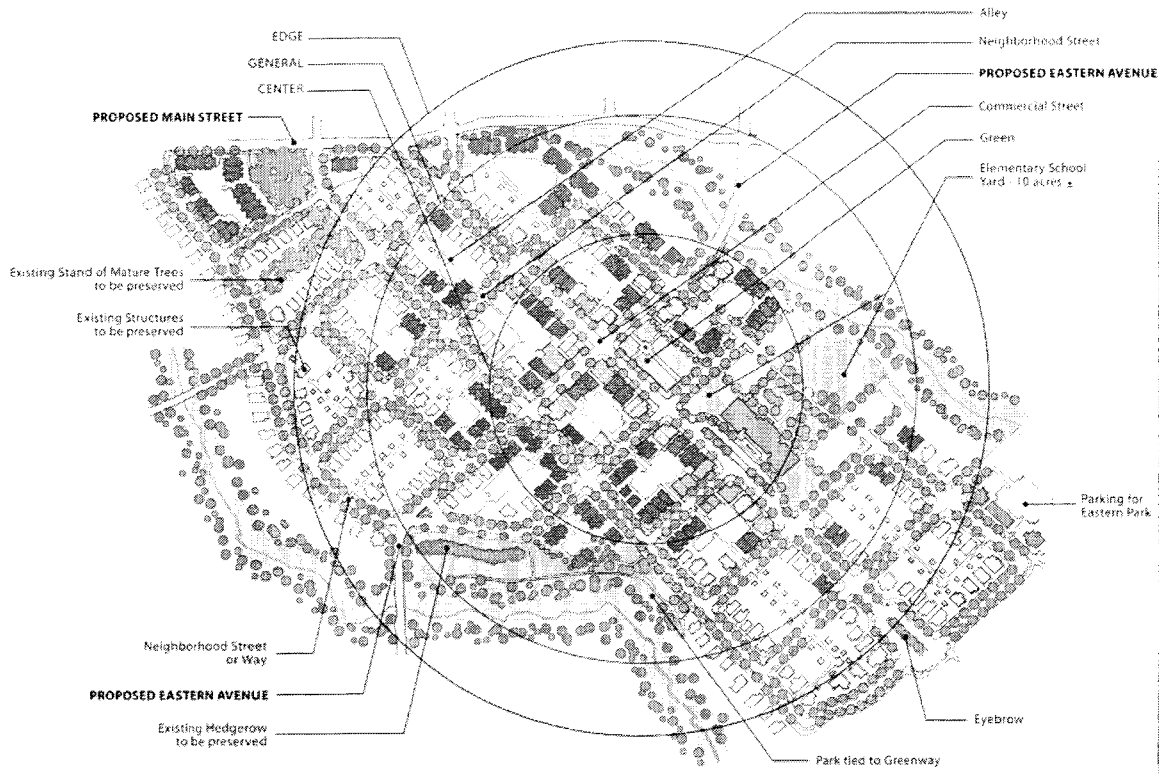


Fig. 14. New Neighborhood east of downtown with elementary school.

NEIGHBORHOODS AND THEIR RELATIONSHIP TO THE LAND

In addition to the downtown area itself, there are several secondary neighborhood centers which serve to organize particular areas. To the east of downtown, an undeveloped property supports a mixed-use center that would include a new neighborhood elementary school. This will be a first for Albemarle County: a school that is designed within a neighborhood and specifically organized in a compact, urban site with children walking or biking too and from school. Further to the east is a new public park occupying elevated land overlooking the Lickinghole Basin. While the Master Plan includes extensive protected lands along all of the existing streams and floodplains, with trails interconnecting all of the neighborhoods, it is important to establish public open space in a few areas beyond the traditional "unbuildable" zones where developers normally locate their open space. This park is accessed off a new Road, called Eastern Avenue that connects Route 240 to the north with Route 250 to the south. This is a key element of an interconnected community to the east of the existing north/south road (Crozet Avenue) that joins downtown with Route 250. In addition, a new Main Street connects the new neighborhood and elementary school with downtown south of the east/west railroad tracks and existing Route 240.

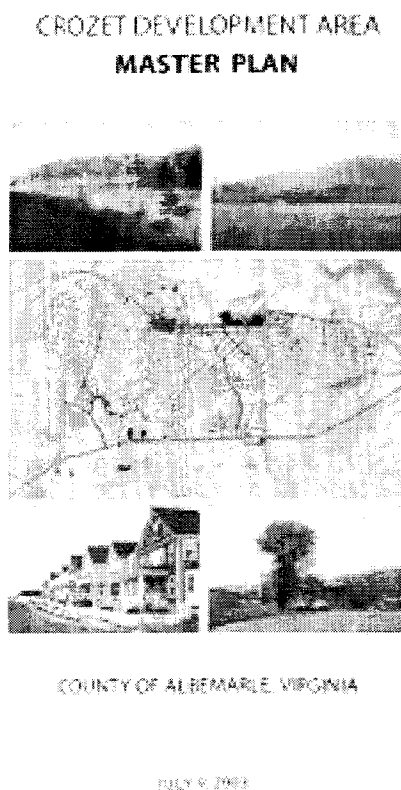
Another park is created to the west of Crozet Avenue, on land overlooking the upstream portion of Lickinghole Creek. This

park has short views to the east and spectacular long views to the west and the Blue Ridge Mountains. Although the former use as a farm will be gone, important views and selected farm structures will be retained to evoke some of the collective memory of this place as a working agrarian landscape.

In fact, the views to the west include continuing farms that are protected in perpetuity by conservation easements, beginning just outside the designated growth area. A new north/south road is introduced in this area as well. This road is not a "collector street" as in the traditional jargon of VDOT and other transportation agencies. It is a neighborhood street that includes mixed-use development as well as an interconnection from an existing road to the north (Jarman's Gap Road) and Route 250 to the south. At the south, existing schools including an elementary school, middle school, and the high school for the entire western portion of the county, will have pedestrian and bike access from these new neighborhoods. Currently no children are allowed to walk to school as a matter of school board policy.

SUMMARY

The reality of the American suburban condition demands a level of creative transformation to produce a better vision for the future. Existing patterns of suburban sprawl are causing significant and often unrecognized problems, ranging from



health issues to surprising risk factors involving traffic fatalities and murder rates¹⁵. This master plan, produced by an interdisciplinary team, acknowledges the value of New Urbanist principles¹⁶ while extending the scope of influence to embrace fundamental conditions of the land. As a single solution to a designated growth area, the Crozet Master Plan has only limited direct impact beyond its own area (although the traffic impacts beyond are significantly mitigated). Beyond Crozet itself, its main value is as a model of positive development for other areas in Albemarle County that will be following a similar strategy of collaborative community design. Lessons from this experience of pedestrian-oriented, compact, mixed-use development, with careful attention to transportation planning and land-use policy integration can be combined with a serious concern for the role of the landscape as mentor, a source of strength and measured guidance.

¹ "Arguing the 'Against' Position: New Urbanism as a Means of Building and Rebuilding Our Cities", by Alex Krieger in Bressi, Todd W., *The Seaside Debates: A Critique of New Urbanism*, The Seaside Institute, Rizzoli International, New York, 2002, pp. 51

² "General Commentary", by Warren Byrd, ASLA and others, *Ibid.*, Pp. 136. Byrd is a practitioner with the office of Nelson Byrd Landscape Architects and a faculty member in Landscape Architecture at the University of Virginia School of Architecture. Obviously the title of this paper submission is borrowed from Byrd's reference to Donlyn Lyndon's title of the MIT conference in 1998.

³ September, 1998.

⁴ *Ibid.*, pp. 40-42.

⁵ *Ibid.*, pp.

⁶ Ellen Dunham Jones, *Harvard Design Magazine*; Nan Ellin *Post Modern Urbanism*.

⁷ Kenneth Schwartz served as project lead for Renaissance Planning Group. The work was produced in close collaboration with Warren Byrd, ASLA and his colleagues in Nelson Byrd Landscape Architects including Thomas Woltz and Sophie Johnston. Bruce Dotson, Ph.D. served as project advisor and public process consulting was provided by Becky Clay Christensen. Within RPG substantial contributions were made by Kathy Galvin, AIA, Noel Murphy, Assoc. AIA, Lynn Osgood and Hannah Twaddell.

⁸ First named in 1925 by Carl Sauer in "The Morphology of Landscape", University of California Publications in Geography 2:2 (1925): 19-53. Also in National Park Service 28, Cultural Resource Management Guideline, Release #4 (1994)... "a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, person, or exhibiting other cultural or aesthetic values." 4 types: historic site, historic designed landscape, historic vernacular landscape, and ethnographic landscape. My thanks to my colleague, Beth Meyer, for these references.

⁹ Sprawl has been defined many people, such as Reid Ewing for example in a recent article in the *Journal of Public Health*, September, 2003, in approximately the same way. "...we consider the term to apply to any environment characterized by the following: a population widely dispersed in low-density residential development; rigid separation of homes, shops and workplaces; a lack of distinct thriving activity centers, such as strong downtowns or suburban town centers; and a network of roads marked by very large block size and poor access from one place to another". Current, traditional, segregated, exclusionary planning tools of zoning could also be called "Dumb Growth" as opposed to the opposite qualities that are promoted by the "Smart Growth" movement.

¹⁰ Carol Burns' definition of the "constructed site" in her chapter "On Site" is particularly meaningful in our approach. "Opposed to the idea of the cleared site is that of the constructed site, which emphasizes the visible physicality, morphological qualities, and existing conditions of land and architecture. The constructed site argument depends on the visible layers of landscape phenomena: first, the prehuman or prehistoric landforms resulting from the chthonic forces; second, that which remains of the efforts and project of the period when agriculture was dominant; third, a layer of transformations that occurred primarily during the industrial period, including.... Transportation systems such as railroads and canals, and finally, the present processes, which are more diffuse but of a larger scale of operation" p. 153.

¹¹ Notes regarding figures: All figures are by the author and the consulting team on the Crozet Master Plan for the County of Albemarle, Virginia with the exception of the USGS map (Fig. 1) and the Comprehensive Land Use Plan (Figure 8) which are both publicly available documents.

¹² "Guiding Principles", from the Crozet Master Plan, July 8, 2003.

¹³ Dan Burden describes the characteristics of Walkable Communities as having: 1. Intact town centers; 2. Residential densities, mixed income, mixed use; 3. Public Space; 4. Universal Design; 5. Key Streets Are Speed Controlled; 6. Streets, Trails are Well Linked; 7. Design is Properly Scaled to 1/8th, 1/4 and 1/2 mile radius segments; 8. Town is Designed for People; 9. Town is Thinking Small; 10. In Walkable Communities There Are Many People Walking; 11. The Town and Neighborhoods have a Vision; 12. Decision Makers Are Visionary, Communicative, and Forward Thinking. We have found these characteristics to be very effective.

¹⁴ The Neighborhood Model was developed over several years with the assistance of Torti Gallas CHK as lead consultants under the guidance of a large citizens committee called the "Development Infill Strategies Committee" or DISC for short. This committee was co-chaired by Kathleen Galvin and Eric Strucko, and the lead staff person for the county was Elaine Echols.

¹⁵ Ewing and Lucy articles, *Journal of Public Health*, September, 2003.

¹⁶ Among all of the New Urbanists, we find Peter Calthorpe's interests most compelling, and we share many of his biases about the importance of regional consideration in master planning efforts. From an unpublished piece presented at the first CXU Transportation Summit, December, 2003 in

Oakland, California: "A Charter Corollary for Regional Edges (2002). No New Urbanist strategy can succeed without a vision of the physical design of both the community and region..... The two most basic components of regional design at this level are transportation facilities and land-use patterns. Indeed, these two components are intertwined so tightly that it should be virtually impossible to separate them. Unfortunately, they are rarely analyzed as the interdependent regional feedback loop that they truly are. Land use is not used as a critical variable in the analysis of transportation options: the land

use effects of new transportation improvements are rarely looped back into the analysis, and alternative land-use patterns are rarely used to generate different types of transportation investments. If we are to break the cycle of highways and sprawl, studying alternative land use patterns must be part of the process that leads to infrastructure decisions and Regional Edges. Likewise, understanding that any new facility will breed a set of land-use patterns that will ultimately create new demands on that system is equally important."