Carolina Planning

Summer 2008 Volume 33 Issue 1

Emerging Issues in Housing

Carolina Planning

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Articles

Features

Carolina Planning is a student-run publication of the Department of City and Regional Planning, The University of North Carolina at Chapel Hill

From the Editors

Over this past year, the subprime mortgage debacle has certainly forced housing affordability to the center of national attention. While extensive press coverage, probing Congressional inquiries, and massive write-downs by financial institutions mired in the credit crunch have served to highlight one aspect of affordable housing—homeownership—other important housing issues have been quietly emerging under the radar. This edition of Carolina Planning attempts to shed light on these very issues that are affecting communities large and small across the state, region, and nation as a whole. Five articles featured in this issue each focus on various aspects of emerging housing concerns in order to capture the immediate attention of the planning community.

In his article on manufactured housing, Adam Rust confronts eight myths associated with this often-eschewed housing type, its industry, and its financing, presenting it as a potential solution to meet affordable housing needs. In Rachel Campbell's cover art, a detail of a mobile home panorama seen in eastern North Carolina, we found an awareness of subtlety and dignity mirroring Rust's own coverage. Both acquaint us with the realities of what for many is the only viable path to homeownership.

As part of our ongoing series of contributions from the North Carolina chapter of the American Planning Association, a collaborative group of planners from around the state offers a view of inclusionary housing policies and practices that have successfully promoted affordable housing in four different North Carolina municipalities. These cities and towns are literally pushing planning into new territory in this state, enacting policies for which there is much support but no legislative precedent.

Candace Stowell discusses what is lacking in this state to equip every locality to provide adequate housing choice for its citizens. Examples from other states show what is possible, while the pioneering efforts detailed in the aforementioned article may smooth the political path.

The subject of Mark Shelburne's critique is a recent report questioning an aspect of the Low Income Housing Tax Credit, which is the main driver of affordable rental housing in this country. He explores several discrepancies and seeks to clarify potential misrepresentations within the report, which, as they stand, question the efficacy of this program.

Rounding out our feature articles, Chris Estes, Executive Director of the North Carolina Housing Coalition, calls attention to the looming planning crisis facing this state and draws upon a regional equity approach as a way to tackle the burgeoning need for affordable housing here in North Carolina.

On a different note, this issue brings together a variety of voices to bid goodbye to an old friend, a faithful advocate, an influential colleague, and a devoted companion found in Robert Stipe, who passed away this past September. We also celebrate the golden anniversary of the Center for Urban and Regional Studies with a piece covering its now fifty-year history and the progression of its research.

In keeping with tradition, we also feature the Best Master's Project of 2007—this time awarded jointly to Kristen Ford and Matt Harris. A new section has been added to the Journal this year—the Student Connection—with the goal of better connecting the broader readership with the three academic planning programs in this state.

Finally, faithful readers may note that this issue is bulkier than those in the past. Reducing our publication schedule from twice a year to just once has allowed us to include more elements in each issue. As always, we encourage our readers to take advantage of this opportunity and submit articles and opinion pieces for inclusion in future issues. Details about our next issue can be found in the Call for Papers on page 64.

Thank you for your readership and continued support of the Carolina Planning Journal.

Editors:
Wendy Baucom and Barbara Elwood Schalmo

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Carolina Planning welcomes comments, suggestions, and submissions. Please contact us at: carolinaplanning@unc.edu

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Untitled, 2008

Cover design: Barbara Elwood Schalmo

The Heritage of a Life:

Robert Stipe, 1928-2007

Milton Heath
Myrick Howard
Weiming Lu
Josie Stipe with the Carolina Planning Editors

The Carolina Planning Journal, the UNC Department of City and Regional Planning, and the broader planning community join preservationists from Chapel Hill, this state, and indeed around the country in remembering the remarkable life and far-reaching career of Robert Stipe, who died this past September. Stipe was certainly a pioneer in the field of conservation and historic preservation. From his base in Chapel Hill, he worked to legitimize the field and establish procedures and standards for preservation at the local, state, and federal levels. His edited volumes are used as university textbooks, while the ordinances and statutes he authored have enabled towns to preserve their past through historic district zoning.

However, Stipe's professional legacy is impossible to disentangle from the personal one, for he left an impact on the field not just through his writings, but also through his relationships of collaboration and mentoring. Four reflections here testify to Stipe's commitment to preservation and to people. Myrick Howard provides an overview of Robert Stipe's career and influence over more than one generation of students who went on to positions of leadership in land use, design, and preservation law. Weiming Lu writes in a more personal vein, as a fellow master's student with Stipe in Regional Planning at UNC in the 1950s. Milton Heath describes the variety of ways that these friends and colleagues collaborated over the years. Finally, conversations with Stipe's wife Josie and his son Fred provided the basis for an explanation of his motivations for dedicating his energies to historic preservation long before it was fashionable. The thread running through each piece is the radical idea, born in Robert Stipe as a young man and carried throughout an unexpectedly long life, to use the law to protect and enhance the landscape and design of cities and towns.

Remembering Bob Stipe

J. Myrick Howard

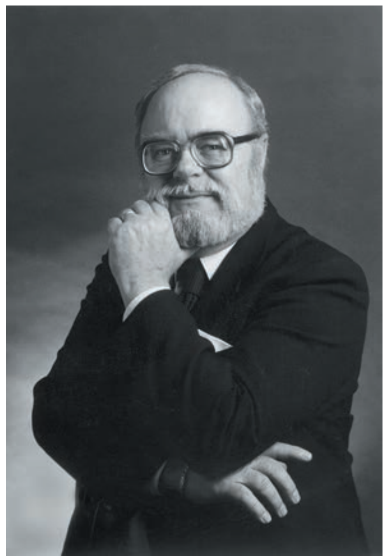
Bob Stipe had a long association with the University of North Carolina's Department of City and Regional Planning (DCRP). He was a graduate of the department, a friend and professional colleague of numerous faculty members, and frequent lecturer (as a faculty member at the Institute of Government). He was honored with a fellowship named for him, a gift of Marion Covington. However, Bob taught only one course in historic preservation there – in the spring of 1975.

After a heart attack, Bob had resigned under doctor's orders as the Director of the Division of Archives and History; he was only in his mid-40s. It was my good fortune that in 1975 I took that course, a workshop to study Tarboro's historic district in preparation for local designation. The course was an introduction into a field that I have loved as a career and the beginning of a 32-year friendship with the man that I would refer to as my mentor.

I was not the only one who thought I was taking the last class that Bob Stipe would ever teach. Decades later, at the North Carolina State University School (now College) of Design, students would leave the first day of class believing that it would be Bob's last semester of teaching. Bob fooled us all, living well beyond his statistical life expectancy. We savored the time we spent with him, fearing that it would be our last.

Born in 1928, Robert Edwin Stipe moved to North Carolina from his native Pennsylvania immediately after World War II. In the 1950s he earned undergraduate and law degrees at Duke University, as well as a graduate degree from DCRP. While an undergraduate at Duke, he met and married Josephine (Josie) Weedon, who would stay by his side the rest of his life.

After several years as the principal planner at City Planning and Architecture Associates (where he worked with Jim Webb, a founding DCRP faculty member), he joined the UNC Institute of Government as an Assistant Director from 1957 to 1974. He rose through the ranks from Instructor to Professor of Public Law and Government, specializing in planning, zoning, and historic preservation and conservation law. In 1974-75 he served as Director of the North Carolina Division of Archives and History and State Historic Preservation Officer. He joined the faculty of the Landscape Architecture Department in the School of Design at N.C. State University, where he was Professor of Design and taught courses in community design policy, historic preservation, and the legal aspects of landscape and townscape conservation.



Robert Stipe
A photo portrait by his son Fred Stipe

Bob retired in 2002 after more than 44 years of university teaching. As a teacher he influenced innumerable students. He made a point of getting to know his students individually and often maintained life-long relationships with them. Behind a curmudgeonly demeanor was a kind heart and receptive ear.

Bob's influence spread far beyond the confines of the university. Starting in 1976, he arranged periodic week-long courses for professionals in the field of preservation, anticipating the National Trust's Preservation Leadership Training. Speakers at these courses were a veritable who's who of preservation, as leaders from around the country came to North Carolina at Bob's request. Alumni of these courses would refer to our "sitting at the feet of Bob."

Bob wrote and wrote. Through his writings, he is credited with conceiving preservation law as a field of practice, urging attorneys to take preservation seriously as a legal tool. One of his writings was quoted by the United States Supreme Court in the Penn Central case, a landmark ruling that remains a touchstone in land use law. Two books that he edited (*The American Mosaic* and *A Richer Heritage*) became standards in the classroom of preservation education.

For many years, Bob served as a trustee of the National Trust for Historic Preservation and was elected a Trustee Emeritus. He provided counsel to presidents and staff throughout his life, maintaining a dedicated relationship with the Trust's legal department. In 1988 he was awarded the Louise DuPont Crowninshield Award, the Trust's highest award for a lifetime of superlative achievement in the field of historic preservation. At the time of the award, many of his friends and colleagues didn't expect Bob to live much longer. At a dinner in his honor, Bob complained that the award sounded too much like an obituary, but I think he actually enjoyed the accolades.

Bob was the principal draftsman of most of North Carolina's preservation legislation, and he authored more than 100 articles and publications about planning and historic preservation and had produced several films in these areas. His "Letter to George," a folksy legal guide on how to set up and run a historic preservation commission, gained wide distribution nationally. At home, he helped get the Chapel Hill Historic District designated as a local and National Register district. He would proudly point out that he risked his job by including the university (his employer) in the National Register district.

Bob was always on the cutting edge of thinking about preservation's future, not just in Chapel Hill, but internationally. A former Senior Fulbright Research Fellow at University College, London University in 1968-69, he received the Secretary of the Interior's Distinguished Conservation Service Award in 1978. In 1987 he was elected a Fellow of the United States Committee of the International Council on Monuments and Sites, a UNESCO organization based in Paris, France. His last chapter in A Richer Heritage (published by the UNC Press in 2003), entitled "Where Do We Go from Here?" should be required reading for every preservation professional.

Despite the health issues that plagued him throughout his adult life, Bob Stipe helped make historic preservation an integral component of successful city planning in the United States. He changed historic preservation as a field, resisting its relegation to an aesthetic nicety,

J. Myrick Howard *is the Executive Director of Preservation North Carolina. He has recently published* *Buying Time for Heritage: How to Save an Endangered Historic Property.* *He teaches a popular yearly course in historic preservation planning at UNC-Chapel Hill.*

and he helped open it up as a legitimate profession.

In 1977, a year before my graduation, the dean of UNC's law school laughed heartily when I told him that I wanted to go into preservation law after graduation. Bob Stipe buttressed me in my youthful ambitions, as he did with many of his other students who went on to fulfilling careers in historic preservation (and, in some cases, law). In the end, we enjoyed the last laugh.

Remembering My Friend Bob Stipe

Weiming Lu

Bob was a classmate of mine. At that time our school was quite small. There were only five in our class. We got to know each other well, whether in class or studio projects. One year, we were sent to Jacksonville, North Carolina, to do a plan. We stayed at the local fire station there. In the middle of the night, we were occasionally awakened by fire engines racing out just below our floor. These experiences were one of our precious collective memories of our days at Chapel Hill.

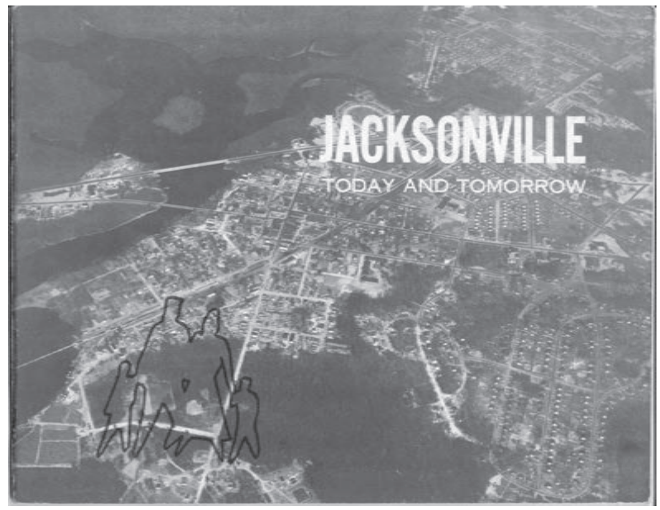
Bob came to the department with a law background. He stood out in our class when we had discussions on planning legislation. When we were in design studio, he also showed great interest. One of his favorite teachers and life-long friend was Jim Webb, our design professor, who also graced Chapel Hill with many of his fine modern designs, including the house for Bob and Josie. Bob was an accomplished photographer and Josie a sensitive Sumi-e painter. Whenever I visited their home, I enjoyed very much the beautiful works in their house.

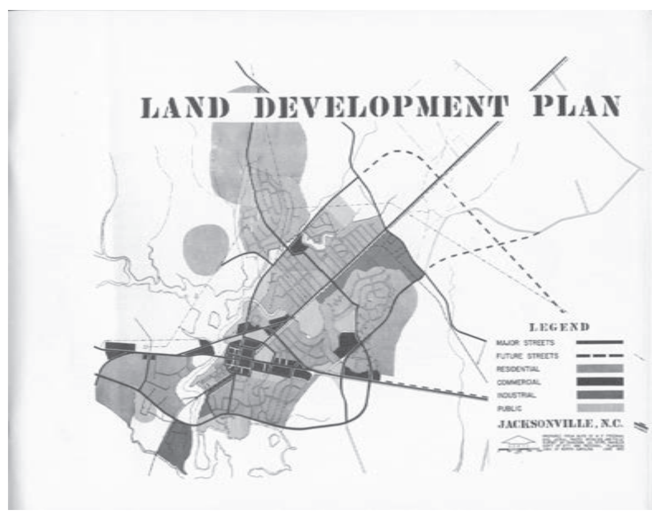
Bob led the movement for preservation in North Carolina for a number of years and had a great ability to reflect and write. He contributed a great deal to preservation. He won the Crowninshield Award from the National Trust for Historic Preservation in 1988, which is considered as the Nobel Award in the preservation field. He taught all his life, and as the Chinese would say, he had planted "peaches and pears all over the world." They are contributing globally today.

Bob was a generous person. He had a library of preservation and other literature. As he was winding down, he began giving away large numbers of his collections to other preservation institutions every year, especially to Eastern Europe based on his assessment of their needs.

Bob's health interrupted his career early while he hadn't even reached middle age. Yet through his strong will and Josie's love and care, he managed to live way beyond the doctor's expectation and continued to encourage and support younger generation to the end of his life.

Bob had a great sense of humor and gave me a nickname "Chop Chop." I have no idea whether that showed his favorite dish to be a pork chop or chop suey. He had good reason to be proud of his many achievements. One time he gave me a copy of his fine preservation report for a city, which he signed "from one genius to another." I am no genius, but I am proud to have been a classmate of his at UNC in Chapel Hill and a friend for over 50 years. I shall always remember him.





Selections from their 1955 DCRP Workshop Class
A Land Use Plan for Jacksonville, North Carolina

Weiming Lu *received his MRP from UNC in 1957. He retired as the President of Lowertown Redevelopment Corporation in St. Paul, Minnesota, in 2006. That same year, he was given the prestigious UNC Distinguished Alumni Award for a lifetime of contributions to planning. He now serves on the Minneapolis Foundation board and as advisor to the National Trust for Historic Preservation/Favrot Family Fund. As an advisor to the City of Beijing, he will be helping with their planning efforts after the Olympic Games.*

Fifty Years in Bob Stipe's Company
Milton Heath

Bob Stipe was the ultimate colleague and friend for half a century. We arrived at the Institute of Government at almost the same time in the late 1950s – along with Dexter Watts, and soon after John Sanders and Jake Wicker. Our paths crossed and recrossed many times, not unlike the woodland trails of the Chapel Hill scene.

Stipe's work in land use and mine in the environment intersected at a variety of points, one of which was environmental impact analysis. Stipe's contributions always had staying power.

In 1971 when a legislative committee asked me for a local impact analysis amendment to the proposed North Carolina Environmental Policy Act, I took the assignment back to Chapel Hill overnight to mull it over with Stipe. The next morning, with Stipe's language in hand, I took the amendment to the committee, which adopted it. Stipe's language remains in the Act today, a sturdy Stipe product.

Thirty-five years later Stipe called me when I was serving on the Orange Water and Sewer Authority (OWASA) board of directors about using environmental impact analysis to evaluate OWASA's planned water and sewer lines in the Pinetum, Stipe's neighborhood. He and I worked this through to a consensus, which I passed along to OWASA.

One of our happiest collaborations was musical. In 1961, we joined with several of my old Chapel Hill peers (including Helen Jane Wettach, the late Joel Carter and Margaret Lester, Bill Olsen, Fran Weaver, and Pearson Stewart) to resurrect the Chapel Hill Concert Series, which Jimmy Wallace had led for years. Our first full season, 1962-63, featured a stunning program – Isaac Stern, American Ballet Theatre, The Moscow Chamber Orchestra, and pianist Gina Bachauer, as I recall – at Sol Hurok's bargain price of $20,000. When I took a leave in 1963-64 to work in the Kennedy Administration, Stipe assumed my role as President of the Series and gave it his superb brand of leadership.

No project was too much for Stipe. Late one week in the early '60s Albert Coates decided to impress a visiting convention of county officials with a display of North Carolina's one hundred county courthouses. On Friday he gave Stipe a weekend project: to collect and mount a picture of each and every courthouse. Stipe went to work Friday and came up for air on Monday, with the collection that is still mounted on the walls of the third floor.

Stipe's extraordinary design flair was always reflected in his yard and garden in Highland Woods and Pine Lane – another facet of Stipe that reached me, as a lifelong flower gardener. A visit to the Stipe's was always a pleasure to the senses in anticipation – the visual treat of his landscaping and the joy of seeing Bob and Josie.

Some of one's interpersonal relationships have a touch of the eternal. Thus it was with Bob Stipe for so many of us, a remarkable person who will never entirely be gone from our consciousness.

***Milton Heath** is a Professor of Public Law and Government in the UNC School of Government where he has held a position since 1957. In 2004 he was inducted into the Hall of Fame of the Southeastern States Association of Conservation Districts.*

Seeing the Big Picture
Based on conversations with Josie Stipe

Bob Stipe's story reads as the tale of a visionary, able to see through and even beyond current trends to an alternate version of the future and to articulate that concept compellingly to the public. Not only was historic preservation absent from planning curricula and agendas in the 1950s, it was seen as an obstacle to the ability to master plan whole communities and cities with the economic wealth of the post-war years. How and why did this law and economics major from Duke stand against the prevailing tides and transform himself into what the *Raleigh News and Observer* called an evangelist of preservation?[1]

Stipe's wife Josie feels that the long career in preservation was born of the seed of his interest in architecture. Clerking for a judge in his native Pennsylvania, he realized quickly that his heart was not in law, at least not in the conventional path. He returned to North Carolina and to a job with City Planning and Architecture Associates, headed by Jim Webb, a renowned Chapel Hill architect. As part of his job, according to his wife, "he used to take the most wonderful photos of the interiors and exteriors of houses." With this eye and this feel for individual structures and the details that render them unique, he was drawn on to city planning and eventually felt that the two fields came together in historic preservation. Preservation at the scale of districts and communities led Stipe to a keen interest in place and in the role that preserved buildings have in physically connecting us to not just any past, but to a specific time and sentiment in history.

Already fully immersed in the growing preservation movement at the federal, state, and local levels, Stipe had a transformative experience while on a Fulbright scholarship at the University of London in the late 1960s. Both his wife and his son Fred remember what a tremendous impact this trip had. Traveling about England and seeing the fruits of generations of preservation efforts was a great source of inspiration and eventually led to more research in historic preservation in other countries. In fact, a series he edited in the 1980s that included profiles of France, Ireland, Denmark, Switzerland, Poland, and other European nations, was for some of these countries the first treatment of their preservation methods ever published in English.[2] In his forward to Stipe's *American Mosaic*, Terry Morton also suggests that conversations with European preservationists drew Stipe's attention to the task of identifying the soul and the purpose of the American preservation project.[3] Much of his later work involved telling this very story and setting it within a national and a global context.

That eye for structural detail which Josie Stipe noted in his early architectural photos developed over time into something of an all-encompassing eye, very keen to note how the individual elements of local policies influenced the big picture, of preserving the past, and of the evolution of preservation itself. In *A Richer Heritage*, he wrote of the shifting landscape of the movement:

> *The machinery of historic preservation has now come mostly into the hands of a younger generation that brings to the movement new and different—and sometimes controversial—visions of what is important. They add many more strands to the preservation rope, but it is not yet woven into a single, strong, politically viable cable*.[4]

Stipe's life work was perhaps less about preaching preservation than about illuminating the connections between time, place, generations and the built environment. His gift for illustrating the vision apparent to him when he viewed the American landscape has made a lasting impact on towns, cities, and universities throughout the country.

Endnotes

[1] Martha Quillin, "Stipe evangelized preservation", November 4, 2007.
[2] Terry B. Morton, in the Foreward to *American Mosaic.*
[3] Ibid.
[4] Robert E. Stipe, Preface to *A Richer Heritage.*

The Stipe Home in Chapel Hill, designed by James Webb

Josie Stipe *was married to Robert Stipe for 55 years. She is a longtime resident of Chapel Hill and lives in a modernist home designed by Jim Webb for her parents, Fred and Josephine Weedon, when Bob was working in Webb's firm.*

Frederick Stipe*, the son of Robert and Josie Stipe, is the Head of the Digital Production Center located in Davis Library at UNC-Chapel Hill. He carries on a family interest in music and photography.*

Celebrating the 50th Anniversary of the Center for Urban and Regional Studies

Anne Patrone

In recognition of the 50th anniversary of the Center for Urban and Regional studies, Anne Patrone wrote a detailed history focusing on the legacy of the Center, its work, and its people. The following is an abbreviated version of this retrospective.

In the Beginning

"It *became clear to me that the education of urban planners needed a more systematic and scientific grounding for planning practice." – F. Stuart Chapin*[1]

As the troops returned home after World War II, cities in the U.S. were still the focal point for regional economies and culture. Downtowns were thriving as most of the jobs and commercial activity were located in central cities. In the 1950s, however, things began to change. Migration to suburban areas, large-scale urban renewal, the creation and growth of the interstate highway system, and racial tensions led to dramatic changes in America's urban areas and their surrounding regions. With those transformations came an increased interest in understanding the forces behind the changes and in effective policies for addressing their negative impacts. This desire for a better understanding of urban and regional change and its consequences motivated the creation of the Center for Urban and Regional Studies at UNC-Chapel Hill.

The Center for Urban and Regional Studies began as a working group within the Institute for Research in Social Science (IRSS) at the University of North Carolina at Chapel Hill (UNC-CH). In the 1940s and early 1950s, the Institute supported a number of studies on urban issues, including anthropological studies of Southern communities and a study of urbanization in the South.

In 1954 IRSS applied for and received a Ford Foundation grant to conduct a self-study on behavioral sciences at UNC-CH. The Behavioral Science Survey Committee was created and it identified six focal areas with "implications for research."[1] One of these focal areas, "demography and social epidemiology," had a sub-area entitled "urban processes."[2] Consequently, in his 1954-55 annual report, Gordon Blackwell, the director of IRSS, highlighted "urban studies" as an important topic for future research.[3]

Capitalizing on the Institute's interest in urban studies, F. Stuart Chapin, Jr., who joined the faculty of the Department of City and Regional Planning in 1949,[4] facilitated a series of luncheon meetings that were attended by faculty members from the city planning, political science, and sociology departments. In these meetings the participants shared their own research on urbanization in America and developed a framework for studying the processes underlying urbanization. In 1955, this group's activities grew to include a bi-monthly faculty seminar that involved faculty from anthropology, economics, psychology, and social work. This larger group, called the Urban Studies Committee, worked to expand the conceptual framework for studying urban development processes.[5] The seeds for a large-scale study of urbanization had been planted.

The Early Years

"*…the Urban Studies Program has as a central and unifying theme an interest in urban development in the Piedmont Industrial Crescent…"*[6]

Although the Urban Studies Committee had successfully created a forum for urban researchers, it wanted to expand its capacity for conducting cutting edge, collaborative research on urban issues and implement the

***Anne Patrone** is a May 2008 graduate of UNC's Department of City and Regional Planning with a concentration in land use. She will be moving to the U.K. to work for Transport for London.*

conceptual framework for collaboration. Over a two-year period from 1955-1957, the Committee prepared a grant proposal titled "Emerging Forms of Metropolitanism in the South," focusing on the Piedmont Industrial Crescent – the area along the transportation corridor connecting Washington, D.C., to Atlanta. The Committee proposed to study the area of the crescent between Raleigh, N.C. and Greenville, S.C., because of its proximity to the University, and because it thought that such a study would shed light on a new kind of urbanization, one driven by the rapid proliferation of the automobile and new road construction.

In April of 1957, the Ford Foundation awarded the Committee a five-year, $1 million grant to pursue its urban research agenda, including a multifaceted study of urbanization processes in the Piedmont Industrial Crescent. This grant also facilitated communication among urban researchers at southern universities. IRSS housed both of these activities, with Chapin heading up the research arm and Frederic M. Cleaveland directing the outreach program. A third portion of the grant went to the Institute of Government to fund research interpretation for state and local organizations. Perhaps most importantly to this history, the Ford Foundation funding formalized Chapin's collective of researchers in the form of the Urban Studies Program, the organization that would in 1963 be renamed the Center for Urban and Regional Studies.

The Piedmont Crescent project was highly interdisciplinary. It focused on seven distinct research areas. The areas were:

- Economic studies of the Piedmont Crescent;
- Leadership patterns and community decision-making in cities of the Piedmont Crescent;
- Power structure studies of the Piedmont Crescent and the intercity and intracity aspects of interaction;
- Newcomers to urban centers: Why they move and their socio-political enculturation in the city;
- Role of the planner in urban development of the Piedmont Crescent
- Livability qualities of urban development in the Piedmont Crescent; and
- Metropolitan development problems in the Piedmont Crescent and alternative approaches to their solution.

These areas of study reflected the diverse interests of the Urban Studies Program's interdisciplinary research team, including faculty members and research fellows from city and regional planning, economics, political science, and sociology.

The original grant proposal delineated a research period of five years, but as the project progressed, it became clear that work would need to extend into a sixth. After the expiration of the Ford Foundation grant, additional funding was secured from the state and other grant sources. By 1963,[7] the research effort had expanded to include fifteen research areas involving over 20 members of the faculty and 27 research assistants. Program research results were published through the Urban Studies Research Paper series, and in *Urban Growth Dynamics in a Regional Cluster of Cities* (1962), edited by Stuart Chapin and Shirley Weiss, a professor in the Department of City and Regional Planning. Many of the Program's researchers contributed chapters on the different project areas, and in Chapin's words, the book sought to "lay the groundwork for research which inevitably will absorb social scientists for the next generation."[8]

From the Program to the Center

"As it has evolved over the past few years, our mission has been to serve as a center on the campus for the study of contemporary issues and problems in urban affairs in the American scene." – F. Stuart Chapin, Jr.[9]

In 1963, the Institute for Research in Social Science renamed the Urban Studies Program the Center for Urban and Regional Studies. Chapin continued to serve as Director and Shirley Weiss was appointed Assistant Director. At this time, the Center identified four "core study" topics for further exploration: the role of the planner in urban issues; political decision-making about urban development issues; urban spatial structure and patterns of land development; and the role of industrial executives in urban growth and development.[10]

Chapin's interest in the factors that influence urban development led him to approach the U.S. Bureau of Public Roads (the predecessor to the Federal Highway Administration) to secure funding for developing a model of residential land use.[11] In 1963, the Center negotiated a contract with the Bureau to develop a model for Greensboro, N.C., where, in the late 1940s, Chapin had served as planning director. The Center enlisted the help of the University's Computation Center to analyze growth patterns from 1949 to 1963. Chapin and his colleagues identified a number of factors that affected urban growth patterns, including access to employment, schools, and public facilities. Based on this analysis, the researchers created a model to predict where future residential development was likely to occur. A monograph from this study, titled "A Probabilistic Model for Residential Growth," was published in 1965, and the growth model became known as the University of North Carolina Model.

In 1965, Chapin began pioneering work on a series of studies of household activity patterns, based in the Washington, D.C. metropolitan area. Documenting the needs of historically underserved populations, this series of studies looked to discover ways to create a built environment and deliver public services that would serve all of a city's inhabitants. To achieve this, the study explored how urban residents in two low-income neighborhoods – one with mostly black residents and one with mostly white residents – allocated their time to different activities and how they utilized city space for those activities.[12] The project was expansive, involving twelve researchers and five separate studies. Three books, including Chapin's *Human Activity Patterns in the City* (1974), were published from this series of studies. Chapin's work in Washington brought him to the attention of federal officials and led to his appointment to President Johnson's Task Force on Cities, convened from 1966-67. In this capacity, Chapin visited many of America's tumultuous inner cities and prepared a section of the Task Force report to the President.

Support from the State

"Things urban were really important, and were being funded, and so, it was a really good time to convince the state legislature that they ought to fund an urban center that would do applied policy-oriented research of use to the state of North Carolina, to make sure that we addressed urban problems in a sound way and came up with solutions."– Ray Burby[13]

In 1969, national attention to urban issues was reaching a crescendo. In response to inner-city rioting, white flight, business relocations, and other urban issues, the General Assembly of North Carolina authorized a "Program in Urban Affairs" for the Consolidated University of North Carolina. The funding provided to this program – which supported urban studies centers at UNC-Charlotte and NC State as well as UNC-Chapel Hill – allowed the Center to become independent of IRSS.

The following year Jonathan Howes took over as the Center's second director. Over his twenty-year tenure as Director, he held an array of positions with federal agencies, and served as mayor of Chapel Hill from 1987 to1991. Other staff were similarly occupied with local, state and national leadership. In particular, Ray Burby held positions on the North Carolina Land Use Congress, the NC Chapter of the American Planning Association, and, with Ed Kaiser, co-edited the Journal of the American Planning Association from 1983 to1988.

In 1972, the Center received, what at the time was the largest award in its history, a $1,179,400 grant from the National Science Foundation to support research on "new towns." The Center first hosted a series of three seminars on new towns in 1969, funded by a grant from the U.S. Department of Health, Education, and Welfare. Researchers also conducted over 5,500 interviews in 36 sample communities (both new towns and "conventional" communities). The final result was New Communities USA, published in 1976, written by Ray Burby and Shirley Weiss. This study remains the definitive work on the new towns created during this period. Other research conducted at the Center during the 1970s focused on the emerging issues of the era: the energy crisis, hazard mitigation and coastal planning and the constitutionality of growth management.

In the late 1980s, in the interest of unifying the research and public service missions of both the Center and DCRP, the Center was brought under the jurisdiction of the Dean of the College of Arts and Sciences. On August 1, 1988, the new administrative structure became official. And in 1994 the current directorship of William Rohe began, following Jonathan Howes' appointment as Secretary of the Department of Environment, Health, and Natural Resources under North Carolina Governor Jim Hunt.

A New Collaborative Focus

Led by Rohe's commitment to broad collaboration within and beyond the university, the Center's research activity began to rapidly expand as many new Faculty Fellows were attracted to the Center. By 1996, there were 51 Faculty Fellows from 16 departments. Aiding in the recruitment of these Fellows was a new center policy (also borrowed from the Carolina Population Center) to share a portion of overhead funds with the Fellows' home departments and with the principal investigators. Adopting this Faculty Fellows model solved one of the Center's previous dilemmas: finding enough talented researchers without the resources to hire them directly.

By the end of 1996, the Center reached its greatest productivity in a decade, supporting 25 research projects.[14] In 1996, Thomas Arcury, a Senior Research Associate, was awarded the largest single grant in the Center's history[15] – $1.2 million from the National Institutes of Health to conduct a study on farm workers' exposure to agricultural chemicals. By 2000, the Center had surpassed the $5.5 million mark in extramural funding, managing $5.8 million in grants.

In the later part of the 1990s the Center also expanded its staff. By 2000, the Center had eight full-time and 2 part-time employees on staff. From 1994-2000, the number of Faculty Fellows increased from 51 to 57. The number of graduate students receiving support from the Center and gaining valuable research experience also increased, from 22 in 1995 to 55 in 2003.

In 1997, the Center received a three-year, $400,000 grant from the U.S. Department of Housing and Urban Development to establish the Community Outreach Partnership Center or COPC. A storefront office on West Chapel Hill Street in southwest central Durham served as headquarters for this partnership between UNC, Duke University, six neighborhood associations, and over twenty-five other public and private organizations. Sixteen faculty members from both universities participated in projects designed to improve the surrounding neighborhoods by increasing affordable housing, expanding job training, and reducing crime. The program also provided community services, including a computer lab, tutoring for middle school children, and adult education. The outreach center's activities involved a number of UNC and Duke students.

In 1998, two years after Hurricanes Bertha and Fran caused extensive damage to the North Carolina coast, the Center reestablished its relationship with the NC Division of Coastal Management (DCM). DCM funded a study headed by David Godschalk to investigate ways to improve the state's hazard mitigation planning. After assembling information on hazard mitigation plans in other states, the study made recommendations to DCM on changes to hazard mitigation legislation in North Carolina.

From 1996 to 1999, the Center hosted visiting researchers through the Floyd B. McKissick Visiting Scholar program. The program, funded by Shirley Weiss (now retired from the University) and her husband, Charles Weiss, supported weeklong visits during which these scholars gave lectures and led discussions on their specific area of interest. The Center continues to house the Weiss' book collection on urban livability, and serves as regular host to the Weiss Urban Livability Fellows, an interdisciplinary group of graduate students.

An important issue that emerged in urban research around this time was the idea of smart growth, a set of practices and theories that look to combat the negative effects of sprawling development. In 1999, the Center hosted a series of meetings led by David Godschalk and attended by state and local decision makers, as well as University students, staff, and faculty. These meetings produced draft legislation for the North Carolina General Assembly on smart growth, which was introduced by Senator Howard Lee in the same year.

In 2002, the Center partnered with the University's Center for the Study of the American South on an initiative to study the impacts of affordable home ownership. The project, co-sponsored by the Enterprise Foundation and the National Building Museum, resulted in a multi-disciplinary conference in the fall of 2003 with over 100 attendees. In addition to targeting policymakers and fellow researchers, the project had a large public outreach component through an oral history and photography exhibition, first at a mobile gallery in San Antonio, Texas, and then at the National Building Museum in Washington, D.C.[16] This project was codirected by Rohe and Harry Watson, Director of the Center for the Study of the American South, who coedited a book entitled *Chasing the American Dream: Multidisciplinary Perspectives on Affordable Homeownership*, based on papers commissioned for the conference (Cornell University Press, 2007).

During this time period, the Center also conducted a number of research projects for the North Carolina Governor's Crime Commission, dealing with subjects as wide-ranging as evaluating the efficacy of after-school, community-oriented policing and domestic violence prevention programs, to studying the amount and nature of crimes against Latinos in North Carolina. These projects were conducted by researchers from various disciplines, including Gordon Whitaker from UNC's Institute of Government and Anna Waller from the Department of Emergency Medicine. The most recent Crime Commission project was a 2005 study examining juvenile structured day and alternative learning programs conducted by James Fraser, a Senior Research Associate at the Center.

Into the Future

"I'd like to think of the Center as matchmaker – we match the research interests of our Faculty Fellows with those of foundations and government agencies that fund research." – Bill Rohe

Since the late 1990s, the Center has been a service-oriented organization, sending out funding alerts to its Faculty Fellows and providing proposal development and grant management assistance. These services have been successful in attracting and retaining researchers from a wide variety of departments and schools across campus. The Scholar-in-Residence program, with funding from the Latane Fund managed by the College of Arts and Sciences, supports College faculty in the development of large interdisciplinary research proposals. This competitive program provides scholars with a course buyout, funds for proposal development expenses, and office space in Hickerson House.

In 2005, the Center established the Carolina Transportation Program, a joint effort undertaken with the Department of City and Regional Planning, with funding from the College of Arts and Sciences and the Vice Chancellor for Research and Development. The program's focus areas include transportation planning, transit, non-motorized transportation, and land use patterns and their impacts on health, environment, energy and economic development at local, regional, national, and global scales. Since its inception, the program's faculty and staff have published over 20 articles and reports, and it has organized a regular series of seminars. The program also actively supports graduate students interested in transportation issues. Asad Khattak was CTP's initial director, and Daniel Rodriguez, an Associate Professor of City and Regional Planning, assumed that position in 2006.

With Mary Beth Powell's departure in late 2004, Todd Owen became the new Associate Director in April 2005. Owen, a graduate of the Department of City and Regional Planning, had previously worked for the North Carolina Division of Emergency Management, specializing in natural hazards mitigation. At the end of 2007, the Center supported 72 Faculty Fellows from 23 academic units and employed three research associates. Departments that are particularly well represented in the Faculty Fellows program continue to be City and Regional Planning, Geography, and Anthropology, but in recent years, there have also been Fellows from a variety of departments and schools.

In its 50th year, the Center managed approximately 35 projects totaling over $10 million in six major areas of research: economic development, environmental protection, housing and community development, poverty and equity, sustainable development, and transportation. The Center's long history of work on natural hazards continues as Hurricane Katrina brought hazard mitigation back into the national spotlight. The Center's more recent work on natural hazards includes FEMA-funded studies on improving emergency preparedness in disadvantaged communities, a study of factors influencing flood victims' buyout decisions, and an NSF-funded mentoring program for emerging hazards researchers. Center staff, led by Senior Research Associate Spencer Cowan, have also been involved in disaster recovery planning in the Gentilly area of New Orleans.

The Center for Urban and Regional Studies continues to promote the mission of the University by supporting urban and regional research and applying that research throughout the state and nation. To date, the Center has published over 1,150 reports, monographs, and books detailing its work. It also contributes to the teaching mission by involving students in the many research projects managed by the Center.

Conclusion

"…research in this discipline can make a difference. I think there is an ethical responsibility for those in the academy to speak to real problems and real issues in this state." – David Brower

Over the years, the Center for Urban and Regional Studies has made major contributions to research on a wide range of urban and regional issues. From its humble beginnings within the Institute for Research in Social Science, the Center has grown into a nationally respected center for research on the issues that affect people and the places they live, work, and play. The Center has maintained its original dedication to research and education: researchers are provided the opportunity to pursue the study of important topics while students are given the opportunity to hone their research skills on policy-relevant projects.

The research conducted through the Center has enriched national debates on urban and regional issues, and influenced a broad range of development issues throughout the state and nation. The Center plans to continue building upon its successful track record as it moves into the future.

Endnotes

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Exploring Myths about Manufactured Housing:

The Truth(s) behind One of America's Least Understood Financial Markets

Adam Rust

With the subprime mortgage crisis and the associated fall in housing values, it is more important than ever for affordable housing advocates to understand and educate the public about available low-cost housing options. Adam Rust argues that manufactured housing may be an avenue to wealth building even in this climate, but only if the truths are separated from the more familiar half-truths surrounding this housing choice. Data from the Home Mortgage Disclosure Act provides a snapshot of manufactured housing's potential and pitfalls in different regions of the country under various financing scenarios.

Imagine that you are in a conversation about the state of affordable housing.

Such a conversation might discuss the dilemmas faced by important elements of the workforce, the pressures of run-ups in pricing brought about by creative financing products, and the local constraints in metropolitan areas. Such a conversation might discuss the important actors in the field, from state housing finance agencies to nonprofit developers to policy advocates.

Nonetheless, such a conversation might not broach the appropriate role played by manufactured housing. In doing so, the discussion would ignore the largest source of unsubsidized housing in the country. In the South, the omission would be even more glaring. Regionally, manufactured housing accounted for forty percent of all housing sold in low-income home purchases in the 1990s.

Now realize that this imaginary viewpoint is largely the one that governs the approach that many non-profits take to affordable housing. As one developer in Kentucky is famously said to have observed, "Manufactured housing and community development--an oxymoron!"[1]

It does not stop with non-profits. Many state housing finance agencies, whose mission is to provide for the funds that fuel the creation of more affordable housing, systemically disqualify manufactured housing from their lending portfolios. Freddie Mac and Fannie Mae, whose charters mandate them to support access to financing, limit their participation in manufactured housing to that small portion of all manufactured homes that attain a legal designation as "real property."

Nationwide, non-profits and housing cooperatives own about 25,000 manufactured homes.[2] This is just a fraction of the homes in the portfolios of community development groups. Another 30,000 mobile homes benefit from some kind of government-aided rental subsidy (Section 8).[3] The vast majority of tenants in parks are forced to finance their housing entirely through private suppliers.

The pre-existing perceptions that surround manufactured housing explain a lot about the actions of its important stakeholders in the development process.[4] Scared off by the wave of foreclosures five years ago, many lenders approach the sector with fear. Frequent pejorative references to "trailer parks" in the lexicon of community development leaders,[5] realtors, and even planners[6] create a chorus of NIMBYism about the sector.

The industry continues to struggle. Only 130,748 manufactured homes were shipped in 2004, a steep fall from the 377,000 that were sold in 1998.[7] There are a number of reasons behind this decline. Those problems reflect less about the product itself and more about changes in factors surrounding manufactured housing. For one, less financing is available. Even FHA financing has declined. Furthermore, circumstantial evidence points to persistent erosion in the supply of mobile home parks in urban areas. At the same time, innovation in

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mortgage products (adjustable rate mortgages, interest-only mortgages, etc.) has lowered some of the obstacles to owning stick-built homes. Over the last four years, shipments have averaged 126,000 units (excluding sales to FEMA), just a third of the 1998 figure.

The traditional trailer park is also affected. Though borrowers want the affordability offered by the sector, many are finding it beneficial to choose land-home over land-lease.[8] Park owners, holding land that fewer and fewer residents want to lease, entertain the idea of closing parks and selling the land.

Some community advocates say it is all bad – all abandoned trailer parks, all depreciating assets. These advocates choose to stick to building affordable site-built housing. In some places, though, community advocates preach a message of higher-quality buildings, better financing, and more wealth building options. Their message is well received by the industry. Some states are proposing effective solutions, notably those which are already taking effect in New Hampshire and Vermont. There are beacons elsewhere, too, in places as diverse as Kentucky and California.

Imagine what would happen if the supply of manufactured housing did not exist among our nation's stock of homes. At the end of the 1990s, manufactured housing accounted for 2 in every 10 new housing starts.[9] An estimated 8.7 million households,[10] or more than 18.3 million residents,[11] lived in mobile homes in 2006. Without these homes, the crisis in affordable housing would be the most profound in the Southwest and Southeastern portion of the country. In 17 states, located mainly in these two regions, more than 10 percent of residents live in mobile homes.[12] Rural areas, where a lack of market-driven development means that the stock of single-family residential stick-built homes is aging, would be particularly impacted.

Even its ardent supporters admit that manufactured housing suffers from systemic problems. Financing costs, upon which much of this paper will focus, are generally higher. Those financing problems are only the beginning. Building new projects requires advocates to surmount hurdles that are not present, or at least not as significant, as those facing developers of single-family site-built home projects. Those problems include titling as personal property, zoning restrictions, and gaining access to land with viable infrastructure.

Market-created manufactured housing has done much to account for the increase in homeownership rates. Mobile homes have been the fastest growing housing sector since World War II, increasing in number from just 315,000 in 1950 to almost nine million by 2000.[13] Yet without systemic reform of the sector, the financing for this housing may grow increasingly prohibitive. Advocates cannot ignore this need.

Why do so many people choose manufactured housing? Perhaps it is because the prices are low. From 1997 to 1999, manufactured housing accounted for 72 percent of all new unsubsidized homes in a price range that was affordable to low-income buyers. Manufactured housing costs almost half as much, on a per square foot basis, as do site-built homes.[14] From 1997 to 2001, the years in the Census Bureau's most recent Resident Financial Survey, the median price of a manufactured home (both new and used) sold in the United States was $15,692. That eye-opening price is low for a number of reasons, specifically the inclusion of used homes in its calculation, the large share of homes that are sold in foreclosure or in distress sales, and the greater proportion of singlewides in existing stock.

With such crucial affordability in mind, this paper will attempt to ascertain the truth in some of the perceptions that exist about manufactured housing, with a particular emphasis on the financing barriers. To the extent that those perceptions hold back advocates from adopting this sector as a point of their efforts, they represent a discrete public policy obstacle. These perceptions are worth addressing for that reason. The most critical of these are that

- Borrowers are poor, white, and rural.
- It's a Southern thing.
- Manufactured housing is relegated to the least desirable neighborhoods.
- "Lenders will finance anyone" or, alternatively, "No one can get a loan for manufactured housing."
- Borrowers must go to captive financing companies because they are unable to access full service banks.
- Manufactured housing loans are difficult to securitize.
- All manufactured home loans bear expensive interest rates.
- These properties do not retain equity.

This paper will use one source of primary data, the Home Mortgage Disclosure Act (HMDA) database, to test those perceptions.[15] The data comes from mortgages made from 2004 to 2006. Some observations will be buttressed with data supplied by the US Census Bureau.

The most significant HMDA finding may be that the market varies widely throughout the country. It turns out that getting a loan on your manufactured home has a lot to do with where the home is located. A reader may react to that statement with little surprise because it is a well-known verity that location matters when considering the value of a home. As such, realtors often ascribe to a mantra about location, location, location. In the case of manufactured housing, we know that putting a home on land impacts its wealth-building trajectory.

Location also appears to matter in a broader way. There is a great difference in regional markets across the country. In the West, in the Mountain States, and in Puerto Rico, access to financing is better than in the South and the Southwest. Those differences include the amount of financing available, the liquidity within the market, and the price associated with borrowing money. In these two regions, borrowers can access loans for higher amounts, relative to their income. Loans originated in these areas are more likely to be securitized, and they are less likely to bear a high-cost interest rate.

The differences surely reflect varieties in housing markets and in local regulations. Through the lens of HMDA, we can see the results that these contexts exert upon financing. To say that the market works smoothly is wrong, but to say that it is entirely broken may be an overstatement.

The First Myth: Borrowers are poor, white, and rural.

Our numbers show that manufactured housing borrowers come from all levels of income. While they do tend to be white in greater proportions than the rest of the mortgage market, there is some variety in racial and ethnic background. In contrast to the expectations of the First Myth, most live in metropolitan areas, although that finding may reflect how demographers label areas. Incomes are generally lower than median.

A discussion of the demographics of manufactured housing matters. Consider that many non-profits define their mission based on service to people from certain areas (the Piedmont, inner-city Baltimore, or rural Appalachia, for example), from certain ethnic, racial, or religious backgrounds, or in certain income strata. To the extent that the perceived population of residents in manufactured housing is narrowly defined, that perception may serve to gently push some non-profit groups away from manufactured housing because they do not realize that this housing type could be a viable path to homeownership for their constituents.

Loans to owner-occupied applicants show that the average borrower has a lower-than-average income. Still, borrowers are not destitute. The median income for owner-occupied manufactured housing loan originations was 79 percent of area median income.

From the perspective of the kinds of non-profits and government housing agencies that attempt to increase the supply of housing available to low- and moderate–income (LMI) populations, this finding about income is a virtue. It establishes the fact that manufactured housing purchases are indeed made by people well within the range of low- and moderate-income borrowers. Then again, this finding confirms existing expectations (as expressed by the First Myth), so merely knowing the relationship between LMI borrowers and manufactured housing is not enough to justify its acceptance as an appropriate target for public investment.

Borrowers are choosing higher-priced homes within the universe of mobile homes, as well. The mean sales price of a manufactured home was just a bit over $23,900 in 2001.[16] That figure includes both singlewides and doublewides and both new and used homes. Compare those figures with data about sales of new homes. Figure 1 shows mean sales prices for new manufactured homes for the last ten years.

Figure 1. Sales of New Manufactured Homes, 1997-2006

Year	*Mean Price*	*Singlewides*	*Doublewides*
1997	$39,800	$27,900	$48,100
1998	$41,600	$28,800	$49,800
1999	$43,300	$29,300	$51,100
2000	$46,400	$30,200	$53,600
2001	$48,900	$30,400	$55,200
2002	$51,300	$30,900	$56,100
2003	$54,900	$31,900	$59,700
2004	$58,200	$32,900	$63,400
2005	$62,600	$34,100	$68,700
2006	$64,200	$35,900	$71,400

Source: Census Bureau

Singlewides run in a general range from 900 to 1400 square feet. Doublewides, as their name implies, are twice as large. For the price, this square footage should demonstrate the claims of affordability within the sector.

This table shows the price of doublewides have grown by a bit more than five percent per year, while the price of singlewides have increased by about three percent per year. Over ten years, the discrepancy in average price has almost doubled. In spite of that pricing differential, doublewides have increased their share of the overall market. Whereas in 1997, they accounted for 59 percent of new financed manufactured home sales, by 2006, they made up almost 80 percent.

As Figure 2 reflects, individuals seeking loans for manufactured housing are concentrated within white Caucasian families. At the same time, as many as twenty percent of borrowers are either non-white or have not identified their racial status. This table provides descriptive statistics to characterize the assertion that borrowers are mainly white and rural. It appears that fewer African-American and Asian borrowers are seeking loans on manufactured housing. However, the number of white and Latino borrowers is increasing.

The HMDA data reports that a majority of borrowers are from urban areas, however. Urban areas include any loan made in a metropolitan area. But other data sets, such as the American Community Survey, often suggest that manufactured housing is rural. A recent study explains the contradiction – most manufactured housing is either suburban or exurban and can therefore fall into either classification depending on the data set's definition of urban.[17]

Figure 2. Home purchase loans, 2004-2006

	2004	*2005*	*2006*	*Sum*	*Share*	*Change*
Race and Ethnicity						
Asian	858	753	839	2,450	0.5%	-2.2%
Black	7,575	6,575	6,981	21,131	4.7%	-7.8%
Islander	274	271	278	823	0.2%	1.5%
Latino	10,508	10,773	11,831	33,112	7.4%	12.6%
Native American	1,270	1,174	1,379	3,823	0.9%	8.6%
Not Provided	8,536	7,986	11,188	27,710	6.2%	31.1%
White	112,159	116,224	126,377	354,760	79.3%	12.7%
Not Given	9,716	9,121	12,513	31,350	7.0%	28.8%
Geography						
Rural	54,794	54,672	67,451	176,917	39.5%	23.1%
Urban	87,566	90,219	92,747	270,532	60.5%	5.9%
Total	142,360	144,891	160,198	447,449	100.0%	12.5%

The Second Myth: It's a Southern Thing.

Taken to an extreme, manufactured housing has attained an iconic place in a narrative about the South.

The same power of perception that held to our analysis of the first myth matters here as well. Housing preferences vary dramatically, not just in terms of neighborhood type, but also among regions of the country. Many parts of the South are unincorporated. That fact alone makes a difference because it predetermines the choices in infrastructure. There are also issues related to cultural preference. Developers desire to provide culturally desirable housing, if only because it makes good business sense. No one wants to build lofts along the border of Texas and Mexico, just as the concrete and corrugated metal colonias would not fit within the woods of Vermont. If a sense exists that manufactured housing is only sought after by dwellers in one part of the country, then this will likely thwart its adaptation elsewhere.

Certainly the numbers show that people all over the country, allowing for some variation in passion, feel compelled to take advantage of the possibilities in manufactured housing. Any manufacturer of mobile homes would quickly balk at the notion that their products only work in one region of the country. At Palm Harbor Homes, for example, the three leading states receiving shipments of homes are California, Arizona, and Florida.[18] While manufactured housing is very popular throughout the South, it also serves many in the West, in the Midwest, and in parts of the Southwest. It is less prevalent in the upper Midwest, in the Northeast, and in the Mid-Atlantic regions.

Beyond the distribution, regional markets vary in their financing and loan sizes. In eight states, the frequency of high cost lending for loans on manufactured homes were lower than they were for loan applications on owner-occupied single-family housing in 2006. Those states are all in the Northeast or the West.

This is a surprising variation. More research should consider what makes the outcomes of financing in these states so different. One possibility is that the findings reflect the response of underwriters to differences in the collateral value of land. In HMDA, manufactured housing loan records can reflect either personal property loans or land-home packages with full real property status. With increasing frequency, manufactured housing is sold in the land-home package. Homes, of course, are made up of both land and a building. The land goes up in value while the building generally depreciates. The same is true for manufactured housing, in a very general sense. The value of land could even change the cost of lending for personal property mortgages in instances where renters have a long-term lease in an area with few alternatives for better housing values.

Unfortunately, more manufactured housing is being purchased in the high-cost loan areas than in the low-cost regions. The next table tracks the interest price and volume of manufactured housing originations.

When considering all property types as a whole, the Southeast is the region with the lowest average interest rate.[19] The Rust Belt is the highest. This contradicts the geographic variations in the price of interest rates among the larger body of manufactured housing loans.

This infers a more complicated truth than was originally suggested by the myth. Lenders will make

Figure 3. Quantity and Cost of Mortgages in Eight

	Manufactured Homes		Single Family Stick Built		
	Volume	*High Cost*	*Volume*	*High Cost*	*Percent Difference*
Utah	857	157	41,593	8,036	-1.0%
Indiana	3,090	906	58,325	17,750	-1.1%
Arizona	6,835	1,941	111,104	34,306	-2.5%
Florida	15,281	5,600	280,847	111,080	-2.9%
Idaho	1,228	223	18,566	3,980	-3.3%
Washington	5,949	1,070	72,541	17,080	-5.6%
Rhode Island	79	21	6,702	2,444	-9.9%
Nevada	2,115	367	54,208	16,512	-13.1%
Washington, DC	9	-	4,530	1,313	-29.0%

Only includes first lien purchase loans, 2006

loans on manufactured housing. Nonetheless, they generally charge high rates of interest. These findings may show that lenders are relatively comfortable lending to borrowers that collateralize their borrowings with instruments whose values stem in greater part from land.

The loan amounts are dramatically different, as well. In the South, home purchase loans averaged $60,777 over the last three years. In the West, by contrast, home purchase loan amounts averaged $117,124.

While the frequency of high-cost loans is roughly the same for home rehabilitation, refinance, or home purchase loans, the variation in the incidence of high-cost loans is greatest among the purchases. In Nevada (16.7 percent), Washington (17.7 percent), Idaho (18.2 percent), and Puerto Rico (3.4 percent), fewer than one in five home purchase loans is high-cost.

The Third Myth: Manufactured housing is relegated to the worst locations. You can find manufactured homes only in the least desirable neighborhoods.

This question is important for a number of reasons. First, because it interacts with the powerful voices of "not-in-my-back-yard" (NIMBY), notions about housing type among planners often conspire to influence zoning decisions. There is some empirical evidence to back up these voices: research in North Carolina found that property appreciation increased more when homes were located farther from manufactured housing.[20] At the same time, planners who cede to these voices will potentially consign manufactured housing to second-best locations. Those are often ones with inferior access to infrastructure, transportation, services, and employment.

Neighborhood quality is one of the defining characteristics of housing. It would be an unfortunate tradeoff, in the minds of most housing advocates, if efforts to increase homeownership compelled residents to move to lower-quality neighborhoods. Yet this is clearly a distinct possibility. Potentially, that could mean that low and middle income (LMI) housing purchase programs funnel the poor into neighborhoods with fewer amenities (parks, good schools, services, jobs), greater expenses for commuting, and more exposure to disamenities (crime, pollution, traffic, et al). Research that has addressed this question finds that LMI minorities experienced the greatest gains in neighborhood quality made by first time homeowners.[21]

There is not any data on the quality of neighborhoods in HMDA records. Still, HMDA data does tell us the median income in a census tract where a loan is originated. It includes statistics on the relative difference in the income of that neighborhood compared to the income of the surrounding metropolitan statistical area (MSA).

If we can impute that a higher than median income census tract is an approximation for a good neighborhood,

Figure 4. Financing Costs by Region

	High Cost	Not High Cost	Total	Percent High Cost
Mid Atlantic	940	1,668	2,608	36.0%
Midwest	36,203	45,010	81,213	44.6%
Northeast	11,557	18,169	29,726	38.9%
South	84,559	92,922	177,481	47.6%
Southwest	28,737	34,638	63,375	45.3%
West	22,818	49,935	72,753	31.4%
Total	192,449	248,977	441,426	43.6%

First lien home purchases, 2004 to 2006 than we can make some descriptive statements about neighborhood quality. I would argue that this is a fair assumption. The market is, if nothing else, an excellent diviner of value. All things being equal, more desirable residential locations should have higher priced homes and relatively higher income families inside their environs. What does the analysis suggest about the relationship between location of manufactured housing and neighborhood quality? The answer is that manufactured housing appears to be located in neighborhoods across the income spectrum. In the 649,401 originations from 2004 to 2006 that come with neighborhood income data, only about 16.8 percent were originated in census tracts with median household incomes at less than 80 percent of the MSA median. Approximately two in seven were originated in moderate income (from 80 percent to 100 percent) census tracts, however. Surprisingly, a fair amount of loans were for manufactured homes sited in the best neighborhoods. More than 11 percent, or about 72,292, were originated for homes in upper income census tracts.

Regional differences also weigh heavily in neighborhood locations for manufactured housing. The biggest regional differences are once again between the South and the West. The differences can be seen at both the upper and the lower ends of our indicators for neighborhood income. Loans in the South are much more likely to go to a home in a low-or moderate-income census tract compared to loans for a manufactured home in the West. They are also much less likely to go to a home in an upper-income census tract.

This finding should undermine the notion that manufactured housing is always in the worst location. It should also assuage fears that relying upon manufactured housing as the housing type of choice in some form of public investment scheme would relegate aid recipients to substandard housing locations.

The Fourth Myth: Lenders will finance anyone. Or, alternatively, **No one can get a loan for manufactured housing.**

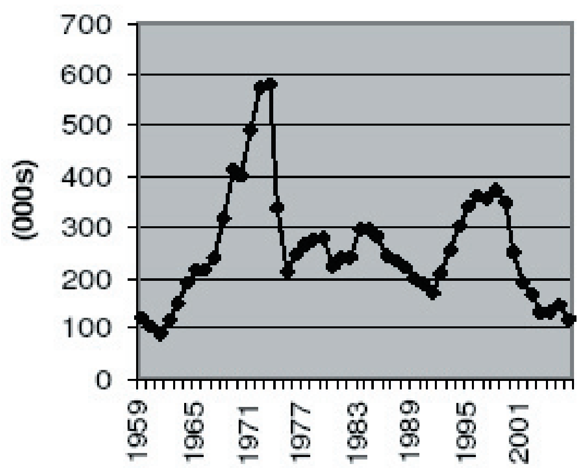
These two myths appear to contradict each other. Nonetheless, some people subscribe to each viewpoint. Taken together, it means there is a lot of confusion about the availability of financing for manufactured housing. This may be a direct product of the murky system that surrounds lending in this sector. For years, people financed a mobile home with the same person who sold them their home. There was no fixed price on mobile homes, and financing was coupled with the sale. These memories support the first assumption.

On the other hand, a close look at the sector reveals that widespread changes have occurred since 2000. Significantly, some of the largest lenders and servicers of mobile home financing (entities like Greentree and Conseco) went bankrupt. No one stepped into the market to take their place. Additionally, manufactured housing producer Fleetwood closed down its lending operation. But originations have actually increased in both 2005 and 2006 over previous years. Declination rates dropped eight percentage points in 2006 to just over 42 percent.

Another point to consider is that lenders are most likely to finance borrowers whose risk is mitigated by government participation in the loan. Borrowers are almost twice as likely to be approved for an FHA loan (1.91 times) on manufactured housing than they are to be approved for a conventional loan, and more than four times as likely when the loan is through either the VA or the FSA. An upper income borrower is still much more likely (3.36 times more likely) to be turned down for a conventional loan to purchase a home than is a low-income borrower who uses the VA program.

The type of loan and the purpose of the loan should be a strong factor in the availability of financing.

Figure 5. Manufactured Housing Shipments, 1959-2006



Reflects seasonally unadjusted data.
Source: US Census Bureau: US Shipments of New Manufactured Homes, Manufactured Housing Institute (1959-1977), Institute for Building Technology and Safety (1978-2006)

Conventional home purchase loans were denied at a rate 1.91 times greater than loans in government programs (FHA, VA, FSA, RHS).

The difficulty in getting access to credit may have less to do with the type of housing utilized for collateral than with the type of borrower applying for a loan. At their own volition, financial institutions can attribute an explanation for a denial of credit in HMDA data. In the 946,380 instances when they did turn down a loan from 2004 to 2006, borrower credit was cited 27.6 percent of the time as the reason for the denial. Collateral, by comparison, was given as the explaining factor only 6.1

percent of the time, meaning that borrower credit is the basis for credit denial 4.3 times as often as insufficient collateral. In the case of home purchase applications for conventional loans, the difference was one of 11.1 times in magnitude. Credit was the leading cause of declination. Collateral was third, with borrower's debt-to-income ratio cited only slightly more frequently.

In the West, borrowers are able to get home purchase loans on much higher amounts relative to their income. More than one in four home purchase originations in each of these areas goes for an amount that is more than three times the annual income of the individual applying for the loan. By contrast, only about nine percent of home purchase loans originated in the South and Southwestern states allow borrowers to finance that much relative to their incomes. Most borrow far less. In fact, more than 57 and 58 percent, respectively, borrow less than 150 percent of their annual income when they buy a home in those regions.

Some would say that the terms of credit and access to financing are expressions of the alternative system of credit that surrounds manufactured housing. This is a worthy assumption since manufactured housing financing developed within the framework of selling homes off a lot. The dealer holds a great deal of control within the market over both manufacturers and buyers.

The Fifth Myth: Because full service banks avoid the market, borrowers must go to captive financing companies, the kind linked to a manufacturer or a dealer.

This is not true. Banks and credit unions make loans on manufactured housing. In fact, Wells Fargo is the leading manufactured housing lender, by volume over the last three years, of all financial institutions. They are not a captive financing arm of a leading manufacturer. The top ten lenders, who together comprised 28 percent of all loans between 2004 and 2006, include just two financial subsidiaries: Vanderbilt (of Clayton, a manufactured home producer) and 21st Century Mortgage.

In the last few years, the mortgage operations of several manufacturers have closed. Fleetwood shuttered its lending unit in 2006. Champion provides short-term financing to dealers that carry its homes on their lots, but it does not make loans to consumers. Palm Harbor and Clayton, on the other hand, continue to provide loans.

Nevertheless, manufacturers approach financing with hesitation. The crisis that hit manufactured housing lending from the late 1990s through 2001 was a product of "loose credit standards for home-only loans," according to one manufacturer.[22] The subsequent reaction has directly impacted sales volumes. Judging by the rate of declinations, credit is tight for loan applicants who want to buy manufactured homes.

One group of borrowers—the one defined by those seeking a chattel loan—is disproportionately more likely to get a loan from the dealer. Chattel loans are ones made on personal property. Generally, that means homes not fixed to the ground by a permanent foundation. In practice, this is a pejorative description for loans with bad terms such as high interest rates, balloon payments, and predatory features. Getting a loan for a home classified as personal property from a bank is relatively difficult because of the lack of GSE demand (government-sponsored enterprises like Fannie Mae, Freddie Mac, and the twelve Federal HOME loan banks) for those loans on the secondary market. A greater percentage of personal property loans are made through consumer finance and dealers financing companies.[23]

The Sixth Myth: Manufactured housing loans are difficult to securitize.

The underlying assumption of this statement is that lenders resist making these loans, in part because the lack of a secondary market poses a threat to lender's liquidity. Yet the statement is not entirely true. There is a flourishing secondary market for mortgages in the FHA, VA, and FSA programs. In the last three years, more than 80 percent of mortgages in each of those programs were sold on the secondary market.

The secondary market treats conventional loans differently, however. Many were made into asset and mortgage-backed securities. Of the ones that were securitized (about 26 percent), slightly more than half had a high cost interest rate. The conventional market is big, though. It accounts for slightly more than 85 percent of all originations.

Within the conventional market, about fourteen percent of loans by volume are extended to LMI borrowers. A greater percentage (about 39 percent) of loans go to borrowers in LMI tracts.

This secondary market for conventional manufactured housing loans has become relatively oligopsonistic. Five out of six manufactured housing loans are purchased by just ten lenders. Such an arrangement suggests that the buyers have a lot of market power over the lenders who originate loans on manufactured housing.

In many ways, it is a case of layers of government intervention supporting some loans, but very little government intervention supporting others. More than 73 percent of all FHA, VA, FSA, and RHS manufactured housing loans that are purchased on the secondary market are bought by Ginnie Mae.

Freddie Mac and Fannie Mae, by purchasing mortgages from originators, provide liquidity for lenders. But they buy manufactured housing loans in limited circumstances.

What kind of manufactured housing loans are they buying? Figure 6 suggests that while terms vary, one thing they have in common is that they will only consider real property loans. As a result, approximately 92 and 96 percent of loans acquired by Fannie Mae and Freddie

Mac, respectively, bear low cost interest rates.

Even so, Fannie and Freddie's involvement is limited and only provides securitization to slightly less than one in every eight manufactured housing loans originated in the United States (11.96 percent). Because the rest of the buyers tend to avoid conventional loans, Fannie Mae and Freddie Mac account for almost half (45.3 percent) of the securitizations for conventional loans.

These government sponsored loans are also more likely to be priced at a prime price. It is hard to say if the liquidity creates the pricing, or if the pricing leads to the liquidity. Nevertheless, there is a dramatic difference between the interest rates on GSE loans and those in the rest of market. From 2004 to 2006, less than 6 percent of these loans bore a high cost interest rate.

Demand for loans on the secondary market dropped off in 2006. Figure 7 shows securitizations reported in HMDA data for each of the three years 2004 to 2006. All loan types are included.

The markets most affected are the ones for conventional loans in the Midwest, the South, and the Southwest. Purchases for those loans fell off by 93 percent from 2004 to 2006. Of the ten states where Fannie and Freddie had the smallest market share in 2006, all but Georgia and Louisiana are in the Northeast. By contrast, the states where Fannie and Freddie had the highest market share in 2006 were all west of Wyoming, with the exception of the District of Columbia. Figure 8 shows the variation in eventual securitization of loans originated on manufactured housing in 2006. Notice how the private market's interest in buying loans corresponds to the interest exhibited by the GSEs. The GSEs focus their purchases on non-high-cost loans. In 2006, for example, only 7.4 percent of loans purchased by one of the four GSEs were high cost. The GSEs bought more than 55 percent of all high-cost loans that were securitized in 2006.

Who buys high-cost debt? The answer is that as there is little liquidity for those loans, more than 87 percent of all high-cost loans are not purchased at all. Insurance companies, who use the cash flows from these loans to provide revenue, are more willing to take on the risk inherent in high-cost loans. In 2006, they bought 4,960 high-cost loans – about 36 percent of all high-cost loans that were successfully securitized.[25]

The Seventh Myth: All loans are high cost.

One of the chief obstacles to integrating manufactured housing within the range of suitable products for community development is the perception of its cost of financing. Nonprofit advocates contend that any development with manufactured housing would fail to build wealth for its clients because they would inevitably take out bad loans. This is closely linked to another perception—that manufactured housing depreciates in value. We cannot ascertain the truth of the latter statement with HMDA data. Nonetheless, HMDA does provide an excellent vantage point for assessing the primary claim that all manufactured housing lending is high cost.

The findings suggest that the answer is not that simple. About half of all conventional (50.2 percent) manufactured housing loans bear high interest rates.

- Conventional owner-occupant loans are more likely to bear a high-cost interest rate (frequency equals 52.1 percent) compared to conventional non-owner-occupied originations (frequency equals 35.1 percent).
- Only 6.7 percent of FHA loans bear a high-cost rate. The benefits of FHA mortgages are enjoyed by owner-occupants. Over 99.4 percent of all FHA originations are owner-occupied. These mortgages come with a down-payment requirement.

There are a lot of very bad loans made on manufactured housing. Defining a bad loan is difficult, but there is one agreed upon benchmark – the HOEPA label. The Home Ownership and Equity Protection Act (HOEPA) of 1994

Figure 6. Mortgage Terms of Leading Government Sponsored Entities (GSEs)

	Freddie Mac	**Fannie Mae**
Term	15, 20 and 30	10, 15, 20, and 30 year
ARMs	Yes: 7/1, 10/1	Yes
Fixed-rate	Yes	Yes
Personal Property	No	No
Pre-HUD Code	No	No
Cash-out Refinance	Yes	Yes, up to 20-year-term at 65% LTV
Max LTV	95%	95%
Loan Type	Conventional	Conventional, FHA (both fixed and ARM)
Appraisal	Required	Required
Lien	First lien	First lien
Fee for Buying MH debt	50 basis points	50 basis points

established a system for safeguards on loans that would otherwise hold the greatest potential for stripping wealth from borrowers. The act constrains lenders from freely originating these loans by requiring extra disclosures and additional strictures. HOEPA loans are generally very high cost, with prices that are more than 800 basis points above comparably termed Treasury securities.

There were 8,252 HOEPA loans made on manufactured housing from 2004 to 2006. That is approximately one percent of all originations. The average interest rate for loans in this group exceeded comparably termed Treasuries by 982 basis points.

Although earlier mentioned differences in interest rate cost among regions would lead us to suspect to find this in the South and Southwest, HOEPA loans are more often situated elsewhere. The problem is largely confined to states in the Midwest, where just slightly less than one in forty originations (2.18 percent) is identified as a HOEPA loan. An origination in the Midwest is 2.76 times more likely to be rated as a HOEPA loan than are loans in the rest of the country. It is a rate that outpaces the West by four times and is even double the rate within the Southern United States. Almost one in eight of all manufactured housing HOEPA loans originated in the United States was made to a borrower from Michigan.

Figure 7. Securitizations Reported in HMDA Data, 2004-2006

Loan Type	2004	2005	2006	Percent Change since 2004
Conventional	130,359	98,064	12,348	-90.5%
FHA	13,656	15,377	11,696	-14.4%
FSA or RHS	63	31	14	-77.8%
VA	1,634	1,831	1,013	-38.0%
Total	145,712	115,303	25,071	-82.8%

None of these HOEPA loans went for home purchase loans. All were confined to either refinance or home rehabilitation loans. More than 4 percent (4.2) of loans made for home rehab on a manufactured home were identified as HOEPA loans. More than 11 percent of rehab loans in Alabama and 20.4 percent in Michigan were HOEPA.

The Eighth Myth: Manufactured homes do not retain equity.

This myth may be the most problematic of all, as it is leveled as a critique that keeps nonprofits and public investment out of this sector. If it is true, their reluctance is warranted, and advocating for this sector would be a second-best path to homeownership. Furthermore, many policy decisions hang on a subscription to this belief, so it deserves close scrutiny through the following questions: Does manufactured housing retain its equity? If so, under what conditions? What are the implications for home refinance, repair, and wealth building strategies?

This myth impacts the ability of borrowers to get loans on used homes. Homes will not retain equity unless demand exists to buy them, and one of the biggest problems with the market for making loans on manufactured housing is the trouble with reselling a manufactured home. But that demand is also a product of the availability of loans to buy used homes. The same forces dictate the likelihood that lenders will be willing to lend for repairs on used homes.[25]

This question addresses not just our immediate concerns about availability of capital for these finance products; it goes further. It lets us gauge the relative truth of one of the lasting critiques about manufactured housing. It is said that manufactured housing “does not retain equity,” and this is a widely held perception. It has also become a critique that many see as necessary to resolve before public investment can be directed into this sector.

The equity problem stems from the large role that dealers play in providing financing on the sale of manufactured homes. While borrowers can get credit to buy a new home on a lot, can they also get credit to refinance their home once it has been sited on a lot? HMDA data is not detailed enough to give us a full picture, but it does show clearly that refinancing mobile homes is a possibility.

In a curious development, refinance loans have become an entry point for some cautious lenders. For a lender, participating in refinance mortgages represents an opportunity that avoids much of the assumed downward trajectory in price. One credit union in North Carolina will not provide home purchase loans but will make refinance loans on real property homes that are at least one year old. This means that homes can be underwritten at loan-to-value ratios that capture the “off-the-lot” depreciation problem.

With that on-the-ground context, the loan sizes on refinance loans tell us a very optimistic story. While the mean loan size for a home purchase was approximately $70,349 from 2004 to 2006, the mean loan size on a refinance was higher. Refinances averaged $77,639. Prices had a lower than average bias, but median refinances were still $69,000 compared to a median of just $59,000 for home purchases.

People do not just need capital to buy homes. They also need to be able to access credit to improve their homes. Moreover, the ability of borrowers to continue to draw financing on their used homes tells us something about their performance in the market place. Borrowers made 62,783 home rehabilitation loans on manufactured homes in the three year period from 2004 to 2006. Each

Figure 8. Securitization of Loans for Manufactured Housing, 2006

Region	Private Share	Government Share	Not Securitized
Northeast and Mid-Atlantic	10.9%	8.2%	80.9%
Midwest	11.6%	15.5%	72.9%
West	28.5%	23.1%	48.3%
South	11.3%	14.1%	74.6%

subsequent year witnessed a slight uptick in the number of loans. Almost all rehab loans were conventional mortgages. The median loan size was $23,000.

North Carolina is one of many states with a housing finance agency that will not provide loans for residents in manufactured housing to rehabilitate their properties. In general, it appears that financing is available for borrowers to fix up their manufactured homes from private lenders, but the loans for that opportunity come with the most onerous interest rates. Home rehab loans are the most likely to be labeled by the Federal Trade Commission as HOEPA loans and thus require the additional levels of regulation associated with those loans.

Geography plays a part too. Getting a loan to fix up your home is more difficult in the South and the Southwest. The same regional disparity that exists in the cost of lending also emerges here in terms of access to financing for home rehabilitation. Of the 27 states where home rehab loans made up a greater share of all owner-occupied loans than the mean (8.4 percent), only five were from the South or Southwest. None of the Southern or Southwestern states ranked in the top ten states in terms of market share made up by home rehab loans.

Home rehab loans defy one of the expectations for the larger real estate market in that owner-occupants normally pay a higher interest rate for these loans than do non-owner occupants. Almost two of every three home rehab loans in a first lien position had a high-cost interest rate from 2004 to 2006 (63.4 percent), whereas just 46.1 percent of similar loans taken out by non-owner occupants had a high-cost interest rate. When they do get a high-cost loan, irrespective of lien position, owner-occupants paid an interest rate that was, on average, about 61 basis points higher than non-owner occupants paid on their high cost loans.

Some types of loans are especially hard to securitize. Loans to rehabilitate manufactured housing find little demand on the secondary market. Less than one in ten (9.51 percent) are securitized. Freddie Mac and Fannie and Ginnie Mae together only purchased 1,169 rehab loans in those three years.

The larger lesson about loans for refinance or repair muddies the absolute nature of the commonly held belief that manufactured homes do not retain value. It appears that they can continue to be viable as collateral after their original sale.

Left unsaid in the equity-depleting argument is a candid truth about the financial returns of site-built housing. While it is true that owning a home presents a family with a great opportunity to build wealth, a more exact statement would be that owning *land* confers the chance to reap financial gains. Land goes up in value, but in most cases, the structure of the house increases little. The structure also imposes maintenance costs. It is unfair to compare a landless mobile home with a stick-built home and land.

Policy makers and advocates alike should seek to introduce manufactured housing into ownership systems that give low-income residents the benefits of land. The "land-home package," through fee simple ownership, is the simplest and most common example. Other less well-known opportunities also exist. Housing cooperatives and non-profit ownership are two examples which have only begun to be explored.

Certainly, community development lenders that gingerly limit their lending to refinances on used homes may ultimately protect their interests. Manufactured housing, at worse, compares to other investments that lose value slowly.

Conclusion

Policy makers working in areas that affect manufactured housing must recognize the continued persistence of problems in the market. Included here are non-profit developers, but also bank underwriters, land-use planners, and state housing finance agencies. All of these groups, which can promote or hinder the momentum of this sector, should see that their actions can affirm the potential of manufactured housing as a point of access for wealth building for low-income people.

Clearly there is great variety among states and regions in the United States in terms of the type of financing issued for borrowers. Borrowers in the West and in the Northeast are really not under the same onerous forces that exist and undermine borrowers in the South and Southwest. The market itself is functioning well.

Those outcomes are likely a product not just of factors within "the market," such as demand for alternative types of housing, the price of land, and the health of the economy, but also of the variety of legal frameworks that surround manufactured housing. Some states will confer real property status upon manufactured housing more willingly than others. For example, in California, manufactured home owners in land-lease parks can get real property loans on homes with long-term leases. AARP and the National Consumer Law Center have put together a survey of laws governing residents in manufactured housing parks. Laws such as right-of-first refusal, when coupled with frameworks that give residents access to financing to buy parks, can make a big difference in security for people who live in manufactured housing communities.

This paper proposes a new direction for non-profits. The time is right to consider a policy of "engagement" with manufactured housing and with segments of the industry itself. The underlying features of low-cost housing built on dense lots, both in infill settings and in traditional parks, have retained if not increased their popularity. The underlying fundamental quality of the housing structure itself has improved. Good relationships can be developed with manufacturers.

Many problems exist, as outlined in here. Yet all too often, those problems are circumstantial to the manufactured housing product itself. Financing, zoning, and statutes defining real property emerge as turning points where opportunities will be created.

The institutional answers to shepherd a new direction are just now being created. They include not just cooperative and non-profit ownership, but also fee simple housing arrangements. The existing framework of actors that make affordable housing production possible in the United States (state housing finance agencies, the GSEs, non-profit developers, and tax credit-incentivized financial institutions) can extend their missions to include the housing needs of manufactured housing residents.

Although the industry will not welcome the medicine of engagement, it may benefit greatly from the cure. Manufactured housing witnessed a renaissance in sales volume 30 years ago following the development of HUD-code standards. In a new era, with advocate engagement, demand for affordable housing can be met with manufactured homes.

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Inclusionary Housing Initiatives in North Carolina

A Case Studies Approach

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While no statewide policies mandate that municipalities must develop housing at every income level, some cities and towns in North Carolina are determined to do so. They employ a number of different strategies and planning tools to see that a fair proportion of new housing stock is affordable to low and middle income households. A group of planners collaborate here to showcase successful outcomes in four places: Chapel Hill, Davidson, Manteo and Greensboro.

Where we live has a significant effect on the quality of our lives. The community we live in affects our access to job opportunities, the quality of the schools our children attend, our use of public transportation, and the amount of involvement we have with our surrounding neighborhood. Many cities and towns around the United States and North Carolina have started to recognize how rapidly rising real estate values can push out or keep out the working families and individuals that make their community diverse and robust: school teachers, police officers, and fire fighters, to name a few.

In an era of ever-constricting state and federal resources, municipalities have had to be creative in addressing the demand for affordable housing. Turning to their own local government policy tools, places have used their zoning powers to create requirements and incentives to promote the development of affordable housing within the private market. The resulting inclusionary housing programs have become models for other communities across the country and state.

Inclusionary zoning is an innovative tool that can be used by municipalities to ensure adequate affordable housing is included in the normal course of land development. However, a distinction exists between this type of zoning and incentive zoning. Inclusionary zoning is a mandatory approach that requires developers to make a portion of the housing units in their project affordable to low- and moderate-income households. Incentive zoning is a voluntary approach that either waives certain regulatory requirements or provides additional density allowances (the incentive) to developers in exchange for incorporating affordable housing into their proposed developments. Generally, this mandatory zoning approach to affordable housing (often in concert with density bonus, as is recommended) has been found to be the most effective

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means of increasing the number of affordable units and creates a wider variety of affordability levels within a development.

Four examples from across the state have been selected to demonstrate how inclusionary zoning and affordable housing ordinances can effectively provide housing to individuals who might not otherwise be able to afford to own a home. Two of the case studies – Davidson and Manteo – are examples of jurisdictions that have both incentive and mandatory zoning approaches to the need to provide housing for all. Chapel Hill, on the other hand, has not yet enacted an ordinance, but the town has outlined its expectations for affordable housing in its comprehensive plan and holds developers to clear goals throughout the approval process. Greensboro provides yet another approach to affordable housing, turning instead to the HOPE VI federal housing program to achieve neighborhood revitalization with a strong mixed-income component.

Town of Chapel Hill

Chapel Hill's Comprehensive Plan includes a strategy that states: "As a general policy, the Town should encourage developers of residential developments of five or more units to 1) provide 15 percent of their units at prices affordable to low and moderate income households, 2) contribute in-lieu fees, or 3) propose alternative methods so that the equivalent of 15 percent of the units will be available and affordable to low and moderate income households."

This is a Comprehensive Plan policy and Town Council expectation, not an ordinance requirement. The Chapel Hill Town Council passed a resolution on March 6, 2000, with the objective of increasing the availability of affordable housing for low and moderate income households in Town. The policy states the Council's expectation that any rezoning requests with a residential component incorporate a 15% affordable housing feature into their plans with mechanisms to assure ongoing affordability. In Chapel Hill, "affordable housing" is defined as housing that is affordable to individuals and families with income levels at 80 percent of the areawide median or lower.

One key feature that the Town looks for in these affordable housing components is ongoing affordability (as opposed to assistance just to the first occupant). Mechanisms to assure ongoing affordability for owner-occupied housing include working with a local nonprofit land trust (more on that below), and/or including deed restrictions that allow the Town the right of first refusal to purchase the unit at a pre-determined price if the unit becomes available for purchase. The main mechanism to assure ongoing affordability for rental units is an enforceable condition of approval.

Greenway Condominiums
Developed by White Oak Properties
16 one- and two-bedroom condo units

Chapel Hill's subdivision regulations require that a certain percentage of the lots that are created carry deed restrictions limiting size, which results in affordable prices. An applicant can choose to place deed restrictions on 25 percent of the lots in a new subdivision, or alternatively make provisions to assure that 15 percent of the units will be affordable.

Regarding the Land Trust: the organization is Orange Community Housing and Land Trust. This is a local nonprofit organization, supported in part by annual contributions from the Town. Information about the Land Trust can be found on the organization's website: http://www.ochlt.org/. The Town is adding approximately 35 units per year to its supply of affordable housing through these approaches. The following page shows illustrative examples of affordable housing, payments-in-lieu of affordable housing, and requirements for size-limited dwellings, provided as components of new development proposals in Chapel Hill.

Rosemary Place at Meadowmont
Developed by the Land Trust
32 two- and three-bedroom townhomes

Town of Davidson

Historically, the small college town of Davidson has been home to a variety of moderate-income professions, such as college professors, store clerks, school teachers, artists, ministers, and police officers. As the region's population has grown rapidly and construction costs have increased, the Town of Davidson has experienced a significant rise in property values. The market value of land and houses is beyond the reach of many people of moderate means who live, work and have grown up in Davidson. Newly constructed single-family homes of approximately 2400 sq. ft. regularly sell at or around $350,000 while existing homes have climbed to an average sales price of $460,000 as compared to $227,000 average sales price in the Charlotte/ Mecklenburg region of which Davidson is a part.

Maintaining an economically diverse citizenry and

Chapel Hill Projects with Inclusionary Elements

Wilson Assemblage (approved March 7, 2005)
- Council-approved Special Use Permit authorized 149 dwelling units and 50,000 sq.ft. of non-residential space
- A condition of approval required verification that the North Carolina Housing Finance Agency had approved a proposal for 32 tax credit affordable units in the adjacent Dobbins Hill Development

Chancellor's View Cluster Subdivision (approved October 11, 2004)
- Council-approved Preliminary Plat authorized 25 lots on 32.4 acres for single-family development
- Three of the lots (12.5 percent of total lots) are restricted to single-family dwelling units affordable to families earning 80 percent or less of Chapel Hill median-family income

Creekside Subdivision (approved April 14, 2003)
- Council approved Preliminary Plat authorized 9 lots on 11 acres
- Two (2) dwelling units (25 percent) were restricted to 1,350 sq. ft. in floor area for 30 months

Avalon Park Subdivision (approved January 13, 2003)
- Council-approved Preliminary Plat authorized 10 lots on 5 acres
- Donation of $52,000 to the Town's Revolving Acquisition Fund to subsidize affordable housing initiatives

Rosemary Mixed-use Development (approved August 26, 2002)
- Council-approved Zoning Atlas Amendment and Special Use Permit
- Development comprised of 42 multi-family dwelling units (53,856 sq. ft.) and 6,204 sq. ft. of non-residential floor area
- 6 units (15 percent) to be rental units available to families earning 80 percent or less of the median 3-person family income

Meadowmont Hilltop/Greenway Condominiums (approved April 22, 2002)
- Council-approved Special Use Permit
- Development comprised of 64 multi-family dwelling units
- 16 units (25 percent) to be either in the Land Trust or with deed restrictions ensuring affordability for buyers earning 76-100 percent of the median-family income depending on the specific option and unit

Cross Creek Subdivision (approved April 22, 2002)
- Council-approved Preliminary Plat authorized 17 lots
- Restrictions on dwelling unit sizes were included for two lots: One house limited to 1,100 sq. ft., two limited to 1,350 sq. ft.
- 100 percent sponsorship of a Habitat for Humanity house in the Chapel Hill planning jurisdiction

The Homestead Townhomes (approved June 25, 2001)
- Council-approved Special Use Permit & Zoning Atlas Amendment
- Development includes 191 multi-family dwelling units and 385,000 sq. ft. of floor area
- 30 dwelling units (15.7 percent) reserved as permanently affordable units for qualified buyers

Wilshire Place Condominiums (approved June 11, 2001)
- Council-approved Special Use Permit Modification
- Development consists of 12 multi-family dwelling units and 14,500 sq. ft. of floor area
- $36,000 payment-in-lieu ($3000/unit) for affordable housing to the OCHC

Chapel Ridge Apartments (approved November 13, 2000)
- Council-approved Special Use Permit and Zoning Atlas Amendment
- Development consists of 180 multi-family dwelling units and 220,844 sq. ft. of floor area
- 24 one-bedroom/one bath multi-family dwelling units permanently available for rent to eligible households (Section 8 vouchers, and/or households earning less than 80 percent of the area median income)

Parkside II Cluster Subdivision (approved July 5, 2000)
- Council-approved Preliminary Plat authorized 67 lots
- Restrictions on dwelling unit size were included for 17 lots: ten houses were limited to 1,100 sq. ft., seven houses were limited to 1,350 sq. ft.

encouraging the production of affordable housing are priorities of the Davidson Town Board. In 2001, the Board adopted an affordable housing ordinance requiring every new development (with a few exceptions) to set aside 12.5 percent of all planned units for affordable housing. In 2005 and 2007, the ordinance was amended to include affordable housing guidelines and standards.

Developments with seven or fewer units must either provide one affordable unit or make a payment-in-lieu to the Town of Davidson's affordable housing fund. Developments with eight or more are required to set aside 12.5 percent of the units as affordable. For example, in a 40-unit development, the builder would build five affordable units. With this many units, developers are then required to distribute the affordable units among different income categories. Hence, out of five affordable units, two must be made available to households with incomes less than 50 percent of the area median income. The other three units must each be priced appropriately for households with incomes between 50-80 percent of AMI, 80-120 percent of AMI, and 120-150 percent of AMI, respectively. For smaller developments whose share of affordable units is less than five, the developer chooses which income levels to target, bearing in mind that the Town Board favors building units for the lowest two income brackets. But this plan does give some leeway for the developer to make a case for the higher affordable brackets, depending on the available stock. While the Town prefers that affordable units be constructed on-site, especially in locations close to transit, the developer may opt out of the minimum required percentage by making a payment-in-lieu of $74,000 per affordable unit to the affordable housing fund. The payment represents the cost difference to the developer of providing one market-rate unit as compared to an affordable unit. This figure was derived using a formula included in the ordinance.

The ordinance states that affordable housing will be designed to complement the neighborhood. This requires that the exteriors of the affordable units be similar to those of market-rate units in the same development. The ordinance also requires that permanently affordable units be "functionally equivalent" to market-rate units. This means that when features are included in market-rate units, such as kitchen cabinets, countertops, dishwasher, etc., then equivalent features must be included in the affordable units. The features do not need to be identical. The Town allows variations, such as laminate rather than Corian countertops, which result in an equivalent livability outcome. Affordable units are also required to meet minimum size requirements based on the number of bedrooms and unit type (attached or detached).

Developers are required to submit an affordable housing plan for approval by the Town Board prior to the release of the development's preliminary plat. The plan must illustrate how the project will meet the affordable housing program requirements. In addition, the Town requires deed restrictions which impose resale and rental price limitations. These covenants are designed to preserve affordability for future qualified home-buyers or renters. Affordability must be maintained for 99 years.

The ordinance is intended to assist income-qualified households in purchasing or renting affordable homes. Income-eligible households have been traditionally defined as those whose income is 80 percent or less of the area median income. However, the Town of Davidson's ordinance includes households with incomes up to 150 percent of the area median income. The median income for a family of four in Mecklenburg County is $60,200. A household with this income would have only $1150 per month available for a house payment, leaving them unable to afford the median home in Davidson. With these rates, Davidson has a demonstrated need for an expanded affordable housing stock, but the development process from the master plan to the issuance of building permits may take several years. Consequently, the Town of Davidson is working to address this need for affordable housing.

Currently, there are 68 affordable housing units in Davidson. Six of the units exist per the requirements of the mandatory affordable housing ordinance while the other affordable housing units are held in a land trust by the Davidson Housing Coalition, a non-profit 501(c)(3) organization that works in conjunction with the Town to provide affordable housing. Additionally, the Town has collected or is owed approximately $600,000 in payment-in-lieu fees. Under the 2001 ordinance provisions, developers were allowed to dedicate land in lieu of building affordable units. As a result, the Town has several valuable parcels of land, donated by developers upon which to construct units for income-qualified households. The Town of Davidson expects to offer 20+ additional affordable units available for sale or rent by the summer of 2008 and to have approximately 200 affordable housing units on-line in the next five years.

Town of Manteo

The Town of Manteo, county seat of Dare County with a population of approximately 1,300, is located on Roanoke Island, part of the Outer Banks of North Carolina. Over the past century, Manteo's economy has shifted from maritime-based industries (fishing, crabbing, boat-building, etc.) to a more tourist-based economy featuring the NC Aquarium, Lost Colony outdoor drama, Elizabethan Gardens, and attractive downtown waterfront district. Although bolstered by the mostly seasonal tourism industry, Manteo is a fully functioning small town with a majority of property owners maintaining year-round residency.

As property values increased sharply on the Outer Banks over the past decade, Manteo struggled with the availability of affordable housing for its low and middle class working citizens. In response to these concerns, the Town of Manteo adopted an inclusionary affordable housing ordinance (IAHO) in May 2004. The objectives of the program are clearly outlined in the initial paragraph of the IAHO:

> The purpose of this chapter is to promote the public health, safety, and welfare by promoting housing of high quality located in neighborhoods throughout the community for households of all income levels, ages and sizes in order to meet the town's goal of preserving and promoting a culturally and economically diverse population in our community. The diversity of the town's housing stock has declined because of increasing property values and construction costs. The town recognizes the need to provide affordable housing to low and moderate-income households in order to maintain a diverse population and to provide housing for those who live or work in the town. Without intervention, the trend toward increasing housing prices will result in an inadequate supply of affordable housing for town residents and local employees, which will have a negative impact upon the ability of local employers to maintain an adequate local work force and will otherwise be detrimental to the public health, safety, and welfare of the town and its residents. Since the remaining land appropriate for new residential development within the town is limited, it is essential that a reasonable proportion of such land be developed into housing units affordable to low and moderate income households and working families.

A number of specific requirements inform Manteo's affordable housing policy:

- Manteo's IAHO applies to all new construction or renovation projects resulting in the creation of five or more residential units. In addition, the IAHO applies to all subdivisions containing five or more new lots.
- The IAHO requires that 20 percent of all new housing units and lots are provided at affordable prices.
- To offset the cost of this requirement to developers, Manteo created a density bonus system in which a developer is granted one additional market-rate unit or lot for each affordable dwelling unit or lot developed.
- In order to prevent excessive density, the density bonus has a cap. The bonus units cannot exceed 25 percent of the number of market-rate units or lots, and in no case shall exceed six units beyond the number of required affordable units. Lots can be no smaller than 6,000 square feet.
- The affordable housing units or lots are required to be dispersed among the market-rate units throughout the property. The exterior appearance of the affordable units must be compatible with the surrounding residential units.
- A phasing plan ensures that the affordable units are implemented in a timely manner during the development process.
- At least 50 percent of the affordable units must be provided at 65 percent of the area median household income, which is considered to be a low income household. The remaining affordable units can be provided at 80 percent of the area median household income, which is classified as a medium income household.
- Affordable units or properties must first be offered to residents and employees of Manteo.
- Resale of affordable housing units and properties requires review by the Town. Sales prices are limited to the original sales price plus a multiplier determined by the Consumer Price Index (CPI) and the fair market value of any improvements. This stipulation is meant to keep the units affordable in perpetuity.

Since the adoption of the IAHO, the Town of Manteo

has granted approval of five eligible projects totaling 28 affordable housing units or lots. One such project is The Flats Subdivision, which includes 20 market-rate units and four affordable units. The developer has subdivided the property and is constructing single-family residences. Two residences will be made available at a price of $118, 300 (65 percent of median income). The other two affordable residences will be made available at a price of $145,600 (80 percent of median income). At this time, several market-rate units and the first two affordable homes are under construction and planned for completion by the end of 2008.

The Willow Oaks Community in Greensboro

In 1992, Congress created the Urban Revitalization Demonstration Program, also known as HOPE VI, to revitalize distressed public housing by providing flexible block grants to local Public Housing Authorities. The primary physical objective of the program was to reconnect "the projects" with surrounding neighborhoods using a locally-determined mix of renovation, demolition, and new construction, which would integrate publicly subsidized units with market-rate housing. In communities where significant numbers of public housing and substandard market-rate units are demolished, HOPE VI grants can provide opportunities for complete neighborhood revitalization with a strong mixed-income residential component.

One such neighborhood benefiting from the HOPE VI initiative is in the southeast quadrant of Greensboro and contains the Morningside Homes project, which provided 380 units of public housing covering 30 acres. When Morningside was constructed in the 1950s, the surrounding community was solidly working class. Over time, as the economy changed and residential segregation increased, Morningside Homes experienced a concentration of very low-income households, and the look and feel of the neighborhood as a whole subsequently changed. A building survey conducted by the city in 1998 concluded that 75 percent of the buildings in the Morningside/Lincoln Grove redevelopment area met the definition of blighted, and a substantial number of housing units were vacant and boarded up

In the fall of 1998, the Greensboro Housing Authority (GHA) was awarded a $23 million HOPE VI grant to improve Morningside Homes. Greensboro's HOPE VI project, renamed Willow Oaks by the residents of Morningside and the surrounding area, is a partnership between community residents, private builders, lead developer Mid-City Urban, GHA, and the City of Greensboro. The City committed $12.4 million to assemble additional land for development around the old public housing site and to provide improvements and upgrades to the surrounding infrastructure. Ultimately the plan will encompass 250 acres and some 1000 units, counting both the new construction and the existing units, which will benefit from the extensive improvements.

Prior to redevelopment, the Morningside/Lincoln Grove neighborhood was characterized by high density, substandard rental housing, the City's highest crime rate, a median income 74 percent lower than the citywide median, and an unemployment rate over 15 percent. Over 40 percent of the population lived below the poverty level. While demolition of Morningside Homes was significant in lowering crime in the area, dramatic changes would be required to create a community where people would choose to live.

Through a series of public design workshops, Duany Plater-Zyberk & Company Town Planners (DPZ), internationally known proponents of New Urbanism, prepared a conceptual master plan and design standards for development of the mixed-use, mixed-income community that would be known as Willow Oaks. Project components include over 250 homes for sale, over 200 townhomes for lease, a Village Center with a community/childcare building and space designated for neighborhood businesses, and scattered pocket parks. In coordination with the master planning process, the City and the Redevelopment Commission of Greensboro prepared a comprehensive Redevelopment Plan, which was adopted in July 2000. In February 2001, a Traditional Neighborhood Development Plan was finalized and the central redevelopment area was rezoned to TN-1.

A mixed-income resident base is the foundation of the new community. Greensboro's TN-1 zoning designation encourages a wide income spread by allowing for a fine-grained mix of unit types, sizes, and designs. Rental and owner-occupied units in Willow Oaks are designed to appeal to and house a broader-than-usual range of income levels, including those who meet public housing eligibility requirements. By design, block faces have a seamless look regardless of whether units are rented or owner-occupied, subsidized or market- rate.

All residential units in Willow Oaks are privately developed and will be privately owned and managed. Three Low Income Housing Tax Credit projects—The Villas at Willow Oaks, a 40-unit senior village, and The Townhomes and The Havens at Willow Oaks which offer 170 family units—are fully occupied with lengthy waiting lists even though the overall vacancy rate for rental units in the City is above 7 percent. Construction of single-family homes is ongoing, with 60+ homes sold or under construction. The Community/Child Development Center is complete, and predevelopment on the commercial component of the Village Center is in progress.

On paper, Willow Oaks seemed to have a high probability of success. The master plan was developed by well-known town planners; $37 million in public investment was available; existing infrastructure could be upgraded at a reasonable cost; and the location was close to a downtown district experiencing revitalization of its own. But successful redevelopment projects are more than the sum of their parts. In 1998, only 24 percent of dwellings in the project area were owner-occupied compared with 54 percent citywide. The median income for the neighborhood was \$11,700, which is 26 percent of the City median income and well below the HUD definition of "low-income." It was clear that success at Willow Oaks would only be achieved through consistent adherence to the principles and commitments set out in the HOPE VI application and the City's redevelopment plan.

The master plan subdivided the land into lots for approximately 500 dwelling units, divided almost equally between attached and detached units. With 210 Low Income Housing Tax Credit rentals already planned for households earning less than 60 percent of area median income, it was obvious that in order to create a truly mixed-income community, the majority of for-sale homes would be marketed to buyers who could choose to live elsewhere in Greensboro. The challenge was to upgrade the neighborhood to a community of choice rather than a community of last resort while still providing opportunities for former residents and other low-income households to participate. As the lead developer explained early on, Willow Oaks had to offer market-rate buyers "screaming value," or in other words, products of high quality and design at price points lower than they would find in other developments.

Houses in Willow Oaks represent the Craftsman, Colonial, and Victorian architecture that is predominantly found in desirable urban neighborhoods in Greensboro. A town architect hired by the City provides plan review for compliance with the Willow Oaks Architectural Standards and construction oversight to assure compliance with the approved set of plans. Builders initially expressed concern that the standards required a level of architectural detail and material upgrades that would price the houses out of the market, but they found the design standards flexible enough to provide for creative alternatives that proved cost-effective.

One obvious measure of success is the current and predicted private investment in a neighborhood that had all but given up hope. Beautiful new buildings and residents determined to live in a vibrant and viable community are an inviting environment for private investors. Building permit applications for existing single properties around Willow Oaks have increased, and private developers have spent millions of dollars for land to develop student housing units within and contiguous to the boundaries of the redevelopment area.

Construction of residential units began in 2003. The effects of the redevelopment on the surrounding neighborhoods will not be fully understood until 2010 census data is compiled and released, but income data from current residents suggests that Willow Oaks is well on its way to becoming the mixed-income community it was intended to be. With its emphasis on a variety of unit types, ownership and rental opportunities are available to a wide segment of Greensboro's population. For-sale homes are marketed to prospective buyers at all income levels, including those in the low to moderate range.

Summary

Inclusionary housing has become a popular tool both in our state and across the nation for addressing the shortage of affordable housing. Inclusionary zoning requires developers to reserve a certain percentage of new residential development as affordable to low- and moderate-income households. Four examples of jurisdictions in North Carolina that have successfully used both mandatory and incentive housing ordinances and a federal housing program have been discussed. These case studies present viable solutions to the affordable housing crisis and are models of how local governments in the state can respond to this widespread shortage.

Editor's Note: *One of the reasons inclusionary zoning is not employed more often in North Carolina may be its ambiguous status before the law. In the absence of specific enabling legislation, local governments are left wondering whether an inclusionary zoning ordinance will be upheld on the basis of general land use and zoning powers clearly granted to municipalities, or whether it may be viewed as a form of tax or as an act that oversteps the bounds of expressly authorized authority. Attempts to introduce legislation authorizing Triangle communities to enact inclusionary zoning ordinances failed in 2002 and 2004. On the other hand, the only places that have adopted mandatory ordinances, Davidson, Manteo, and Kill Devil Hills, have not been challenged in court. Wilmington, Durham and Durham County, Winston-Salem and Forsyth County, and Orange County have gone the route of seeking specific authorization to enact voluntary programs that are similar in style to inclusionary zoning ordinances. Candace Stowell's article on the following page details the assistance that a reformed legislative policy could give to communities across the state.*

Should North Carolina Cities be Required to Have a Housing Element?

Candace H. Stowell, AICP

One strategy to promote affordable housing is for the state legislature to mandate that local governments make provisions for more low-cost units. Many states have passed laws requiring towns and cities to inventory their housing stock and carry out plans to correct imbalances. Candace Stowell discusses the lack of such legislation in North Carolina as well as numerous examples of housing elements that have been implemented by other states.

Although many states around the country either require or authorize local jurisdictions to prepare housing elements as part of the comprehensive plan, North Carolina's planning laws make no mention of housing elements. A housing element law in North Carolina could not only provide needed guidance to jurisdictions that want to address affordable housing needs, but could also provide the necessary "stick" to jurisdictions that attempt to avoid affordable housing in their communities through exclusionary policies or regulations. When towns declare that all single family homes must have a two car garage or else prohibit multifamily residential zoning districts, such practices limit housing choice and deny opportunity to low-income households that need affordable housing. Requiring cities and counties to have a comprehensive plan housing element would help expand housing opportunity for existing and future residents of North Carolina.

Current Housing Needs in North Carolina

According to the 2006 American Community Survey, there are 3,454,068 households in North Carolina, including 1,103,270 renter households (32%) and 2,350,798 owner-occupied households (68%). According to the Survey, there are 622,595 renter-occupied households with incomes below $35,000 and 72 percent of these households are cost burdened. In terms of owner-occupied households, the Survey found that of the 710,183 households with incomes below $35,000, 53 percent of the households were cost burdened.

Many low-income households are not able to access affordable housing for the following reasons: 1) the demand for affordable rental units and housing choice vouchers managed by local housing authorities grossly exceeds the supply with long waiting lists or even closed waiting lists in some jurisdictions; 2) many affordable units are actually occupied by households that can afford more expensive housing units, thus restricting the supply of affordable units; and 3) many older market rate rental units are disappearing, particularly in strong housing markets such as the City of Raleigh, where there is pressure for infill redevelopment.

Current State Law and the NC Smart Growth Commission

North Carolina planning statutes do not require or even encourage housing elements for counties or cities. North Carolina finds itself among a shrinking number of states that still lack specific language concerning housing elements. More troubling is the fact that state law does not require or even define the contents of a comprehensive plan. State law was amended last year to increase consistency standards between zoning decisions and the comprehensive plan but still does not explicitly define a comprehensive plan. Many North Carolina jurisdictions have zoning regulations and no comprehensive plan and of course many counties do not have either a comprehensive plan or zoning regulations.

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One of the more recent attempts to change state law occurred with the Smart Growth Commission. In 1999, the State Legislature created a Commission to Addresss Smart Growth, Growth Management, and Development Issues. The Commission was established with 37 members representing many different sectors and was charged to carry out seven specific tasks including "protect housing affordability and assure consumer choice." There were three workgroups created as part of the Smart Growth Commission and many of the recommendations regarding affordable housing came out of the Community and Downtown Vitality work group. Goal #6 of the Workgroup stated "Stimulate a Full Range of Housing Opportunities in Downtown Areas, nearby neighborhoods, and other concentrated centers of economic activity." To implement this particular goal, the Community and Downtown Vitality Group not only recommended that state legislation needed to be enacted to enable all "localities to implement inclusionary housing programs," but also recommended that all 'local growth plans address the issue of affordable housing, including both single-family homeownership and multi-family needs." Unfortunately, none of these housing recommendations evolved into potential bills.

Housing Element Laws in Other States

During the last two decades the trend has been for States to either adopt or else strengthen housing element laws. This article will examine the housing element practices of the states of Nevada and California.

Nevada

Since the American Planning Association had its first national conference in Las Vegas, Nevada, in April 2008, it is interesting to look at how this state addresses the housing element. Nevada not only defines the contents of a master plan, but also requires counties above 100,000 (as well cities within these counties) to adopt specific elements, including a housing element. In 1995, the Nevada State Legislature amended the master plan law (NRS 278.160) and specified that a housing plan needed to include the following items:

1. An inventory of housing conditions, needs and plans and procedures for improving and for providing adequate housing to individuals and families in the community regardless of income level.
2. An inventory of existing affordable housing in the community, including without limitation, housing that is available to rent or own, housing that is subsidized either directly or indirectly by the State, an agency or political subdivision of this State, or the Federal government or an agency of the Federal Government and housing that is accessible to persons with disabilities.
3. An analysis of projected growth and the demographic characteristics of the community.
4. A determination of the present and prospective need for affordable housing in the community.
5. An analysis of any impediments to the development of affordable housing and the development of policies to mitigate those impediments.
6. An analysis of the characteristics of the land that is suitable for residential development. The analysis must include, without limitation:
   i) a determination of whether the existing infrastructure is sufficient to sustain the current needs and projected growth of the community; and
   ii) an inventory of available parcels that are suitable for residential development and any zoning, environmental and other land-use planning restrictions that affect such parcels.
7. An analysis of the needs and appropriate methods for the construction of affordable housing or conversion or rehabilitation of existing housing to affordable housing.
8. A plan for maintaining and developing affordable housing to meet the housing needs of the community for a period of at least 5 years.

In 2007, the Nevada Legislature went even further and amended the planning statutes in order to require jurisdictions to actually adopt specific housing strategies. NRS 278.35 describes 12 specific strategies, and local entities are required to adopt at least six of these strategies. Further, Nevada counties and cities covered by the planning law must submit an annual report to the State describing how the strategies helped to address affordable housing needs. The twelve strategies contained in NRS 278.35 are as follows:

1. At the expense of the city or county, as applicable, subsidizing in whole or in part impact fees and fees for the issuance of building permits collected pursuant to NRS 278.580.
2. Selling land owned by the city or county, as applicable, to developers exclusively for the development of affordable housing at not more than 10 percent of the appraised value of the land, and requiring that any such savings, subsidy or reduction in price be passed on to the purchaser of housing in such a development. Nothing in this paragraph authorizes a city or county to obtain land pursuant to the power of eminent domain for the purposes set forth in this paragraph.
3. Donating land owned by the city or county to a nonprofit organization to be used for affordable housing.
4. Leasing land by the city or county to be used for affordable housing.
5. Requesting to purchase land owned by the Federal

Government at a discounted price for the creation of affordable housing pursuant to the provisions of section 7(b) of the Southern Nevada Public Land Management Act of 1998, Public Law 105-263.

6. Establishing a trust fund for affordable housing that must be used for the acquisition, construction or rehabilitation of affordable housing.
7. Establishing a process that expedites the approval of plans and specifications relating to maintaining and developing affordable housing.
8. Providing money, support or density bonuses for affordable housing developments that are financed, wholly or in part, with low-income housing tax credits, private activity bonds or money from a governmental entity for affordable housing, including, without limitation, money received pursuant to 12 U.S.C. § 1701q and 42 U.S.C. § 8013.
9. Providing financial incentives or density bonuses to promote appropriate transit-oriented housing

Planning Raleigh 2030

The City of Raleigh Comprehensive Plan update began in the summer of 2007 and is expected to conclude with the adoption of a new Comprehensive Plan by May 2009. The City hired HNTB as the principal consultant for the Comprehensive Plan in addition to several other consultants that specialize in public facilitation, economic development, parks and environmental planning, public utilities, and other related aspects. To date, the Planning Department has held three visioning workshops around the City and just completed a second round of three workshops in March that focused on specific issues informing the Comprehensive Plan. The Planning Department has also participated in a number of community meetings and issue-focused roundtable discussion on the Comprehensive Plan.

Planning Raleigh 2030 Comprehensive Plan Timeline

(www.planningraleigh2030.com)

Timeline	Item	Purpose
November 2007-February 2008	First Round of Workshops and Presentations on the Comprehensive Plan	To identify themes and solicit issues from public and elected officials
January-April 2008	Comprehensive Plan Roundtables	Five roundtables held to date with different stakeholders groups. Notes from these roundtables will be posted on the Comprehensive Plan website
March 2008	Second Round of Workshops Release of Draft Community Inventory Chapters	Second round of workshops held March 25-27 and included break out tables on housing choice, economic prosperity and equity, growing successful neighborhoods and communities, managing our growth, and coordinating land use and transportation
October 2008	Draft Comprehensive Plan released to public	
November 2008	Third Round of Workshops	To receive comments on the Draft Comprehensive Plan from the public
January 2009	Final Draft Plan published and submitted to City Planning Commission and City Council for public hearings	
January – March 2009	Public Hearings before Planning Commission and City Council	

developments that would include an affordable housing component.

10. Offering density bonuses or other incentives to encourage the development of affordable housing.
11. Providing direct financial assistance to qualified applicants for the purchase or rental of affordable housing.
12. Providing money for supportive services necessary to enable persons with supportive housing needs to reside in affordable housing in accordance with a need for supportive housing identified in the 5-year consolidated plan adopted by the United States Department of Housing and Urban Development for the city or county pursuant to 42 U.S.C. § 12705 and described in 24 C.F.R. Part 91.

California

One of the most comprehensive housing element laws is in California. The original housing element law was adopted in 1969, and since then, the State of California has expanded the scope and significance of this statute. California Government Code Section 65583 specifies four main components of housing elements:

1. A Needs Assessment and Inventory of Constraints and Resources
2. Statement of Goals, Quantified Objectives, and Policies
3. Five-Year Housing Program
4. Public Participation

The California Department of Housing and Community Development reviews all local housing elements. This certification process has become a de-facto mandatory review since many jurisdictions expect that a successful certification by HCD will help prevent litigation. Housing elements in California must be prepared every five years and must include the identification of adequate sites for affordable housing.

In 2001, the housing element law in California was amended further to provide additional guidance regarding housing for persons with disabilities. The housing element law now requires local governments to identify constraints on the development of housing for persons with disabilities and must demonstrate efforts to remove these constraints or provide reasonable accommodation for housing designed for persons with disabilities.

Other States

The table below summarizes the housing element laws in several other states.

North Carolina

If North Carolina were to ever adopt a housing element law, the contents would be very similar to the requirements outlined in several other states and would no doubt include the following items:

1. Housing Inventory and Location of Both Market Rate and Assisted Housing Units in the Jurisdictions
2. Existing Housing Conditions
3. Inventory of Vacant Residential Parcels
4. Affordable Housing Needs and Analysis of Needs for Specific Population Groups
5. Supportive Housing Needs for Persons with Disabilities and Homeless Populations
6. Fair Housing Issues
7. Available Resources (funding, land, etc.) to Address Housing Needs
8. Existing Regulatory or Policy Barriers
9. Goals, Strategies, and Actions to Address Identified Housing Needs During a Five Year Period

State Requirements for Housing Elements

State	Housing Element Requirement
Arizona	Arizona requires housing element for cities over 50,000 and authorizes housing elements for other cities (Arizona Revised Statutes Section 11-821)
New Jersey	New Jersey requires comprehensive plans to include a housing element (New Jersey Statutes, Section 40:55D-28) that includes a housing inventory, the existing and projected housing demand, and the identification of land available for affordable housing. The New Jersey Fair Housing Act (1985) set up the Council on Affordable Housing to determine the fair share allocation of affordable housing throughout the State. Cities may request COAH to certify housing elements and fair share plans (New Jersey Statutes Annotated Section 52:27D-310)
South Carolina	South Carolina Code Annotated, Section 6-29-510, requires local comprehensive plans to have a housing element that examines existing conditions, includes needs and goals, and sets schedules for implementation strategies

Sources: American Planning Association, Regional Approaches to Affordable Housing

Final Thoughts

There are many housing issues in North Carolina. The State needs to have a dedicated revenue source to support the Housing Trust Fund, as is the case in other states around the country. In addition, there needs to be consistent legislation on inclusionary housing. At the current time, only certain communities, such as Durham and Winston-Salem, have been given explicit authority to carry out voluntary inclusionary zoning programs. Although a housing element law will not fix all of the housing issues in North Carolina, it will raise the bar on how local jurisdictions address housing needs.

The creation of a housing element law will present an opportunity to allow jurisdictions to use various affordable housing strategies, such as inclusionary housing. Local jurisdictions, both cities and counties, should be able to adopt inclusionary housing programs provided that they establish a sound housing needs analysis, have identified housing needs and proposed housing strategies as part of their housing element, and have adopted inclusionary housing regulations in their respective zoning regulations.

As with many planning issues, there is no doubt that smaller jurisdictions would find it difficult to comply with a new housing element law unless technical assistance was provided either directly from the Division of Community Assistance (DCA) in the Department of Commerce or else funded by DCA. It also goes without saying that before North Carolina adopts a strong housing element law, enabling statutes will have to specify the contents of the comprehensive plan.

Resources for Readers

- APA Policy Guide on Housing (2006)
- APA Affordable Housing Reader
- HousingPolicy.org
- 2006 AICP Webcast on The Housing Plan
- HUD Regulatory Barriers Clearninghouse
- Journal of the American Planning Association (JAPA) – Winter 2008 issue on Housing

Critiquing the Critique:

Analyzing a Report on the Housing Credit Program

Mark Shelburne

The federal low-income housing tax credit ("LIHTC") is the largest production resource for affordable rental housing. Advocacy groups have critiques of the program's administration, but a recent study used to support their arguments contains multiple controversial elements. In evaluating this report, Mark Shelburne also discusses racial desegregation, concentrating poverty, preservation, community revitalization, and other related housing policy issues. This article concludes that those researching the LIHTC program should communicate with state administrators in order to avoid analytical flaws.

Introduction and Purpose[1]

The following quote is taken from an amicus brief submitted to United States Supreme Court as part of the Seattle and Louisville school desegregation cases[2]:

> A recent report found that "very few states are placing more than half their LIHTC family units… in census tracts with lower minority population rates than the metropolitan area average." In both the Seattle and Louisville metropolitan areas, with minority population shares of approximately 24%and 18%, respectively, more than 68% of LIHTC family units were located in census tracts with greater than average minority population shares between 1995 and 2003.

The report cited is *Are States Using the Low Income Housing Tax Credit to Enable Families with Children to Live in Low Poverty and Racially Integrated Neighborhoods?* (2006),[3] referred to herein as the "Report"; it was prepared by Abt Associates, Inc. for the Poverty and Race Research Action Council and National Fair Housing Alliance.

The advocacy groups responsible for the amicus brief, and others who use the Report for similar purposes,[4] have a problem: the analysis is not adequate to support its conclusions. The unfortunate necessity served by this article is an explanation of these shortcomings.

Ideally for everyone involved, the basis for the advocates' charges could remain unchallenged. Every year the state and local agencies that allocate LIHTCs ("allocating agencies") actively solicit criticism of their policies. Even small jurisdictions receive many dozens of comments annually. None of these statements, no matter how negative, merits a 2,500 word published response.

But the claims of these advocacy groups are fundamentally different, and the potential stakes are higher. A full explanation of their agenda is beyond the scope of this article (although it is readily available on the Internet).[5] In summary, their goal is to make the case that allocating agencies' administration of LIHTCs does not comply with federal law.[6]

The advocates' hoped-for remedial measures include additional mandates from Congress, the Internal Revenue Service ("IRS"), and Department of Housing and Urban Development ("HUD"). These new requirements could have unintended negative consequences for allocators, properties, and residents.[7] Other interested parties do not claim illegality in their comments and almost never seek additional federal impositions.

A more important reason for not describing the advocates' position here is that this article does not prove the absence of the problems they claim exist. Rather, its purpose is to raise the level of dialogue. Without

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these comments, the Report would be the last word on this issue. In reality it's barely a beginning. Advocates and agencies actually have a great deal in common, but inaccurate and unfair characterizations such as those in the Report impede progress towards shared goals. Balanced, fact-based discussions are a prerequisite to meaningful change.

Background on LIHTCs and the Report

A proper description of LIHTCs is even further beyond the scope of this article, but fortunately there are many descriptions available on the Internet.[8] The following is a much abbreviated summary:

- The governing statute is the Internal Revenue Code and the federal administrator is the IRS (not HUD).
- Allocating agencies are responsible for implementing the program, including allocation and compliance. The rules for these processes are contained in Qualified Allocation Plans.[9]
- Large institutional investors place equity into qualified properties. For example, a 56 unit property generates $4,700,000 in credits over 10 years. In exchange for this dollar-for-dollar reduction in tax liability, the investor provides $4 million in equity (amounts vary). This covers approximately 70 percent of the costs and greatly reduces the amount of debt financing necessary.
- Units are rented (none are owner-occupied). To be eligible for LIHTCs, units must be affordable to and occupied by households at 60 percent of area median income.
- Each year LIHTCs are awarded to build or rehabilitate 130,000 units across the country, and there are over 2 million nationwide.[10]

The Report attempts to identify the extent to which states are using LIHTCs to develop family housing in low poverty and racially integrated portions of large metropolitan areas. To answer these questions, the authors geocoded projects with two or more bedrooms that were placed in service between 1995 and 2003.[11] The Report's definition of metropolitan areas is those with populations greater than 250,000, and a low poverty neighborhood is a census tract in which fewer than 10 percent of the residents live in households with incomes below the poverty line.[12] For their analysis of racial patterns, the authors compared "the minority population rates of the locations of LIHTC family housing within each state's large metropolitan areas to average minority population rates for those areas."[13]

Based on these assumptions, the Report has reached conclusions such as the following: "Patterns within regions show that some states appear to focus on [using LIHTCs in low poverty areas] considerably more than do adjacent states."[14] Five states are identified as performing poorly for concentrating both race and poverty.[15]

Problems with the Report

The following are the most important limitations in the Report's analysis:

1. Including rehabilitated units

The Report uses words such as "placed," "located," or "produced" to describe how allocating agencies have used LIHTCs in areas of concentration.[16] These words clearly imply newly constructed projects that increase an area's population. Of course that is not just an implication but inherent to the advocates' claim that allocating agencies are exacerbating the problems of concentration.

However, in making their calculations, the authors do not differentiate between creating new units and rehabilitating existing ones. According to the Report, apartments that have been occupied for decades are "placed," "located," or "produced" in concentrated areas because of using LIHTCs to make physical improvements. In other words, replacing cabinets in a 100 unit project is counted as having the same effect on concentration as building new housing for 100 families.

Not only is this methodology counterintuitive, it skews the results.[17] Over half of the LIHTC units placed in service between 1995 and 2003 in the Seattle metropolitan statistical area ("MSA"), and nearly 40 percent of those in Louisville, were in pre-existing projects rehabilitated using LIHTCs.

Even a pro-rata split between new construction and rehabilitation would reduce the 68 percent "located" figure cited in the amicus brief down to 32 percent and 41 percent, respectively.[18] But the distribution of allocations to new and rehabilitation projects is generally not pro-rata; the latter are more likely to be in areas of concentration. Indeed, many of the properties that are being physically improved with LIHTCs already contribute to the low-income concentration.

Therefore the percentage of units actually added to areas of concentration in these two cities may be even less than the percentage of the MSA population that is minority. At a minimum, the problem these advocates identify and subsequently present to the Supreme Court is substantially less severe than indicated.

The effect of not distinguishing new construction units from rehabilitated ones runs throughout the Report. Of the five states critiqued for performance in both poverty and race, 56 percent of the total units covered are in rehabilitated projects.

The first three jurisdictions listed in the following table are particularly compelling. The Report critiques the work of these allocating agencies as exacerbating the problems of concentration, when in fact less than 20 percent of all LIHTC units were newly constructed.

Location	Rehab	Total	Percent
D.C.	6,248	6,725	92.9%
Massachusetts	13,714	17,278	79.4%
Connecticut	4,192	5,700	73.5%
Illinois	10,241	22,820	44.9%
Arizona	1,489	11,539	12.9%
TOTAL	35,884	64,062	56.0%

The remaining housing was already there, and now the residents have an improved physical environment.

Furthermore, a substantial proportion of the new units may have been built outside of concentrated areas. One researcher reached that very conclusion:

> By and large, the program seems to be placing LIHTC new construction units in low-poverty tracts in at least roughly the same proportion as all LIHTC units, and most states are placing a disproportionate share of their LIHTC new construction units in low-poverty tracts.[19]

Lastly, the advocates' premise also fails to account for the intrinsic value of rehabilitation: making existing conditions better and ensuring that affordable apartments are not lost to deterioration or market forces.[20] Preservation can only occur where the properties exist, not where theorists may prefer they exist.

2. Not counting the net effect of replacement housing

During the time period of the Report's analysis, federal, state and local governments have redeveloped a large amount of distressed subsidized housing. HOPE VI is the largest single program for redevelopment and is typical of the most frequent pattern: replacing obsolete apartments with mixes of incomes (i.e. from zero-income to market rate), tenures (i.e. rental and ownership), and uses (i.e. residential and commercial). The federal investment has been substantial:

> Since 1992, HUD has awarded 446 HOPE VI grants in 166 cities. To date, 63,100 severely distressed units have been demolished and another 20,300 units are slated for redevelopment.[21]

The eventual outcome is almost always a reduction in the number of low-income households in the immediate vicinity. Indeed, one of the official goals of the HOPE VI program is "[l]essening concentrations of poverty by placing public housing in nonpoverty neighborhoods and promoting mixed-income communities."[22]

Another of HUD's goals for HOPE VI is to leverage other resources. As a result, three-fourths of HOPE VI project phases involve LIHTCs.[23] (Some of the other phases are for homeownership and thus not eligible for LIHTCs.) The work of the housing authority in Louisville fits this description. In 1996, HUD awarded $20 million to redevelop over 700 units of public housing. An aspect of this work was to build at least 300 new LIHTC units.[24] There is little doubt that all of these new units were located in areas of concentration.

As a result, the Report counts the 300 LIHTC apartments as "placed," "located," or "produced" in areas of concentration, when they are in fact partially or completely replacing over 700 units of public housing. The reality is a net reduction of approximately 400 units for low-income families. This housing represents 17 percent of the new construction counted in the Report. Removing both these 300 HOPE VI tax credit units and the rehabilitated units described in the preceding section would reduce the true figure in the amicus brief to 33 percent – a far cry from the advocates' 68 percent as derived from the Report's analysis.

The analytical consequences of not addressing replacement housing may be even more pronounced for other parts of the country. The five jurisdictions cited by the report were awarded $588 million in HOPE VI between 1993 and 2002. Calculating the net reduction due to redevelopment would have required a great deal of time and additional data (unlike accounting for rehabilitated units). However the authors should have clearly noted this limitation as a caveat to the Report's conclusions. Failure to do so was a problematic omission.

3. Available and appropriate sites

There are three related factors outside the control of LIHTC allocating agencies that contribute to creating concentrations. They are functions of federal law, local decisions, and the marketplace.

Land is a major factor in siting LIHTC projects since its cost is not subsidized.[25] Dollars spent on land must be covered by loans, and tenant rent pays the resulting debt service. Thus, higher land costs mean reduced cash flow and/or less affordability (each to the extent allowed under program rules). Since the market value of land generally has a negative correlation with the percent of area households in poverty, the inherent math of project feasibility encourages sites in low-income areas.

Finding real estate that is not too expensive for affordable housing is only part of a developer's challenge. Uses permitted under local land regulations are another. Higher income neighborhoods often object to any type of apartment development, let alone those for low-income families. The political reality in some jurisdictions is that LIHTC projects can be sited either in areas of relative poverty or not at all.

Regardless of land costs and uses allowed by zoning, not all areas of a city make sense for low-income rental housing. Residents of LIHTC projects need convenient access to employment, mass transit, shopping, amenities, and services at least to the same extent as occupants of market-rate apartments, if not more so. This consideration is even more important for particular targeted populations, such as the formerly homeless. Locations that work well from a practical, real estate perspective simply are more likely to be in census tracts with higher densities and higher poverty, not in rural areas or sprawling suburbs.

Finally, even if none of the above were factors, the preference of particular project sponsors often drives the location of LIHTC projects. Many developers are community-based nonprofit organizations that include housing as part of an overall mission of service. While a good nonprofit can add value anywhere, many see a greater opportunity to have an impact in low-income neighborhoods. As a result they are more likely to undertake projects in areas of concentration.[26] One commentator recognizes that following the advocates' agenda means "the structure of many community development corporations would need to change."[27]

4. Statutory preference for Qualified Census Tracts

The federal law governing LIHTCs has two related provisions that actually have the effect of increasing concentrations; both involve housing located in Qualified Census Tracts ("QCT"). Census tracts become "Qualified" if at least half or more of households' incomes are less than 60 percent of the area median gross income or if the poverty rate is at least 25 percent.[28]

The first incentive is financial: projects in QCTs may generate up to 30 percent more LIHTC equity. The effect is to reduce the amount of debt financing, which in turn increases cash flow and makes the project more feasible and attractive to developers. The public benefit is lower rents and deeper income targeting.

The other provision is regulatory: allocating agencies must give preference to projects that contribute to a community revitalization plan and are located in a QCT.[29] Therefore, all else being equal, an application meeting these criteria will be funded over a competing proposal outside of a QCT.

These aspects of the IRS Code have the same effect on the location of LIHTC projects as the lack of subsidy for land costs. All are functions of how Congress created the LIHTC program, as opposed to choices made by state or local policy makers.

Conclusion

Allocating agencies agree with the advocates' fundamental goal of deconcentration. However, being experienced practitioners means learning that actions based on good intentions sometimes lead to negative unintended consequences. The following are possible outcomes of policies that could be adopted in response to the Report:

- not rehabilitating units for low-income residents;
- not participating in community redevelopment efforts;
- awarding projects that are less affordable due to high land costs;
- substantially increasing developers' challenges in finding sites;
- diminishing the role of community-based nonprofits; and
- in general, not building new apartments in jurisdictions with a serious need for affordable housing.

Any of these would be unfortunate, particularly if premised on incomplete or faulty analysis.

One of the primary reasons for the Report's shortcomings is a lack of communication with allocating agency staff, which is a frequent phenomenon among academic researchers. The process of LIHTC administration is extremely complex and difficult to understand. Failure to directly engage those who implement the program will almost invariably result in debatable analysis.

Replacing the current one-sided critique with a cooperative, constructive dialogue is the best way to reach common goals. Advocates should take the approach of others who seek policy changes: reach out in good faith to program administrators, express concerns, listen to responses, and try to understand states' limitations.

Endnotes

[1] All statements in this article are my (Mark Shelburne's) own personal opinions and not positions of the North Carolina Housing Finance Agency.

[2] Brief for Housing Scholars and Research & Advocacy Organizations as Amici Curiae Supporting Respondents, Parents involved in Community Schools v. Seattle School District No. 1, 127 S. Ct. 2738 (2007) (No. 05-908).

[3] Khadduri, J., Buron, L., and Climaco, C. (2006). Are states using the Low Income Housing Tax Credit to enable families with children to live in low povery and racially integrated neighborhoods? Abt Associates Inc. Cambridge, MA. Last retrieved online April 5, 2008: www.prrac.org/pdf/LIHTC_report_2006.pdf

[4] For an example see Brown, C. and Williams, S. (2007). The houses that eminent domain and housing tax credits built: imagining a better New Orleans, 34 Fordham Urb. L.J. 689. Last retrieved online March 16, 2008: http://law.fordham.edu/publications/articles/400flspub8506.pdf; see also de Leeuw, M. (2006). Residential Segregation and Housing Discrimination in the United States 8, Last retrieved April 24, 2008:

www.knowledgeplex.org/showdoc.html?id=1394851

[5] The following is one knowledgeable commentator's description of the goal: "The issue of race, however, is mobilizing housing advocates in the current era of de facto segregation where 'racial hierarchy is maintained through institutional means.' Specifically, housing advocates are mobilizing around the Low Income Housing Tax Credit…." from Standaert, D. (2006). The absence of minority concentration assessments in the Low Income Housing Tax Credit: An empirical data case study of Durham, North Carolina. Practicing Planner. Last retrieved online January 27, 2008:www.prrac.org/pdf/Standaert.pdf.

[6] In a few states, making the case has involved initiating litigation. See, e.g., Asylum Hill Problem Solving Revitalization Ass'n v. King, 890 A.2d 522 (Conn. 2006); In re Adoption of the 2003 Low Income Hous. Tax Credit Qualified Allocation Plan, 848 A.2d 1 (N.J. Super. Ct. App. Div. 2004)

[7] For example, certain suggested policies may have the effect of actually increasing race-based Fair Housing violations at the project level.

[8] See www.nchfa.com/Rental/RDweoffer.aspx for a brief explanation.

[9] For more information, see Shelburne, M. (2008). An analysis of Qualified Allocation Plan selection criteria. Journal of Tax Credit Housing,. 1(1, 1-7. Last retrieved online January 31, 2008: http://www.novoco.com/low_income_housing/news/article_of_month/article_of_month_0108.pdf.

[10] For more information see http://www.ncsha.org/uploads/Housing_Credit_Fact_Sheet.pdf . (last retrieved April 5, 2008)

[11] This information available at www.huduser.org/datasets/lihtc.html.

[12] [page 3]

[13] [page 4]

[14] [page 22]

[15] [pages 14 and 17] Arizona, Connecticut, Illinois, Massachusetts, and Washington D.C. Other states were identified as having poor results in concentrating either race or poverty.

[16] When used in this article, the word "concentration" means both poverty and race.

[17] The following analysis essentially replicates the Report's, while also distinguishing between added units and rehabilitation. The information for this distinction is readily available in the same HUD database used by the authors.

[18] If 54% of applicable units in the Seattle MSA were rehabilitated, 46% were newly constructed. A pro-rata split of the 68% of units "located" in areas of concentration would mean that 32% of new units were in areas of concentration (46 * .68 = 32).

[19] Rengert, K. (2006). Comment on Kirk McClure's "The Low-Income Housing Tax Credit program goes mainstream and moves into the suburbs." Housing Policy Debate, 17(3), 473-490. Last retrieved online January 27, 2008: www.fanniemaefoundation.org/programs/hpd/pdf/hpd_1703_rengert.pdf. (quotation taken from page 482).

[20] For more information see www.nhtinc.org/documents/Why_preserve_issue_brief.pdf . Last retrieved on February 9, 2008.

[21]Popkin, S., Katz, B., Cunningham, M., Brown, K., Gustafson, J., and Turner, M. (2004). A decade of HOPE VI: Research Findings and Policy Changes. The Urban Institute. Retrieved online January 26, 2008: www.urban.org/publications/411002.html.

[22] U.S. Department of Housing and Urban Development. (ND). About HOPE VI. Retrieved online December 29, 2007: www.hud.gov/offices/pih/programs/ph/hope6/about/.

[23] U.S. Department of Housing and Urban Development. (2007). HUD Testimony: Statement of Orlando J. Cabrera. Retrieved online December 29, 2007: www.hud.gov/offices/cir/test052407a.cfm.

[24] These units are readily identifiable in the HUD database as being part of a HOPE VI redevelopment due to the name of the project. Other new construction LIHTC projects with different names also may have been part of the redevelopment.

[25] IRS Code Section 42 bases the amount of subsidy on depreciable items, which do not include land and certain soft costs (e.g. negotiating the partnership).

[26] Abt Associates, Inc., (2000). Assessment of the Economic and Social Characteristics of LIHTC Residents and Neighborhoods: Final Report, 4:16-4:18.

[27] Orfield, M. (November 2005). Racial integration and community revitalization: applying the fair housing act to the low income housing tax credit, 58 Vand. L. Rev. 1747, 1802.

[28] Internal Revenue Code, 26 U.S.C. § 42(d)(5)(c)(ii)(I).

[29] Internal Revenue Code, 26 U.S.C. § 42(m)(1)(B).

Opportunities and Challenges of the North Carolina Planning Crisis

Why Housing Affordability and Regional Equity are Critical to Success

Chris Estes

For much of its modern history, North Carolina and its localities have resisted a planned approach to development for fear this would conflict with economic expansion fueling the state's growth. However, with recent economic decline in certain parts of the state and population and employment growth in others, several major deficiencies, including a shortage of affordable housing, have become utterly apparent. These conditions serve only to further highlight the need for a more integrated approach to planning. In this article, Chris Estes exposes a history of planning shortcomings regarding sustainable development practices, affordable housing, and economic equity within this state. In response, he explores the concept of Regional Equity as an effective strategy for confronting North Carolina's impending planning crisis and dire affordable housing needs.

When thinking about the work I do with the North Carolina Housing Coalition, I am constantly referring to two central themes: that planning is key for our state's future in both its urban and rural communities, and that housing and housing affordability is central to that future because of its interconnected impact on so many social and infrastructure issues.

While our state has many positives going for it with its growing population and better than average economy, there is much to be concerned about in terms of our future. As a state, we have rarely planned far ahead for our future in terms of forecasting change; we have relied more on the status quo or "the way we have always done it" and embraced the overarching belief that any development is good development.

This philosophy is certainly understandable given the state's history as a mostly poor agrarian economy that relied on cheap land and cheap labor to lure manufacturing jobs from the northeast here throughout the 20th century.

While it is clear to most that this strategy of exploiting our natural resources and labor has run its course as far as viable economic development goes, old habits still die hard. One important by-product of this strategy was that any attempt to plan or direct development was seen as an impediment to growth and progress because it might limit where development could occur. With a large amount of undeveloped land available, the planning-related issues most local governments focused on were road expansion to encourage economic development and, to much lesser degree, school funding to meet the community's education needs. While having a good road system was critical for a manufacturing economy, it certainly exacerbated the sprawling development pattern of every North Carolina town and city that by the 1980s left every town/city center in our state largely empty of residents and retail options. Similarly, school planning and development focused on trying to keep up with demand in growing areas. There was little acknowledgement of either its impact on added sprawl or its lack of socioeconomic diversity, as new school construction encouraged even

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more gentrifying development that rarely if ever included affordable housing.

In our current decade we are witnessing a continued in-migration of population, a significant transition from manufacturing to service sector and tourism in our mountain and coastal regions, and a significant influx of development into the downtown areas of almost all of North Carolina's major cities. It is interesting to note that Durham and High Point still lag behind Raleigh, Charlotte, Wilmington, and Asheville in growth and development, while Winston-Salem and Greensboro continue to see modest returns to the urban core but with continued sprawl in outlying areas.

This has created multiple planning-related crises for these MSAs. Local governments struggle with congested roadways as workers from outer ring developments commute in to work, and overcrowded schools constantly face re-assignment or re-segregation pressures. Downtown employment centers need lots of lower-wage employees to support their service-sector economies (hotels, restaurants, bars, galleries, etc.), as well as economic development and revitalization in those areas left behind by the demise of the state's traditional industries.

Planning Crisis

Despite the positives that growth can bring in terms of new construction, new consumers, and more dollars circulating in local economies, there are many difficult economic challenges facing our state. As the ever-changing economy has shifted manufacturing, textile, and furniture jobs away from many areas of the state, rural areas have little hope of a tax base that can secure a high quality education for their students. The result is that while our overall unemployment has not increased substantially, a significant portion of North Carolina's middle class has moved downward economically to the service sector that largely serves the upper income segment of the work force and the large numbers of wealthy retirees that are moving to our state (especially in the mountain and coastal regions).

While a discussion of the implications for education policy and economic development is better left for another venue, it is important to acknowledge their impact on housing and community development. Meanwhile, the growth of metro areas has led to significant traffic congestion, school overcrowding, and rising housing prices. What we face is a planning crisis that will require implementation of the best practices of infrastructure and community development planning if we are to manage the projected growth and maintain a sustainable future.

When leaders have dared to push ahead, the results have been important in North Carolina's development. Investments in our road system earned the state the title of the "good roads state" in the 1930's. Investments in public education and the UNC and community college systems have been critical parts of our recent economic development. In the best-known example of prescient regional leadership, the vision to create the Research Triangle Park continues to spur major economic development many years after it was initiated.

North Carolina is truly at a crossroads in terms of planning. Despite having strong planning departments at several of the UNC system campuses, the legacy of progressive planning in our state is still relatively weak. As a state we have largely followed the mantra of "all development is good" and invested in the belief that building more roads is central to our economic development and transportation challenges. With the exception of the mountains region, our topography allowed for a sprawling expansion pattern, and with an economy heavy on production and natural resources, expanding our roadways was a logical development strategy. We are not unique in this strategy--as the rest of our southern states can attest – but now we must change this paradigm before it is too late.

There is no avoiding the planning crisis faced by the state. Nor can it be solved with technical expertise, ArcView, charrettes, or ride-share projections alone. It will require planners to battle in the policy arena with a broad coalition of community and state advocates.

Solutions

The solutions that our communities need are already familiar to all planners: higher density development with a transit-oriented priority, inclusionary housing policies to provide affordability in growing areas, and green development planning for open space, water management, flood plain protection, etc.

These initiatives might sound like the standard Smart Growth canon that was being pushed at the start of the decade at the state level. However, this philosophy was mostly embraced by environmental groups who saw the benefits for open space and air quality from a slow down in development. What was not prioritized (at least not in North Carolina) was the critical importance of housing and in particular the fact that inclusionary housing is critical to linking economic equity issues with the environmental benefits of higher density/lower sprawl development. When housing advocates took on this issue they were unable to form a strong broad coalition of supporters and were easily defeated by the homebuilders' lobbying group, and Smart Growth has hardly been uttered in the North Carolina General Assembly since.

I sense a new opportunity today with the planning crisis more evident than ever before for the North Carolina public. The discussions of growth and inequality now include both environmental groups and economic justice/housing interests. Disparate groups like AARP, United Way, Arc of NC, and NC Bankers Association have come together to advocate with the usual housing and community development groups for significantly more resources for the NC Housing Trust Fund. We now need to broaden the group to include school/education and environmental organizations to form powerful local coalitions to advocate for comprehensive planning that links land use, affordable housing, transportation, school construction, mixed-use development, and open space preservation. This is happening at the state level around transportation advocacy and locally in North Carolina's two largest cities, Charlotte and Raleigh, as well as more rural areas like Chatham and Henderson counties.

How Do We Do This?

As planners we have the ability to bring many groups together into the advocacy effort through the concept of Regional Equity. Put forward by PolicyLink, a national research and action institute in Oakland, CA, regional equity expands on the principles of smart growth by emphasizing the social costs of unplanned sprawling development – both for the green space areas targeted by this growth and for the areas left behind which predominately include low- to moderate-income households.

While some planners may argue that this is nothing new for them either, what PolicyLink is doing is actively bringing social justice groups into the advocacy effort so they can understand how to fight for better planning. What is critical in the dialogue with these groups is to understand how every land use decision needs to be viewed from the concept of regional equity. How can transit-oriented development work in low to moderate income communities? How do communities manage gentrification successfully? How do they preserve affordable housing as part of that process? How can community members be a part of shaping what they want their community to look like? And most importantly, how can we insure the investments in highly desirable areas of our community do not lock out low- to moderate-income households?

These questions and their answers point to the need for planners to engage with a wider array of community groups in pushing for more planning advocacy. Politically speaking, planners are often very limited in what they can do directly, but they can play a vital role in bringing groups together to discuss the issues in communities and increase the public understanding of how these issues fit together. Most importantly they can emphasize how central a place housing affordability holds in successful community development.

How do we frame this message? Where you live and what you live in have a major impact on your ability to be successful in society. Where you can afford to live determines where your children go to school (as well as how far they are bussed to school in order to achieve a socio-economic balance), who your neighbors are, how much crime and violence you may experience daily (directly impacting your physical and emotional well-being), and how far you have to commute to employment, goods, and services (as well as whether public transportation is a viable option). The quality of the housing you can afford directly impacts the health of every member of your household, especially if you have to choose housing that is substandard but affordable. The availability of landlords that will accept housing assistance vouchers or offer accessible housing determines whether people with disabilities and fixed-income seniors can live independently or will be restricted to group homes, adult care homes, or homeless shelters. Finally, your ability to purchase a home that will appreciate in value and that you can afford to maintain has a significant impact on your ability to build wealth.

Taking these messages to the public through public forums, listening sessions, and other gatherings that bring interested citizens together can go a long way in opening the public's eyes on how these issues fit together and why more comprehensive planning is the key for improving the quality of life in their community.

By bringing the right groups to the table in these planning sessions and working with state-level advocacy organizations, planners can significantly improve the local planning process. Communicating the importance of housing affordability in this work can broaden the categories of stakeholders and increase the political support planners need to develop documents that will have long lasting impact, and the broad-based support that is needed to change the course of development in our state towards a more sustainable model.

UNC-DCRP Best Master's Project of 2007

ReImagining the Land:

Alternative Futures for Brownscape Development

Kristen Ford

In Philadelphia, like many other industrial cities, the question of how to successfully redevelop contaminated land is one of the most crucial issues facing urban areas. Most strategies tend to favor the economic side of the redevelopment equation over ecological and social concerns. This excerpt from a research project investigates both these strategies by exploring possible scenarios for the redevelopment of brownfields corridors using an Alternative Futures methodology. Ford's research, which was awarded joint honors for the Best Master's Project of the year, was funded by the Dangermond Fellowship, a program administered by the Landscape Architecture Foundation with support from the American Society for Landscape Architects and ESRI to fund landscape architecture students incorporating GIS into year-long reserch projects.

This study presents an alternative redevelopment strategy for one brownscape, the Central Delaware Waterfront in Philadelphia, Pennsylvania, which incorporates information about ecological processes and human use patterns associated with brownfields corridors into planning and design. To evaluate the effectiveness of this strategy for addressing the complexity of the brownscape, this scenario will be compared with a conventional scenario, where individual sites along the riverfront are developed on a site-by-site basis through the decision making of individual stakeholders. The comparison will proceed based on the Alternative Futures framework articulated by Carl Steinitz and others[1]. This Alternative Futures methodology employs GIS-based simulation modeling and visualization to consider the consequences of various planning and design decisions.

Once the scenarios are developed, they will be assessed for their ability to meet defined goals for brownscape redevelopment. This assessment will be based on specific measures associated with the goals of brownscape redevelopment. While the assessment of alternative future scenarios for the Central Delaware Waterfront will offer insight into the impacts of potential design decisions, a larger goal for the project will be to identify design strategies that may be applied to other redevelopment areas with a preponderance of marginal land.

Background

Brownfields are abandoned or underutilized sites, often associated with industry, that contain some degree of real or perceived contamination.[2] Rather than posing a serious human health or environmental threat, the key concern regarding brownfield properties is the persistence of vacancy and neglect resulting from the contamination associated with them. This centrally located urban land is often overlooked in favor of greenfield properties on the outskirts of cities, contributing to urban disinvestment and suburban sprawl.

Brownfields have come about in different ways and for different reasons. Some sites, such as former gas stations, are scattered throughout the landscape in rather isolated patches. These sites contribute to the contamination of water systems and surrounding land, but addressing redevelopment of these sites involves a focus on a particular site. On the other hand, some brownfield sites are concentrated en masse in a particular locale, establishing a brownscape.

Over the last few decades, brownfields policy

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has emphasized the redevelopment potential of this land, promoting the infusion of private development dollars to individual sites, often at the expense of cleanup of contamination and the overall ecological and social functioning of the entire corridor. These site specific policies are not designed to address the scale of contamination or the ecological and social conditions associated with brownfields corridors. Critics have described this scenario as "environmental apartheid," where cities or areas of a city with a disproportionate share of brownfields are subjected to a permanent loosening of environmental standards.[3]

An Alternative Approach: Brownscape Redevelopment

This project is based on a consideration of the nature of brownscapes, contaminated urban corridors, as distinct from individual brownfield sites in their scale and ecological complexity. Goals for the redevelopment of the brownscape recognize the inadequacy of site by site brownfields redevelopment, favoring strategies that address the context, scale and processes of the brownscape. These goals are 1) Reveal the river corridor as a natural and cultural resource for all of the city's inhabitants; 2) Expand the scale of interest to emphasize the entire river system in addition to sites; and 3) Emphasize long-term restoration of ecological processes and human use patterns over the short-term use of sites.

Alternative Futures Methodology

An "alternative futures study" offers a way to compare the ability of alternative scenarios to meet specified goals, using associated metrics as the basis for comparison. In this case, a corridor-based scenario will be compared to a site-by-site scenario for their ability to meet the goals of brownscape redevelopment.

The Alternative Futures methodology has primarily been applied to land conservation and hydrologic modeling in the United States and for rural scenario development in the Netherlands.[4] The basic framework for conceptualizing an alternative futures study has been established through the work of Carl Steinitz and Joan Iverson Nassauer.[5] In general, a study proceeds through four questions. These four questions allow us to describe the present, design alternative pathways to the future, describe those alternatives futures and then compare the performance of those futures: 1) What are the historical and existing conditions of this landscape; 2) What are possible scenarios for the future of the landscape; 3) What are the consequences of those scenarios compared to the present; 4) Based on this analysis, how should we proceed in this landscape and in other landscapes?

The development of alternative scenarios can be initiated fairly early in the planning process. It is useful for envisioning possibilities and recognizing opportunities. The analysis of alternatives also helps stakeholders to understand the consequences of various alternatives. The alternative scenario process becomes a tool for conceptualization as well as for informing the decision-making process. Because an alternative futures study involves a visualization component, it helps to facilitate a process of public participation.

An alternative futures study allows various scales of interest to be investigated simultaneously.[6] Landscape scale concerns can be modeled and assessed at a coarser grain than neighborhood and site level concerns. This study enables a conversation about public policy decisions to occur at the same time as urban design and site planning decisions, so that "top-down" and "bottom-up" approaches to decision-making are replaced by an integrated and interactive one.[7]

Assessing the Alternatives

To facilitate the comparison of alternatives for their ability to meet the goals of brownscape redevelopment, measurable factors have been established for each goal. These measures are based on established precedents for approaching this type of analysis within the fields of landscape ecology, urban planning and landscape architecture. The chart on page 48 lists these goals and the criteria used to measure success, as well as the different outcomes achieved by using either corridor-based planning or site-by-site decision making.

The Scenarios

Site-by-Site Scenario

The site-by-site scenario simulates the likely decisions made by individual decision makers about which sites can be successfully developed from a financial perspective.

Corridor-Based Scenario

The corridor-based scenario uses ecological processes and human use patterns associated with natural and constructed corridors as the basis for planning and design.

Results of the Scenario Analysis

The results of the analysis suggest that substantial differences exist between the two scenarios in their ability to address the compounding concerns of the brownscape. In terms of restoring and enhancing ecological processes and human use patterns associated with the larger brownscape, the corridor-based scenario represents a successful approach. The difference between the scenarios in terms of the amount and quality of open space and public access areas, as well as connectivity to the rest of the city, was substantial.

Sustainability and community development are held up by policy makers and government officials as the primary values of brownfields redevelopment. But the site-by-site decision-making scenario highlights how such policy might be expressed through the conventional development process. The results of this analysis reveal that such development is not responsive to the ecological processes and human use patterns of the corridors where these brownfields are concentrated.

This study, however, is not tied to specific policy recommendations about exactly what quantitative value should be attached to each specific indicator. For example, the analysis reveals that the site-by-site scenario would allocate 8.0% of the study area to be publicly accessible, while the corridor-based scenario would allocate 26.8% of the land as publicly accessible. This indicates a substantial difference in public access between the two scenarios.

The question remains however, whether it would be feasible or most desirable for Philadelphians for 26.8% of the land to be publicly accessible. Publicly accessible land calls for a substantial level of maintenence and oversight. Philadelphians might be concerned about the costs of maintaining such spaces. They might also harbor concerns about crime in such an accessible site.

Similarly, the viewshed analysis reveals that by opening up land on the waterfront in the corridor-based plan, 25% more of the viewpoints offered views of the river than in the site-by-site plan. While more views to the river may be seen as more desirable to the populace, this involves a trade-off where high-rise towers must be removed from the waterfront. Philadelphians might find that they would give up some views to the river in exchange for the economic development potential that would be associated with more building projects on the waterfront.

The public land share and viewshed analysis examples represent indicators where a substantial difference between the scenarios was revealed. Not all of the indicators revealed such a decisive distinction. For example, the average street segment length associated with the two scenarios differs by 45 feet. In both cases, the average street segment length exceeds the standard block length for the City of Philadelphia. The costs associated with building new road connections in the corridor-based scenario might not be worth the modest increase in accessibility that would stem from such an intervention. In fact, 45 feet might not yield a noticeable difference in accessibility at all.

Overall Value of the Scenario Analysis Process

In reviewing the results of the alternative scenario analysis, it is useful to consider the overall value of this type of process. Instead of being an absolute portrait of definitive future conditions, these scenarios make visible the range of choices implicit in the redevelopment process. Visible differences reveal themselves in a way that helps to guide the public debate surrounding large scale redevelopment decision making. As a tool for exploring these choices, this methodology represents a straightforward approach that can be employed as part of a community's redevelopment decision making process:

Goal 1: Reveal the landscape as a natural and cultural resource

Criterion: Access to natural and cultural resources

Share of public land

In the site-by-site scenario, 86 acres of the 1073 parcelled acres are publicly accessible. In the corridor-based scenario, 291 acres are publicly accessible. Overall,

Goal 1: Reveal the landscape as a natural and cultural resource.

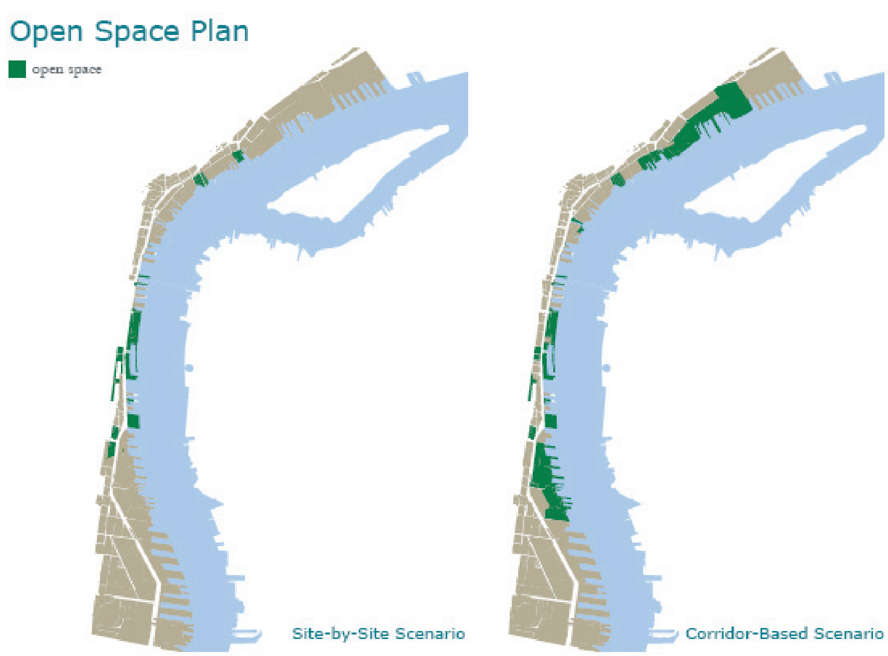
	Criterion: Access to resources		*Criterion: Internal accessibility*		*Criterion: Views to river*
	Share of public access	Riverside adjacency to public access	Average street segment length	Intersection density	Viewshed analysis
Site-by-site decision-making	**8.0%**	**29.0%**	**489.7 ft.**	**3.7 per mile**	**25.0%**
Corridor-based planning	**26.8% (14.8% semi)**	**84.3%**	**455.2 ft.**	**5 per mile**	**50.0%**

Goal 2: Expand the scale of interest to emphasize the corridor system in addition to sites.

	Criterion: Open space pattern			*Criterion: Urban connectivity*	
	Open space share	Open space density	Open space connectivity	Connectivity to redevelopment area	Connectivity to water's edge
Site-by-site decision-making	**5.3%**	**.6 patches/acre**	**1950 ft.**	**50.8%**	**7.7%**
Corridor-based planning	**24.3%**	**.9 patches/acre**	**1154 ft.**	**80.0%**	**26.2%**

Goal 3: Emphasize long-term restoration of ecological processes and cultural patterns over the short-term use of sites.

	Criterion: Green infrastructure		*Criterion: Stormwater infiltration*
	Vegetative coverage	Vegetated patch size	Impervious surface coverage
Site-by-site decision making	**3.7%**	**6.6 acres**	**80.0%**
Corridor-based planning	**21.7%**	**20.8 acres**	**61.7%**



8.0% of the redevelopment area is publicly accessible in the site-by site scenario and 26.8% of the land in the corridor-based scenario is publicly accessible.
Riverside adjacency to public land
In the site-by-site scenario, 12,986 feet or 29.0% of the water's edge is publicly accessible. In the corridor-based scenario, 37,771 feet, 84.3% of the water's edge is publicly accessible.

Criterion: Internal accessibility
Average street segment length
In the site-by-site scenario, the average street segment length is 490 feet. In the corridor-based approach, it is 455 feet. The standard city block size in Philadelphia is 400 feet, signifying that both of these scenarios lengthen the typical block length.
Intersection density
The site-by-site scenariio contains 3.7 intersections per mile. The corridor-based scenario contains 5 intersections per mile.

Criterion: Views to river
Viewshed analysis
The viewshed analyis was conducted from 80 potential viewpoints, which represent the approach from each perpendicular street to the river. For the site-by-site analysis, 25.0% of these viewpoints offered views to the river. For the corridor-based analysis, 50.0% of these viewpoints afforded views to the river.

Goal 2: Expand the scale of interest to emphasize the corridor system in addition to sites

Criterion: Open space pattern
Open space share
In the site-by-site scenario, 56 acres of the 1073 parcelled acres are dedicated to open space. In the corridor-based scenario, 263 acres is open space. Overall, 5.3% of the redevelopment area is dedicated to open space in the site-by-site scenario and 24.3% of the land in the corridor-based scenario is dedicated to open space. In all of Philadelphia County, 12.5% of the land area is dedicated to open space.
Open space density
In the site-by-site scenario, there are .6 patches of open space per acre, while in the corridor-based scenario, there is .9 patches of open space per acre.
Open space connectivity
In the site-by-site scenario, the average distance between open space patches is 1154 feet. In the corridor-based scenario, the average distance between open space patches is 1950 feet.

Criterion: Urban connectivity
Connectivity to redevelopment area
In the study area, 65 streets run perpendicular to the river. Of these 65 streets, 33 in the site-by-site scenario connect to Columbus Boulevard, which represents the center of the redevelopment. This means that 51.0% of the streets connect. In the corridor-based scenario, 52 of the 65 streets, or 80% connect to Columbus Boulevard.
Connectivity to water's edge
Of the 65 streets, 5 of the streets in the site-by-site scenario connect to the water's edge directly or through a greenway connection. This is 7.7% of the streets. In the corridor-based scenario, 17 of the streets or 26.2%, connect to the water's edge directly or through greenway connections.

Goal 3: Emphasize long-term restoration of ecological processes and cultural patterns over the short-term use of sites

Criterion: Green infrastructure
Vegetative coverage
In the site-by-site scenario, 39 acres of the 1073 parcelled acres contain vegetated cover. In the corridor-based scenario, 235 acres is vegetated. Overall, 3.7% of the redevelopment area is dedicated to open space in the site-by site scenario and 21.7% of the land in the corridor-based scenario is dedicated to open space.
Vegetated patch size
In the site-by-site scenario, the average vegetated patch size is 6.6 acres. In the corridor-based scenario, the average vegetated patch size is 20.8 acres.

Criterion: Stormwater infiltration
Impervious surface coverage
In the site-by-site scenario, 80.0% of the redevelopment area contains impervious surfaces, where groundwater infiltrate. In the corridor-based scenario, 61.7% of the redevelopment area contains impervious surfaces.

These differences highlight important concerns that have been part of the city's debate over the future of their waterfront. How much access should people have to the water? Which option is more desirable to residents who live in nearby neighborhoods? The alternative futures process helps to facilitate discussion of such issues.

Feasibility of Implementing a Scenario Analysis Process

This scenario analysis process represents a straightforward methodology for considering a range of redevelopment choices that could easily be employed by local governments or community groups. The scenarios could be generated using existing proposals, such as the site-by-site scenario in this study, or by individual designers as in the corridor-based scenario. More preferably, a community participation process could be used to generate alternative scenarios.

For the computation of the data, an analyst with a moderate level of GIS fluency would be able to carry out the operations. The data came from readily available sources that can be accessed in most municipalities. The measures that were used in this study can be easily computed using GIS software by someone with experience using Spatial Analyst extensions in ArcGIS.

Additional Considerations

Because this study sought to analyze the scenarios for their ability to address the goals of brownscape redevelopment, the financial considerations of redevelopment were not analyzed. When we quantify the value of landscape processes for citizens and local governments, however, it is clear that corridor-based decision making may actually promote economic development goals rather than detract from them. One way that the landscape may be valued is to focus on the economic benefits of open space. As open space within a metropolitan region decreases, the value of the remaining open space increases.[8]

Benefits of open space to citizens include enhancement of surrounding property values; potential production value through urban forestry or urban agriculture; natural systems value stemming from groundwater recharge, climate moderation, flood control and water pollution abatement; use and nonuse value, such as recreational opportunities and scenic viewshed preservation; and intangible value associated with place attachment.[9] The benefits to local economies from open space go beyond the benefits for individual citizens. For example, open space and the creation of green infrastructure can also generate new business opportunities for a city from tourism and recreational activities. These new business opportunities generate jobs and increase tax revenues.[10]

On the other hand, the added infrastructure and services associated with new residential development may actually cost local governments more than the marginal increase in property tax revenues from this development. Preserving open space or clustering development may be fiscally preferable to development of that land. In fact, the development of open space often falls above the break-even line in a fiscal impact analysis.[11]

In Philadelphia in particular, development of the 1,294 acre Pennypack Park, which lies northeast of the study area, increased surrounding real estate values by $3,391,000. This means that each acre of parkland generated $2,600 in increased value to surrounding properties.[12] Applying this figure to the corridor-based scenario, adjusting for inflation, the 263 acres of open space parkland would generate $1,446,500 in added value to the surrounding residential neighborhoods. This enhancement value can be contrasted with the costs associated with providing services to a large number of new residential units that will not be contributing property tax for ten years.

Another important measure that was beyond the scope of this study is the potential for each scenario to eliminate or reduce contamination. In general, it will be difficult to generate a model to analyze these conditions until a Phase 1 Environmental Site Assessment is completed. This assessment generates a picture of the degree and nature of contamination that exists on a site through an examination of historical conditions and soil sampling.[13] Phase 1 Site Assessments are not initiated until a developer makes plans to develop a particular parcel. Such assessments are conducted in relation to that parcel rather than throughout the brownscape.[14]

Assessing an entire brownscape is unlikely to occur for several reasons. Such assessments are very expensive. It is unclear who would pay for such a study other than a development entity with an interest in the development potential of that land. Without knowing the existing conditions of contamination on a site, it is impossible to understand what technologies will need to be employed to clean up that site and in turn, how well that site may eventually be remediated.[15] Until more landscape-based processes for site characterization and cleanup are established as acceptable practices in the environmental sciences, a risk-based approach to remediation will continue to be employed.

Endnotes

[1]Carl Steinitz et al., *Alternative Futures for Changing Landscapes* (Washington, D.C.: Island Press, 2003).
[2]"Brownfields Cleanup and Redevelopment," United States Environmental Protection Agency, http://www.epa.gov/swerosps/bf/ (accessed February 13, 2006).
[3]Georgette C. Poindexter, "Separate and Unequal: A Comment on the Urban Development Aspects of Brownfields Initiatives.," Knowledge@Wharton (March 2, 1996).
[4]David Hulse, "Using Normative Scenarios in Landscape Ecology," *Landscape Journa*l 19, no. 2 (2000).
[5]Steinitz et al., *Alternative Futures for Changing Landscapes*.
[6]Carl Steinitz et al., *Biodiversity and Landscape Planning: Alternative Futures for the Region of Camp Pendleton, California*, (Cambridge: Harvard University, 1996).
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[8]Charles Fausold and Robert Lilieholm, "The Economic Value of Open Space: A Review and Synthesis," *Environmental Management* 23, no. 3.
[9]Ibid.
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[11]Ibid.
[12]Tom Fox, "Urban Open Space: An Investment That Pays," (New York: Neighborhood Open Space Coalition, 1990).
[13]Simons, Turning Brownfields into Greenbacks: Developing and Financing Environmentally Contaminated Urban Real Estate.
[14]Ibid.
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UNC-DCRP Best Master's Project of 2007

North Carolina's Aero/Space Economy:

Current Performance and Future Potential...Revisited

Christopher M. Harris

As North Carolina's economy shifts from one based in agriculture and textile manufacturing to a new economy founded on technological advancement, Harris explores through his award-winning study the strength and potential of the aero/space industry within North Carolina's borders. A joint recipient of DCRP's distnction of Best Master's Project of 2007, Harris' report gives an indepth look at this industry as it stands in this state and carefully details the resources the aero/space field can draw upon for future growth and expansion. He also assesses the state's performance and potential within this industry relative to three other similarly situated states around the country. Though only an exerpt of this extensive study is presented here, the report's findings offer a comprehensive assessment of North Carolina's current position and future potential in the aero/space industry.

Introduction

North Carolina, like virtually every state in the country, has experienced a dramatic economic transformation in recent years amidst the onset of increased global competition and the continued diffusion of more and more sophisticated technologies. This period has been particularly turbulent for the Tarheel state as North Carolina has seen some of its longest standing economic cornerstones – industries such as textiles, furniture, and tobacco – dwindle from the landscape. Nonetheless, the state has weathered the storm rather well and is currently trying to find its place in the new economy. In response, there have been numerous recent endeavors in the state aimed at trying to identify industries that are seemingly well-suited to become meaningful parts of North Carolina's 21st century economic portfolio.

One such effort is the ongoing work of the North Carolina Space Initiative, an organization which is interested in the potential for the aerospace industry to become a meaningful part of North Carolina's economic future. To that end, a working group published a white paper in January of 2006 entitled "The Aero/Space Economy in North Carolina: A Preliminary Assessment of Current Performance and Future Prospects," which found North Carolina to have only a "modest presence" in the aerospace industry – defined in their report as traditional aerospace activities such as aircraft manufacturing, airport operations, etc (Hardin, 2006, p.16). Nonetheless, their analysis suggested that if the conception of what was considered to be the aerospace industry was somewhat widened, the industry would have a more significant presence in North Carolina, as well as, greater potential for future growth. Ultimately, their analysis concluded that the next logical step was to perform a follow-up study that could explore the issue in much greater detail. Accordingly, this report was funded by the Initiative to serve as the second phase of their initial white paper.

Thus, this analysis picks up from where the initial report left off, but with one important caveat. As mentioned, the Initiative's white paper essentially contends that traditional aerospace, by itself, does not appear to have the required potential to be a significant part of the state economy and, therefore, should not be pursued as such. Instead, they suggest casting aerospace as a wider category that would include traditional functions like aircraft manufacturing, but also other related industries, including budding commercial space activity. Commercial space is defined by the Federal Aviation Administration (FAA) as "the movement of, or means of moving objects, such as communications and observation satellites, to, from, or in space" (FAA, 2007a, par. 2). Essentially,

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commercial space is about the growing participation of private industry in space operations – an historically public sector-only endeavor. The other far less explored frontier of the commercial space industry is space tourism which focuses on sending private citizens into space for personal pleasure or interest. Nevertheless, the overarching point is that the Initiative's report suggested an expanded notion of aerospace. As a result, they coined the term "aero/space" which will be employed throughout this analysis when referring to the idea of the broader industry, i.e. both traditional aerospace and commercial space applications.

That being said, this analysis will take a slightly different track. Namely, this report will revisit the question of whether or not traditional aerospace, alone, can become a meaningful part of the state economy, instead of taking the previous conclusion as a given. The present study has four fundamental goals. First, it aims to develop a more complete picture of what North Carolina's traditional aerospace presence actually looks like. Second, it attempts to make a realistic assessment of the state's capacity to expand its aero/space presence and whether or not the industry is a worthy pursuit for the state. Third, it examines the development experiences of other states where the aero/space industry is already an important part of their economy. And finally, the study will use those benchmark findings to gauge whether North Carolina's case for aero/space is a realistic one.

Understanding the State's Aero/Space Position

In composing a detailed quantitative snapshot of the state's traditional aerospace presence, this report relies on a cluster analysis and evaluation methodology. Drawing on the 17 NAICS codes classified as "traditional aerospace," this study uses location quotients to examine the industry in terms of employment numbers, establishment size, wages and job quality, geographic distribution of firms across the state, and occupational structure.

This analysis suggests a four key findings: First, the overall numbers presented seem to suggest that the North Carolina Space Initiative's description of the state's overall traditional aerospace presence as "modest" is a fairly reasonable assessment. Second, it also reveals that traditional aerospace is a relatively high-paying industry. In fact, traditional aerospace was found to consistently pay better than the state and even sometimes the nation for comparable work. Third, albeit a somewhat preliminary finding, traditional aerospace was found to have a significant presence in most of the regions of the state. And fourth, despite a "modest" overall presence, the analysis identifies two specific segments of the state's industry – aerospace manufacturing (specifically engine and engine part manufacturing) and aircraft maintenance and repair – that seem to be areas of existing strength and perhaps future potential.

However, numbers alone cannot tell the whole story, especially when it comes to issues like understanding whether or not the state is well positioned to expand its presence in traditional aerospace or the commercial space industry. Therefore, a more qualitative approach – relying on interviews, articles, reports, and some data – was also employed in an attempt to paint a more complete picture of North Carolina's aero/space economy and its potential in the future. To do so, this report will evaluate the state on the following six criteria in order to provide an initial assessment of the state's position with respect to aero/space:

Corporate Presence: *While employment levels are useful, it is also important to gain an understanding of the firms that employ them, the number of key aero/space companies currently operating in the state, and an inventory of those headquartered in North Carolina.*

Military Presence: *In terms of aero/space activity, particularly with respect to traditional aerospace, private industry is not the only major player in North Carolina. The military is also a key aero/space employer, producer, and consumer.*

Educational Assets: *An especially key component of the state's capacity to expand its aero/space presence is its ability to produce the required workforce who must be prepared by the aero/space-related educational programs and curricula offered at the state's community colleges and universities.*

Institutional Assets: *Although they tend to get overlooked, institutional partners and intermediaries such as business associations can be crucial parts of an industry's success. In fact, much of the aero/space development that has occurred thus far in the State has been driven by various institutions and it is safe to say any further efforts will also include their hard work and expertise.*

Infrastructure Resources: *Another key factor in determining the success of almost any industry is the availability of required physical infrastructure. In the aero/space industry, transportation facilities are key, therefore a full inventory of the industry's most important physical infrastructure categories, namely airports, must be undertaken.*

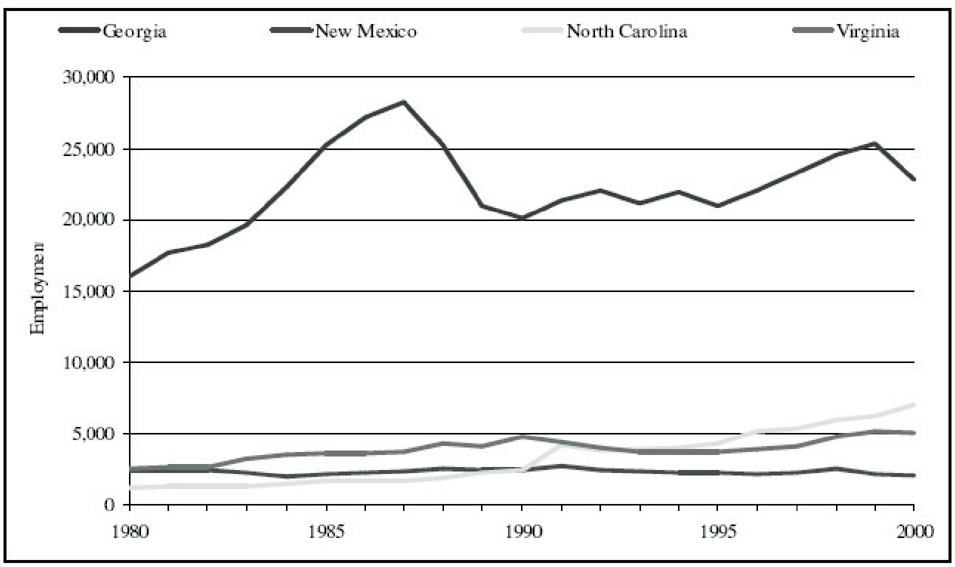
Innovation Activity: *In trying to assess North Carolina's prospects for future aero/space industry growth, a key area to investigate is what, if any, related innovative research and development activity is being performed in the state.*

Lessons from Other States

After compiling a comprehensive quantitative and qualitative profile of North Carolina's traditional aerospace presence, this study looked for insights from the experiences of a select group of peer states that have already been down the road that North Carolina is now considering. Three states – Georgia, New Mexico, and Virginia – were selected to serve as benchmarks in order to evaluate North Carolina's current industry potential and the role that the commercial space industry could play in the state's economic future. Georgia was selected first and foremost because a large portion of the state's traditional aerospace industry is focused around the existence of a major military asset, a very similar scenario to North Carolina's situation in the eastern third of the state. New Mexico was selected in order to examine the effort required to break into the burgeoning commercial space industry essentially from scratch. This is the same reality that North Carolina would face if the state decided to pursue such endeavors. Finally, Virginia was chosen because it too offers a look at the commitment required to crack into the commercial space industry, as well as, some perspective on the intricacies of more general aero/space recruitment.

Though the specifics of each state's experiences are not explored here, Figure 1 provides a general idea of how the aerospace industry has developed over time in each state, specifically during the twenty-year span between 1980 and 2000.

Figure 1. Development Trajectories of Traditional Aerospace Industry in each State



Source: Bureau of Labor Statistics

The first result of note from Figure 1 is that Georgia's aerospace industry, on the strength of its sizable manufacturing segment, was the largest among the four states as of the end of 2000. North Carolina's industry, which began the highlighted period with the smallest total, increased more than six-fold during the twenty-year span. As for the other benchmark states, Virginia's industry grew fairly steady between 1980 and 2000 as it tracked closely with North Carolina's path. New Mexico, on the other hand, saw its industry total decrease lightly during the twenty-year period.

Traditional Aerospace Conclusions Revisited

Traditional aerospace positions are generally well-paying. This finding was definitely confirmed via the benchmark analysis detailed in the full report. In fact, representatives from each of the three peer states interviewed explicitly stated that the aerospace employees in their respective states were generally well-paid, due in large part to the high quality work demanded in the industry. Furthermore, officials from Georgia and Virginia pointed out that traditional aerospace pays well across the employment spectrum from aerospace engineer all the way to machinist.

Traditional aerospace can provide employment opportunities for a diverse set of regions. One of the most attractive things about traditional aerospace was the fact that the industry could benefit virtually every corner of North Carolina's diverse economic landscape, especially distressed regions like eastern North Carolina. Fortunately, that notion was reinforced in the benchmark analysis – especially in Virginia where traditional aerospace is meaningful part of the state's more corporate and research and development-focused areas, as well as its more rural, production-focused regions.

North Carolina has a favorable mix of traditional aerospace industry segments. The full analysis suggested that the state's existing strengths in traditional aerospace – engine and engine part manufacturing, replacement part manufacturing, and maintenance and repair – are growing segments of the industry and the evidence from chapter three certainly seemed to confirm that idea. Specifically, Georgia officials noted that maintenance and repair is a rapidly expanding part of the industry and the testimonies of Virginia and Georgia officials both highlighted replacement part manufacturing as a business on the rise. Furthermore, based on New Mexico's experiences with Eclipse Aviation, it also appears that the very light jet market is poised for significant growth in the next decade or so – a particularly important finding given North Carolina's recent addition of VLJ producer, HondaJet.

The military is a key part of North Carolina's traditional aerospace industry. Despite employing an initial industry definition that explicitly excluded the military from traditional aerospace, the findings from the earlier inventory made it abundantly clear that North Carolina's large military presence was a significant part of the state's current and future involvement in the industry. That assertion was strongly reinforced throughout the benchmark analysis, most notably in Georgia where a large part of the state's aerospace-related development efforts center around Georgia's seminal military aviation asset, Warner Robins Air Force Base in Macon.

North Carolina's rich institutional network plays a crucial role in the development of the state's traditional aerospace industry. The qualitative analysis drew attention to North Carolina's existing network of aerospace-related institutions and emphasized how important they would be to any future development in the industry – a point that was also emphasized throughout the benchmark analysis. Specifically, the testimonies from the three states tied the development of traditional aerospace to the involvement of three types of institutions. First off, the benchmark analysis underscored the importance of having a flexible community college system that can provide customized training and produce significant numbers of key occupations such as machinists. Second, the other states stressed the importance of university involvement in traditional aerospace in order to produce key segments of the workforce such as aerospace engineers, but also to act as a source of innovation for the industry. Finally, the benchmark analysis emphasized the significance of other dedicated aerospace institutions such as the Aerospace Innovation Center in Georgia which often help coordinate overall development efforts. More generally, officials in all three states noted how important all three types of institutions are as a source of partnership and collaboration.

The future of traditional aerospace development in North Carolina faces several workforce availability challenges. Throughout the analysis it has become clear that North Carolina's traditional aerospace industry is facing several workforce-related constraints, including a lack of machinist production caused in large part by the negative connation associated with manufacturing careers. However, based on the testimonies of other states, North Carolina is not fighting those battles alone. Georgia and New Mexico both noted that skilled machinists are in high demand but short supply, while Virginia officials reported an unwillingness among displaced manufacturing workers towards obtaining the needed training that would allow them fill many of the machinist-type openings in the industry. Furthermore, the larger, more fundamental challenge regarding traditional aerospace's image was also brought up during the benchmark analysis. Georgia officials, in particular, expressed concern over how to get the generation of workers to view traditional aerospace as a viable career alternative. They suggest that the industry's attractiveness suffers from sustained weakness in manufacturing, as well as, an ever-increasing interest in other technology areas such as computers.

Finally, the benchmark analysis also highlighted another key point regarding the future expansion of North Carolina's traditional aerospace industry, namely, the importance of smaller, less busy airport facilities. Officials in Virginia and New Mexico both emphasized the fact that smaller, less busy airports can be real engines of traditional aerospace growth. In North Carolina there are a number of such facilities headlined by the Piedmont Triad International (PTI) Airport, which, as mentioned, has become a real hub of aerospace activity in the state. However, at some point PTI is likely to run out of room or at least become busy enough that it loses some its initial appeal. Accordingly, the question becomes where else in North Carolina might such a hub emerge?

The answer, in the opinion of this analyst, is without question the Global TransPark in Kinston. The TransPark has become widely considered a failed economic development investment. Yet given the apparent attractiveness of less busy airport facilities with ample room for expansion and sufficient infrastructure, i.e. runways, this analysis holds that the TransPark could still be a success story. Remarketing the TransPark as a facility well-suited to handle traditional aerospace functions as opposed to global cargo logistics could provide a much needed venue for the further expansion of the state's traditional aerospace industry, bolster eastern North Carolina, and make use of an existing asset that many people have already written off.

An Assessment of Commercial Space

As mentioned throughout this analysis, the commercial space industry is largely an emerging field whose uncertain potential is best evaluated via the experiences of other states that have already begun their pursuit of the industry. That being said, this analysis offers the following observations regarding North Carolina's potential pursuit of the commercial space industry.

First and foremost, it must be understood that any effort aimed at developing a commercial space presence in North Carolina is a risky proposition. Officials in both of the active commercial space states evaluated, New Mexico and Virginia, openly admit they are taking a sizable risk. Furthermore, little of the enabling technology in either area of the industry, transportation or tourism, is well established.

Second, the regulatory environment for both areas is largely undecided. Nonetheless, industry experts believe that private space operations will eventually happen. The real question is when. The central point here is that if North Carolina decided to pursue the industry, it would take a massive amount of precious state resources as up-front investment.

Third, it would take a significant amount of time to get up to speed. It has taken well over a decade for the Mid-Atlantic Regional Spaceport in Virginia to witness its first launch and Spaceport America in New Mexico is not expecting to send anyone into space until at least 2010. Meanwhile, the competition for a slice of an already thin commercial space pie is heating up. As of this year there are already six licensed spaceports in the country, as well as, another eight in the application process.

Moreover, North Carolina would be facing a particularly steep learning curve given the paucity of space-related presence and/or facilities currently in the state. Virginia's decision to pursue commercial space was primarily a result of the existing NASA facility at Wallops Island. And while New Mexico did not have an existing spaceport per se, they did have a long legacy of space-related activity to build around. North Carolina, on the other hand, would essentially be starting from scratch.

Though an attractive case could probably be made for commercial space in North Carolina, in the end, we are agnostic about whether this emerging industry can

SWOT Analysis

STRENGTHS	WEAKNESSES
Traditional Aerospace: - Provides well-paying jobs - Industry presence throughout state - Particularly meaningful presence in eastern North Carolina - State is home to four unique military aviation assets, all of which are in eastern North Carolina - Strong network of aerospace-related institutions including the North Carolina Aerospace Alliance - Favorable industry mix in traditional aerospace including growing areas such as maintenance and repair and aircraft part manufacturing - Recent addition of HondaJet gives state an aircraft production presence - Strong traditional aerospace corporate presence in Charlotte including firms such as Goodrich - State has a flexible community college system that has added numerous aerospace-focused programs in recent years - Ongoing collaboration between N.C. State, private industry, and the military - The state has a long tradition with respect to a manufacturing and military presence	**Traditional Aerospace**: - A lack of aerospace-related research and development activity - Limited workforce production, particularly with respect to machinists and aerospace engineers - A lack of aerospace engineering programs - The recent negative image often associated with manufacturing careers **Commercial Space**: - A general lack of any space-related presence and/or facilities in the state
OPPORTUNITIES	**THREATS**
Traditional Aerospace: - HondaJet's place in the emerging very light jet industry - Traditional aerospace's potential to help the state increase its share of DoD dollars - Traditional aerospace's potential to help solidify presence of the state's invaluable military aviation assets - More small business growth/entrepreneurship opportunities stemming from replacement part business - Expanded future collaborations between state universities, community colleges, private industry, and the military - Potential spinouts from university-led aerospace research - Growth fueled by smaller, less busy airports such as Piedmont Triad International - An opportunity to turn the Global TransPark into a positive - Synergy between traditional aerospace development and more general efforts to grow state's defense and security presence - Potential to recruit more production operations to the state from companies already based in North Carolina, most notably Goodrich in Charlotte	**Traditional Aerospace**: - The very light jet industry not materializing as experts predict - Future rounds of BRAC closures and consolidations - Consolidations among major aerospace producers such as the possible merger/consolidation of Smiths Aerospace and GE Aviation - National and international competition in the future recruitment of traditional aerospace firms - National competition for aerospace workforce as evidenced by the University of North Dakota/ Robeson Community College Program **Commercial Space**: - Tremendous amount of competition from other states who are getting involved in the industry and getting their spaceports off the ground - Delays in the development of commercial space-enabling technologies - Regulatory hurdles

be a significant economic activity in the state. Rather, we are more concerned with making sure the would-be decision makers understand the full nature of the required commitment and the risks associated with such a decision.

Some Final Thoughts

Currently, neither traditional aerospace nor the commercial space industry are dominating fixtures on the North Carolina economic landscape. However, it has been shown throughout the course of this analysis that traditional aerospace does currently have a beneficial presence in state. The commercial space industry, on the other hand, has yet to arrive. The totality of the evidence presented suggests that traditional aerospace is capable of becoming a promising part of the state's economic future, while the commercial space industry appears to have a lower potential in North Carolina, a result due to the absence of any unique space-related assets to build around and other states having significant head-starts in the marketplace.

As was evident from the benchmark analysis, development in either industry is largely dependent on an existing foundation of unique assets. However, even with the presence of an existing NASA facility, Virginia's experience with commercial space has still been a long, hard road toward any results even with a considerable head start. Unfortunately, North Carolina has no such leg up and, accordingly, any commercial-space related effort in the state would be from scratch, making for a very risky proposition with already scarce public economic development dollars.

On the other hand, the state has a rich endowment of unique traditional aerospace assets, especially the various military aviation facilities in eastern North Carolina. In fact, traditional aerospace and the military or more generally the defense industry are so intimately intertwined in North Carolina that this analysis feels that the term aero/defense economy is a more appropriate descriptor than aero/space. Nonetheless, the ultimate point is that economic development efforts are more likely to be successful when they leverage existing strengths, not when they pursue the latest trend. That being said, the evidence presented throughout this analysis makes a strong case that suggests that traditional aerospace is indeed a strength in North Carolina. Accordingly, this analysis contends that any future effort to expand the state's traditional aerospace presence has the potential to succeed due to the solid foundation already in place.

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Student Connection

Jess Brandes, UNC
Brian DuPont, ASU
Melissa Norton, UNC

A new addition to this issue, the Student Connection is an attempt by the editors of Carolina Planning to better connect the broader readership with the three academic planning departments across this state, their faculty, student bodies, and current happenings. We intend for the Student Connection to become a permanent element of CPJ. This section provides a venue for current planning students at Appalachian State University, Eastern Carolina University, or UNC Chapel Hill to showcase important work or notable events within their departments, either by a stand-alone submission or through inclusion in the Department Review section. UNC-CH student Melissa Norton provides the first stand-alone contribution through her thoughtful description of the first DCRP Diversity Bus Tour, an event with the intention to broaden the purview of planning education. For the Department Review section, all student NCAPA representatives were invited to submit an overview and update of their respective departments. UNC-CH and ASU student representatives each submitted an update for this inaugural run.

DCRP Diversity Committee Sponsors First Annual Neighborhood and Community Bus Tour

Melissa Norton

The Diversity Committee at UNC's Department of City and Regional Planning is a group of faculty and students dedicated to furthering the following goals:

- Integrate diversity into the undergraduate and graduate curricula.
- Support and encourage recruitment of diverse faculty.
- Recruit a more diverse student population.
- Support students of color in their academic, professional, and personal development.
- Provide a forum to discuss issues related to communities of color.

Each year one of the main endeavors of the Diversity Committee is to organize an event aimed at furthering dialogue about diversity issues by involving new graduate students, returning students, faculty, and staff.

To this end, the committee sponsored a day-long Neighborhood and Community Bus Tour in the fall of 2007. The motivating ideas were first, to raise students' awareness about the needs and challenges of the Triangle's diverse communities and second, to create an opportunity for them to connect their educational experience to the vital social justice work in the area.

The day was divided into two parts with tours of Chapel Hill in the morning and an afternoon tour of Durham. Each leg of the tour was then followed by a panel discussion to continue dialogue about the issues raised throughout the day. Panel participants came from the public, private, and non-profit sectors and included representatives from Blue Ribbon Mentors, El Centro Latino, the Hidden Voices Project, EmPOWERment Inc., local elected leaders, city staff, and long-time neighborhood resident activists.

The Neighborhoods Bus Tour was an eye-opening experience for all involved. The highlights of the Chapel Hill tour included an overview of the environmental racism issue concerning the location of a landfill in a

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***Melissa Norton** is a May 2008 graduate of UNC's Department of City and Regional Planning with a concentration in Housing and Community Development. She plans to work in neighborhood revitalization and advocacy with the City of Durham.*

predominantly low-income minority community, the physical isolation of public housing communities, and the challenges facing new immigrant communities from Latin America and Southeast Asia.

In Durham, the tour was facilitated by three long-time resident activists who shared powerful personal narratives about the history of their neighborhoods' decline and the day-to-day reality of life in a distressed inner-city community. They also left students with an inspiring message about the spirit of community activism and the important role planners can play in neighborhood revitalization.

The DCRP Diversity Committee expresses appreciation to all those who participated in the Neighborhoods and Community Bus Tour and hopes that participants were left with a lasting impression as to the real challenges facing communities of color in the Triangle area, as well as some glimpses of the roles that can be played by planners in overcoming these challenges.

Dorcas Bradley
West End Durham resident

Vivian McCoy
Northeast Central Durham resident

Ray Urqhart
Southside/ St. Theresa Durham resident

CAMPUS CONNECTION

Appalachian State University

Department of Geography and Planning
Brian DuPont

The Department of Geography and Planning at Appalachian State University, which is located in the small mountain town of Boone, NC, has been preparing students for the planning profession since 1976. As an undergraduate program with dual disciplines in both planning and geography, it offers students a B.S. in Community and Regional Planning. To date, 244 planning students have graduated from the program. The planning program has effectively targeted the public sector's needs by providing knowledgeable graduates who go on to work in rural communities or small towns across North Carolina; most are working in planning or planning-related jobs. The department also offers a graduate geography degree with a concentration in planning, and the graduate planning concentration will be available in Asheville in the fall.

The Student Planners Association at ASU has worked on such community service projects as road and stream clean ups around Boone. We are a service-oriented club that contributes to the University by participating in campus events. SPA is also a creative group that allows members the freedom of expressing their different ideas in a friendly and supportive atmosphere. Membership is not limited to planning majors but is open to any student at ASU, because community planning requires broad input

The ASU curriculum provides plenty of opportunities for students to work in small groups and to take courses that advance their technical skills in the field of planning. Both are important core elements of the department. Students learn the processes of planning and are able to implement those plans in real-world situations. Students seem to get the most enjoyment from classes by doing hands-on work and moving from theoretical to practical applications. One of the strengths of the department is that students gain the necessary skills to succeed as planners in the professional world by developing a framework throughout their coursework that will allow them to perform well on the job or in graduate studies. Professors would like to broaden the planning department by introducing environmental planning, urban design, or more GIS analysis courses; these courses would be a

***Brian DuPont** is a double major in Community and Regional Planning and Geography at Appalachian State University. He is president of the Student Planner's Association as well as NCAPA student representative for ASU.*

great addition to current GIS and sustainable development courses.

Currently, research projects by the department faculty and students involve the town of Boone, Habitat for Humanity, and ASU's Renewable Energy Initiative Council. One project of great interest is the Kraut Creek project: ASU planning students have had the opportunity to work on this project in the classroom setting and now are watching as their plans for this area transition into a real world project in the ground-breaking stage. Overall, the Planning Program at ASU is small, but it is beginning to grow both in enrollment and impact. As students and faculty, we can already see our influence on the community around us, and with new ideas for the future and an improving GIS curriculum, the coming years for the ASU Planning Program look very promising.

University of North Carolina at Chapel Hill

Department of City and Regional Planning
Jess Brandes

Founded in 1946, the University of North Carolina at Chapel Hill's Department of City and Regional Planning was the first planning program established on the foundation of the social sciences. Currently, 26 PhD candidates, 47 first-year MA students, and 46 second-year MA students comprise the department's student body. Many of UNC's 16 faculty are engaged in research with other UNC departments at research centers that include the Carolina Transportation Program, the Center for Community Capital, the Institute for Economic Development, the Center for Urban and Regional Studies, and the Center for Sustainable Community Design within UNC's Institute for the Environment.

In the fall of 2007, students who enrolled in Dr. Roberto Quercia's New Orleans Recovery Initiative workshop traveled to Louisiana to work in the Gentilly area of the Crescent City, assessing needs and inventorying properties. In the spring, Dr. Bill Rohe continued this NOLA-based project with another group of students; workshop participants helped local community members interpret and develop plans for redevelopment scenarios based on the data collected in the fall. Dr. Thomas Campanella was a visiting lecturer in the spring at Harvard University's Graduate School of Design and is anticipating the release of his forthcoming book, The Concrete Dragon: China's Urban Revolution and What it Means for the World. Students enrolled in the Spring economic development workshop worked with the Center for Community Action in Lumberton, NC, to assess the economic impact of community food programs. In addition, a group of nine students traveled to Berlin in March with Dr. Harvey Goldstein to gain an international perspective on planning.

Many of Carolina's planning students currently hold positions outside of the department at firms and organizations such as the City of Raleigh, Triangle Transit Authority, Zapolski and Rudd, and the City of Chapel Hill, to name a few. Additionally, students and faculty members demonstrate their strong, continuing commitment to community involvement throughout the year. Service activities included building with Habitat for Humanity, performing trail maintenance with North Carolina's Mountains-to-Sea Trail, and volunteering at Project Homeless Connect, a day-long event bringing together service providers and local homeless families.

Planner's Forum, DCRP's student government organization, works in many capacities in the department, including serving as a liaison between students and the faculty. Recently, Planner's Forum successfully advocated to change the official Master's degree title to Master of City and Regional Planning in order to reflect the field's shift toward planning on both a local and regional level. In addition, members of the Forum's Diversity Committee organized a tour of Chapel Hill and Durham for the purpose of highlighting the issues of equity and diversity in the area; they then hosted a panel discussion on the topic to conclude the event. DCRP continues to benefit from a dedicated social committee, which organizes and publicizes weekly departmental events, in addition to planning and hosting certain special events like the holiday party and the Open House weekend for prospective students in March. Finally, planning students are currently working alongside faculty to hire an additional senior land use professor.

***Jess Brandes** has completed the first year of the master's program in the Department of City and Regional Planning at UNC-Chapel Hill. She is concentrating in Housing and Community Development. Jess is also the UNC student representative to the NCAPA.*

Book Reviews

The Regional City: Planning for the End of Sprawl

Peter Calthorpe and William Fulton

Reviewed by Trey Akers

With over 60 years combined planning experience in both the public and private sectors, urban designer Peter Calthorpe and researcher/author William Fulton bring together a stunning array of knowledge regarding urban planning and practice. At the heart of their argument lies the city, but their central focus pertains to the region as a whole—a complex but coherent economic system including labor pools, networks, transportation and land-use patterns that drive today's global economy. The goal: connect these broad relationships with a regional vision undergirded by human-scaled design and policies. Only at this scale, the authors claim, will effective policies and planning produce the greatest change.

Though published in 2000, *The Regional City* offers comprehensive insight into the current form and function of cities. According to Calthorpe and Fulton, only three *true* regional cities exist in the United States: Portland, Seattle, and Salt Lake City. The distinguishing factor among these three relates to each city's explicitly *regional vision bolstered by local policies at the municipal/metropolitan level*. Specifically, these regions each contain policies that delineate urban boundaries and encourage interconnected land-use and transportation patterns (63).

The book also profiles many other metropolitan areas across the United States, including three of the largest—New York, Chicago, and San Francisco—and illustrates the regional dynamics of each. At the state level, the authors discuss the innovative approaches of Florida, Maryland, and Minnesota, which have pioneered regional responses to growth-related issues. Yet each of these instances is missing key elements of true regionalism. For, the authors maintain, many policies successfully address one part of the city or economic sector (jobs, housing, social disparities, etc.) while ignoring the rest. Rather, planning must address the region *holistically* with a citizen-driven, consensus vision backed by projects, policies, and institutions that embody this vision *and* support local development efforts.

Despite laudable attempts, up until now many cities' efforts to reinvigorate distressed areas or manage development hotspots have fallen short because such targeted improvements lacked a unifying regional framework to oversee progress. Instead, complicated and uncoordinated ad hoc processes have hindered large-scale change capable of benefitting entire regions. The Clean Water and Endangered Species Acts of the 1960's and 1970's demonstrate this point, representing isolated responses that contained federal mandates but lacked regional direction (22). The result: fragmented places and incoherent systems unable to function as a whole. Alternatively, the authors present the region as a "layering of networks" (open space, economic, and cultural) that fosters interconnectedness and cooperation, not isolation and competition (6).

So, how exactly are cities to accomplish these objectives? The answer lies in human-based planning; or, designing cities for people. Focusing on the city as a region guards against missing the big picture, while human-scaled design ensures that planning doesn't forget the person. Good design starts by creating a strong sense of place, a part of *each* fundamental community element—civic places, commercial uses, housing opportunities, and natural systems (46). As the authors note, "Civic life starts at the neighborhood level," and encourages ownership of individuals' larger place within the region (38). The book's illustrative case studies showcase design principles that reinforce land-use/transportation connections, highlighting opportunities for access and connections at the neighborhood, local, and regional levels (59). In fact, these examples are one of the book's outstanding features, providing ingenious insight into real planning challenges. Chief among the design features are pedestrian-scaled, mixed-uses applied across a range of urban environments—from suburban redevelopment to public housing infill—with the authors emphasizing design that expands individual housing and transportation choices in each scenario.

***Trey Akers** has completed the first year of the master's program in the Department of City and Regional Planning at UNC-Chapel Hill, where he is specializing in Design and Preservation. He has worked as a planner for The Lawrence Group, a Davidson, NC-based firm specializing in new urbanist, LEED, and smart growth practices, and TND Partners, a traditional neighborhood developer in Durham, NC.*

Most importantly, the policies espoused in *The Regional City* combine administered guidelines with market-based incentives to promote regional coherence. For example, Section 8 neighborhoods are re-designed as mixed-income, human-scale communities *and* coupled with housing vouchers to allow for residential choices *across the region*. It is this mix of policy and incentive that make these strategies viable. Far from being a utopian construct, *The Regional City* "builds on the reality of the existing metropolis with all its complexities and contradictions" (276). The book can be used to address the often simplified arguments of sprawl proponents, as it directly counters such claims at several points. Ultimately, however, *The Regional City* provides an invaluable "armature" of "comprehensive alternatives" to rebuild the city as a region.

EcoVillage at Ithaca: Pioneering a Sustainable Culture

Liz Walker

Reviewed by Jess Brandes

This accessible book by Liz Walker tells the story of the decades-long journey to imagine, create, fund, sustain, and manage a low-impact, highly connected community. EVI, as it's called, is one of the earliest and best known communities in the worldwide eco-village movement. Begun in the early 1990s by visionary Joan Bokaer and by Walker herself, the story of EVI is told by Walker with a mix of factual explanation, descriptive stories, and personal reflections.

EcoVillage at Ithaca is set on 175 acres and includes two neighborhoods, an organic farm, Common House, community garden, forested land and several waterways and ponds. The organic farm and much of the forest and open space are protected by conservation easements. Only ten percent of the property is eligible for development under EVI's plan, compared with 90 percent under Ithaca's original land use plan. The organic farm is set up as a CSA, and therefore benefits not only residents at EVI, but those in the town of Ithaca located just five miles away. The village follows the co-housing model begun in Denmark in 1968, a model that combines private home ownership with shared common spaces. Strong community participation and governance by group consensus are also integral to life at EVI.

Walker explains from the outset that this book is not a how-to book, and will not explain all the legal and financial nuts and bolts of a project like EcoVillage at Ithaca. Having been the director of EVI since its founding, however, she does share a great deal about the difficulties in financing the project and the struggles to keep it afloat. With a background in community activism, Walker describes in detail the many techniques used to gather agreement and foster a spirit of communication during all phases of the process of building EVI. She explains the brainstorming sessions, and small group formation that made for extremely effective envisioning meetings. She outlines conflict-resolution techniques used at EVI and includes lots of examples ranging from negotiations with the City of Ithaca about a water tank on EVI land, to the crisis that ensued when a family of geese chose to nest on the banks of the swimming pond.

Also of interest to planners and planning students is Walker's description of the creation of EVI's land use plan and guidelines for development. Driven by the desire to live in harmony with the natural systems already in place, EcoVillage residents did extensive topographical studies of the land and its water systems, as well as tedious cataloguing of the land's plant and animal species before drafting a plan. Part of the plan also included how the village would function socially and financially, and how the organic farm, orchards, and berry patches would fit into the life of the village. This comprehensive, whole-systems approach to planning is explained in a very simplified way, which makes for greater readability but also leaves some unanswered questions.

At its best, EcoVillage at Ithaca is engaging and hard to put down, filled with vivid descriptions about real personalities and struggles. At other points, however, Walker goes overboard with florid depictions of life at the village, such as her description of neighbors dancing around a Maypole with "eyes sparkling and heads encircled by bright wreaths of forsythia and daffodils… Our ceremonious dance honors the joyous energy of Eros that springtime brings." Such sentimentality comes off as contrived, or at least certainly not a description of a community in which everyone would fit. This being said, the book is still valuable to those interested in a real-life example of sustainable co-housing. For example, the final section is about EVI's outreach to spread its message of sustainability, and contains particularly compelling accounts of the ways EVI has partnered with other organizations, and the way that the community has actively involved its local colleges and universities in its work. Overall, Walker's account of the development of EVI is worth a read. It's an inspiring tale of the commitment and determination of a group of average people who want to live their lives in a better way, and it has practical implications for planners as well.

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