Chapter Two: Urban Habitat: New Multi-family Development Frameworks and Design Opportunities

4 New Frames
+ 4 Opportunities
= 16 Urban Habitat points for design innovation
“It is clear that the most important issue we need to question is housing and its relationship to the urbanism it occupies. Conventional ideas in housing – government, financial, and academic institutions, for example – generally define it as an equation, a number. In the same way, density has been understood solely in terms of building size and mass. Both concepts need to be redefined as sets of relationships within a broader framework to promote new types of density and land uses. Housing and density need to be seen not as an amount of units but as dwelling in relationship to the larger infrastructure of the city, which includes, transportation, ecological networks, the politics and economics of the land use, and particular cultural idiosyncrasies of place.”

http://www.residentialarchitect.com/industry-news.asp?sectionID=0&articleID=92858

Sunrise Trailer Court is one of the most visible examples of the challenge that Teddy Cruz describes — that of redefining the fundamental relationship between household, homes, and the city, not to mention the questions the form of this next manifestation raises. To paraphrase the Peruvian economist Hernando de Soto, providing affordable housing is more than a single act of erecting a protective a “housing” or “roof” over a poor family’s head. [NOTE: the “to paraphrase” seems a little odd to me since I don’t know the original reference – can/should it be introduced?] The task entails establishing and mediating the household’s outside relationships to the common wealth of a city and providing direct access to the civic (?) and economic systems embedded within an urban setting that can sustain working families and elderly couples living on fixed and limited incomes. It also involve inside relationships between roof shape, wall placement, opening configuration and room layout that engage the local environment for passive cooling, change household lifecycles and provide shared boundaries with next-door neighbors.

[NOTE: should the outside/inside description here be reversed?]

In the process of developing the goals, program and parameters for jury deliberations for the Urban Habitats competition, the Charlottesville Community Design Center and Habitat for Humanity of Greater Charlottesville recognized that the title for this creative project carried a connotation that went well beyond conventional definitions of “multi-family housing design.” Sunrise residents and Belmont neighbors had recently rejected architectural site plans and buildings sketches for typical multi-family housing buildings much the same as the nearby townhouses or three-story apartment and condominium blocks wrapped under a big pitched roof. They argued that the combination of lifestyles, site configurations and building assemblages found in the Sunrise Court and the surrounding small-home neighborhood could provide a wellspring of inspiration for different “multi-family” building prototypes from the standard merchant-built product found elsewhere in Charlottesville and, indeed, across the country.

(we could have images of early sketches and or pictures of local projects)
As it happened, the local neighborhood [Belmont-Carlton? Woolen Mills? Either way, it might be worth mentioning by name] had recently finished providing City Hall planning officials their contributions to a citywide push to produce a comprehensive plan as well as projects, systems and procedures capable of building a more sustainable city. All involved with these efforts wanted the Sunrise redevelopment to reflect Belmont’s many individual renovations, new infill “green” homes, and architecturally unique loft and four-plex buildings.

(pictures of the new and existing local Belmont infill examples)

[ADD SUBHEAD SOMEWHERE, LIKE] Phrase I

Compared to putting a big roof over a cluster of new homes, it’s a lot harder to transform Sunrise and meet development costs and regional affordable housing needs while resettling existing residents into a new community that accommodates three times the present population, At the same time, CCDC, HfHGC and residents recognized that this project would have to be designed, built and operated in another manner to meet local political approval, appeal to new residents and support low-income trailer-court residents. An affordable, compact and sustainable “sunrise” enrichment to Belmont was an attractive model in this respect — one that clearly demands what Cruz calls a “broader framework to promote new types of density and land uses.”

The phrase for this broader framework began to materialize as we worked to give a title to the competition that forms the basis of this book. Evolving from a conjugation of the sponsoring partners’ missions, “urban habitat” also established the design spirit and ambitions for contestant submissions. CCDC works to design and build a compact, affordable and sustainable city through community-based work. HfHGC seeks to design and build more humane and affordable housing for the poorest families in the community through volunteer assistance. Inspired both by these missions and the local residents took in the project, the organizations sought to define a competition and resulting outcomes reflective of Sunrise Court’s idiosyncratic physical circumstance., They also sought to demonstrate its potential for generating new multifamily housing models capable of serving as prototypes for local public- and private-sector housing providers, especially HfHGC.

meet the organizational goals of its sponsoring partners

For CCDC, the term urban habitat further reflected its aspiration to become a center of the community’s exploration of innovative design. By taking an active role in presenting alternative architecture, landscape architecture and planning models, CCDC worked toward the goal of making Charlottesville a compact, livable, sustainable city.

“Urban” emphasizes the dependence of affordability on many of SMART GROWTH planning principles, like those reflected in transit-oriented compact housing developments. [Do you want to talk more about smart growth here? We haven’t yet…]
CCDC sponsors local programs on design and building methods to help local leaders, officials, developers and residents find fitting ways to implement smart-growth development guidelines in their neighborhoods, buildings and homes within the local cultural and environmental setting. These programs have explored alternative models of compact neighborhood development, infill housing utilizing green-building techniques and ecological systems to support affordable housing.

“Habitat” acknowledges two critical design and development aspects typically excluded by standard development practices: local residents and the place’s natural systems. Latin for “it inhabits,” the word is firmly rooted in the science of ecology, referring to the place where particular species (human and/or natural) lives. For CCDC, habitat came to stand for its mission to promote programs and projects that build local capacities to design and build affordable housing using green technologies and ecological processes. It’s a living space, where humans, flora and fauna coexist in supportive relationships.

There’s one more important thing worth noting. The word “urban” also reflects Charlottesville’s sometime fitful evolution toward becoming a dense city. One of the biggest challenges the city has faced in pursuing a more sustainable future centers on the perceived and real issues of existing multi-family housing developments. A successful, diversified economy in recent decades, accompanied by an influx of residents drawn by a solid job market and cultural amenities, has helped fuel the relatively rapid transition from a proverbially sleepy Southern town to a vibrant small city. However, the city lacks much experience with models of compact higher-density housing, other than the anonymous student-apartment blocks that often fill residential areas neighboring the U.Va. grounds with overflow parking. By and large, homeowners living near these places see them as transient communities that house transitory occupants in repetitive inexpensive units with high rent.

((to my taste, you could rant and rave a little more, here, about the multi-family trap, the density trap, and (sorry, i’m repeating myself) the planned community trap. I.e. a little more background color for what we’re up against, to make the four examples stand out all the more brilliantly. Refer to recent “multi-family” in Cville. Doesn’t need to be the dorm or the public housing, but other examples, more or less successful, i presume, to create multi-family – as lux condos, rowhouses, and so on. And why this won’t work at Sunrise – or is that part of ch 3, that talks about the irregular sites???)

[Thought I’d leave my contribution above for the moment — hope it can spur you on, whether it’s dead right or dead wrong…]

Trailer courts and small-home neighborhoods in Charlottesville are getting pinched by countervailing pressures: from a development market that rewards handsome profits from gentrification and from political and regulatory forces that wish to accommodate a more diverse, affordable housing stock that connects into transit and civic infrastructure.
In the process of developing the competition details, judging 174 submissions, and preparing and reflecting on our symposiums and, finally, structuring the implementation of the project Sunrise, we discovered that many housing providers nationwide were struggling with the same question: How do we expand, enrich or maybe even replace the planning and development term “multi-family housing”? Our term, Urban Habitats, proved more and more valuable for this task, providing a more definitive way of describing a multi-family housing program that embraces expanded economic, social, physical and ecological considerations. For now, our working definition can be taken as this:

**Urban Habitat = design, planning, financing and implementation frameworks that recalibrate the medium-density multi-family housing development.**

In their pursuit of objectives similar to our notion of urban habitats, the four examples that follow best reflect the range of design, finance, policy and implementation work now underway to create new multi-family housing prototypes. These four projects — led by three California non-profits and one University of Virginia research initiative — have successfully engaged in pushing the envelope of affordable housing development. They also explore the potential for this phrase help provide a language that effectively describes the changing economic, social and physical context of Urban Habitats. Their work addresses design challenges resulting from new family formations, sustainability thresholds, development opportunities resulting from advances in green building and new custom-design pre-assembly construction methods. These existing efforts — each of which was presented at the Growing Urban Habitats symposium — added richness and depth to the insights provided by the competition.

**Frame #1: Urban Habitats begin with community-based design and build partnerships capable of transforming problematic sites and mixed-income family needs into quality affordable, compact and green urban homes and gardens that engage and enrich a sense of place.**

[NOTE: I FIGURED OUT WHY I’M NOT SURE WHAT TO DO WITH THIS YET – ARE WE GOING TO TALK ABOUT A SPECIFIC EXAMPLE HERE? THE DISCUSSION IS MORE GENERAL THAN THE OTHER THREE THAT FOLLOW IT. PLENTY MORE TO DO HERE WITH THAT CLARIFICATION.]

David Baker’s projects cover a full range of affordable housing density types, from suburban townhouse infill to complicated mixed-use dense assemblage of buildings in San Francisco neighborhoods. Each of this San Francisco architect’s projects is architecturally unique to the place and synthesizes new spaces to support changing lifestyles while maintaining principles of smart urban and town living. In their final form and operation, these projects demonstrate the successful results of a long collaborative effort by many partners, including neighbors, residents, city agencies and professionals exploring creative options to make a model urban habitat. One of his clients is a local non-profit housing provider, BRIDGE. Their organization is symbolic of the kind of upfront design and development thinking needed to produce urban habitat development
Founded in 1983, BRIDGE Housing Corporation has offices located in San Francisco, and San Diego. BRIDGE is one of the most successful non-profit affordable housing providers in the United States, over 13,000 affordable homes that they have developed through own expertise and jointly with other developers. As their mission states, “We build a range of housing types that not only fit comfortably into their surroundings but also act as the catalyst for revitalizing and strengthening neighborhoods”.

Their staff of 200 offers a diverse set of skills from site acquisition, community relations, tax benefits and donation resources, working with a wide range of architects in diverse places. They build infill projects from 100 senior and affordable first-time buyers townhouses in the BayView District of San Francisco to large multi-acre, mixed-use compact centers in the urban neighborhoods under their 2001 development program called The Neighborhood Partnership Initiative.

All of their projects strive to build quality market-rate housing that responds to the immediate community and supports smart-growth policy agendas like focusing on transit friendly sites and projects. In addition to developing housing, they manage over 7000 units. Excess income that is generated from property management, their website states are reinvested to support resident and community services and to create new affordable housing opportunities. This means that quality building is critical if maintenance costs are to remain low and such that management income can be reinvested into new housing.

Each BRIDGE Housing project is different, with its form and program elements drawing from the idiosyncratic cultural and physical qualities of its place while integrating contemporary living spaces, green building and landscape architecture.

To overcome resistance by many residents to affordable mixed income multi-family housing, the word “Bridge” represents the design setting terms and work efforts necessary to create developments that build connections between new and existing communities, and between families of different wealth and circumstance. Through collaborative team efforts, Bridge staff work to make this set of connections transparent throughout the development process in the details of development deal to the design of places that can add value to the project and the surrounding community. Like the word bridge implies, they seek to bring opposing sides of the affordable housing debate together across the abyss of the development table -- next door neighbor and new resident, political leader and activist, donated funds and lending institutions together to circumscribe the baseline points of common agreement and within the actual project so that they see can see how their interests and contributions can benefit. It is working with local city officials, residents, and architects exploring many creative development options in order the get the right deal and plan for the place. This customization of each projects is key Though many affordable housing developments draw from many of the same list of issues, the translation of those needs to a specific neighborhood, an idiosyncratic parcel and to serve a particular set of households is never the same project. Their projects are successful because they carry through the whole process of programming, development and sometimes management the same values of high quality work and the production of projects that are positive economic, social and physical catalyst to the local
This attention to detail positions a low-income family into a positive environment that is safe and supportive. There are many lessons to learn from BRIDGE Housing, that is why they are national leaders.

Creating an affordable housing projects that acts as a financial, social and physical connective bridge like this takes more “upfront works” for each project, than a standard merchant build project. The buildings designed by David Baker and produced by BRIDGE are successful because their development framework creates architecture that is reflective of the process that has gathered together a group of financial and users partners while forming collaborations between new residents and neighbors that will take ownership and pride in their new homes and addition to their neighborhood.

**Frame #2: Urban Habitats are “other densities” — livable places realign city regulations, design criteria, and building methods to attract and support innovations in local affordable housing prototypes and add to the building of culturally diverse, equitable and sustainable cities.**

[NOTE: I’m not sure what you want to talk about here, as I see three things going on: Colorado Court, Livable Places, and Olive Court. The specific connections between them aren’t terribly obvious to me. That said, I really like the idea of finishing the section with the word dingbats!]

Participating in the same symposium panel that found Anderson Bros presenting their competition-winning “Orchard” scheme, architect Lawrence Scarpa presented Colorado Court, an award-winning single room occupancy housing project designed by his Santa Monica–based firm Pugh + Scarpa. As he walked the audience through the design concept, building challenges and policy issues involved with Colorado Court, Scarpa’s primary point was that creating the “other densities” needed for compact, green and affordable housing requires realignment of governance, policy, building-technology and aesthetic issues into one parallel creative work process. Politicians, contractors, engineers, residents, bankers and designers all need to be more innovative and willing to recalibrate their basic models, calculations and comfort zones. Scarpa offered the example of how he and a group of Los Angeles housing activists and environmentalists pushed the boundaries of their understanding to be more creative with the form, function, and operational vocabulary of development. Livable Places, the non-profit they organized, provides assistance to local developers, residents and City Hall while creating a venue for the process of realigning and fine-tuning the production of new housing models.

In the L.A. metropolitan region, multi-family housing is often synonymous with blocks of aging, three-story, stucco apartment buildings appropriately called “dingbats.” Livable Places has set an ambitious agenda to create policies and design models for the next generation of multi-family housing. At a time when area housing costs are among the highest in the nation, this unique group has staged design competitions, held public forums, and has written proposals for new planning ordinances to increase density and more energy efficient development.
For example, in 2003, Livable Places in conjunction with the Local Initiatives Support Corporation and National Endowment for the Arts sponsored a design competition for a mixed-use sustainable affordable housing and urban design project on problematic urban sites and to influence and change the vision of urban policy makers and voters. The winners were architects McCormack, Smith and Others, from San Diego, California.

Livable Places has earned national recognition by advocating for affordable, vibrant and healthy Southern California communities and building innovative multi-family housing models. One of their primary programs is an open information hub that offers local community leaders and builders research materials on topics like the cost of operating a car in Southern California and green building design. This information is continually updated to provide an overview of current city development proposals and recently adopted ordinances. Each reference includes a thorough review of the development issues and particularities raised by each ordinance as well as links to other key advocacy groups, agencies and information resources. This orchestrated effort translate the guiding policies of the new City of Los Angeles General Plan Framework aims to communicate a more livable and sustainable agenda to a wider audience, offering examples of how citizens might implement this broad program. Livable Places has overseen efforts to align diverse grassroots organizations with City agendas while providing constructive critics ways to improve the Plan Framework with on the ground examples.

One more recent project is Olive Court, a cluster of 58 new “green” market-rate condominiums in central Long Beach completed in 2007. This project reveals an effective approach for the design and construction of a mixed-income development with compact floor plans that range in size from 800 to 1500 square-feet in a variety of one-, two-, three- and four-bedroom configurations. The project is design by San Diego architects, Studio E.

[NOTE: If this example stays, it needs more analysis, rather than simply citing and asserting an example. It’s adding to my confusion about the section.]

Colorado Court and Livable Places have successfully framed the idea — one through architecture, the other education and research — that livable, affordable urban housing is a composite arrangement. Investing in quality livable places where city networks converge can form a variety of households within the comfort zone of the place’s natural systems that add up to a livable city. If developers, designers, city officials and residents fail to understand the common wealth generated by making this set of relationships vivid in every project, — thus ensuring that Los Angeles and other cities will continue on the old path of approving dressed up dingbats..

Frame #3: Urban Habitats capture the potentials inherent in the changing dimensions of our urban neighborhood patterns, social and cultural capital mixtures, economic niches and both local and global ecological operations.
San Diego architect and Urban Habitat competition juror Teddy Cruz delivered the symposium’s keynote address, where he framed the work of affordable housing not as an issue of density, an equation, or number, but as a means of addressing the changing dimensions and relationships inherent to the dynamic process of living and working. Rather than seeing it as a “beautification and gentrification project” that fills in a gap in decaying central cities or growing suburban centers, Cruz asked the audience to look at a more familiar landscape: the ordinary everyday small-home neighborhoods where city and town workforces strive to add needed living and work space to their basic foundations.

Cruz’s past collaborations with Casa Familiar have revealed how governance rules and development processes cater to the gentrification of infill housing types, rather than promoting the more opened-ended and culturally messy process of adding density, accommodating household needs and ecological desires in the everyday inner neighborhood. To answer this question he worked with the executive director Andrea Skoprepa, of Casa Familiar in San Ysidro, California.

Incorporated in 1973, Casa Familiar is a non-profit human services organization located in the San Diego suburb or San Ysidro, that centers its efforts on the challenges faced by international border communities. Offering over fifty programs in human services, community development, recreation services, technology training, and arts and culture. They have also used the design and development of several housing projects to help residents to leverage the economic capacity, social capital and physical resources of their local communities as the primary design and building material for creating what Andrea Skoprepa calls “expensive housing for the poor.” In addition replacing the somewhat oxymoronic term of affordable housing, their use of “expensive” emphasizes how the long-term aggregation of small investments can generate a common wealth from individual and shared efforts, instead of focusing on a “glamorous stylistic display”.

One of their projects, Mi Pueblo, is a “non-conforming” mixed-use housing development that received national attention for the formidable challenges it posed to San Diego’s zoning regulations and affordable housing conventions. The project examined the changing needs and dimensions of existing and new immigrant households and how they might be expressed in architectural form and community organization, while offering a simultaneous assessment of changes to the city’s zoning and development ordinances that could harness the resources of this inner-city or middle-urban residential landscape. This investigation and other research have led to a working definition for a new set of “micro-zoning” polices that Casa Familiar, Cruz, and other local residents call an Affordable Housing Overlay Zone (AHOZ).

The AHOZ reflects both micro- and macro-scale dimensions of an economic and political framework that views the starting point of development as a means for leveraging and
adding to the complexity of the existing common wealth of this working community, rather than simply displacing them in the process of clearing the site to make way for presumptively critical and missing components like new housing stock. At the micro-scale, AHOZ establishes guidelines that allow single-family home owners to add rooms to the side yard, accessory units to the rear, or expand the front of their homes to accommodate a small business. It also puts a local non-governmental agency like Casa Familiar on the ground as the local manager of the community’s larger urban design plan. This entity works to ensure that pedestrian connections and transit networks grow effectively over time and that micro-loans are tied to the production-quality additions and new projects. The AHOZ is the subject of debate in San Diego city hallways. Elsewhere in the city, other less affluent neighborhoods have shown interest in using this approach to add density in ways that accommodate local household lifecycle needs, diverse cultural lifestyles, rising housing costs and environmental responsibility.

The example of Mi Pueblo suggests that many of the answers to dealing with big issues like affordable housing for low-income and work-force families can be found in expanding the number of ”micro-dimensions” that we incorporate. Taking them for granted reduces the opportunity for innovation and limits the production of needed stock. To paraphrase the AHOZ language, Casa Familiar and Teddy Cruz are looking to build the large affordable condominium project that satisfies demand by shattering it into smaller units and broadcasting it across the community. By seeding backyards, side lots, second stories of existing small homes as well as under-utilized warehouse parcels and aging trailer parks, their orchestrated composition of “spot zoning” and constructive use of “non-conforming” additions expands affordable housing stock, increases the local equity, and builds skills and capacity within the existing community.

Frame #4: Urban Habitats are “green” in two interdependent ways – architecture is seen as reciprocal design and building processes and open spaces and buildings envelopes as a continuous productive landscapes.

As we reviewed the Urban Habitats competition submissions in July 2005, University of Virginia School of Architecture Professor John Quale was leading a team of graduate students who were designing and were building pre-fabricated modules for a affordable, compact, green duplex in a hot decommissioned airport hanger in Milton, Virginia. The duplex was vertically stacked – the lower unit is a studio and the upper two floors a two-bedroom condominium., Trucks delivered finished modules to the site on 7_ Street SW in Charlottesville neighborhood of Fifeville, where a crane lifted them onto a new foundation on an empty parcel that once contained a small single-family home. This duplex is the first is a series of design/build demonstration projects called ecoMOD for our [who’s this we, Kemosabe?] affordable housing partners, Piedmont Housing Alliance and Habitat for Humanity. This applied research project has been developing prefab prototypes to test a possible solution that provides sustainable and affordable infill housing capable of accommodating changing lifecycle needs.
Carefully considered prefabrication can help reduce both construction costs and utility bills, and ecoMOD embodies a commitment to sustainability and affordability by re-imagining the idea of “home” through thoughtful, efficient and ecological design. The full potential of prefabricated housing, whether at the scale of walls panels, room-size modules or other large-scale components, has yet to be discovered, at least in the U.S. [NOTE: right? Do you want to cite Scandiwhovian precedents, for example?]. ecoMOD has become embedded in the curriculum of the U.Va. School of Architecture since starting in 2003, developing design methods and modular building processes to construct compact, well-built homes that cost less to operate than conventional homes, respect its environment and appreciate over time ((how? Doesn’t every house do that, ideally?)). These goals are in stark contrast to the qualities of most affordable homes constructed using modular methods — trailers. ((or something to show what they are competing against.)) [KC: what about “Always low prices.” The appeal of lowest first cost.] In many medium-sized and small towns across the country, low-income homes tend to be trailers or some variant of manufactured or prefabricated housing. They tend to be built in ways that waste resources and have inherent indoor air quality problems. Such homes may be affordable and easily installed at the edge of neighborhoods, even in low-lying flood-prone land or near light-industrial areas. Most get sited without any consideration of solar or wind orientation or local hydrology. The buildings themselves are aggressively 'site-less' – seemingly adaptable to any environment, yet entirely separate from their surroundings.

(I will get photo of actual built duplex)

[NOTE: I have at least a couple high-res Scott Smith photos from the Hidden in Plain Sight exhibit. KC]

**Four Urban Habitat Design Opportunities**

Various community-development corporations across the country are integrating green-building practices and systems into their affordable multi-family housing projects. An article published in *Multi-Family Trends* magazine called “Mixing and Matching Financing Sustainable Affordable Developments” quoted DeWitt Jones, COO of Boston Community Capital, who observed, “You need to be thinking about environmental impacts from density, siting orientation, parking and wastewater systems from the beginning and consult [corresponding] experts.” Whether it’s pursuing low-waste construction practices or implementing sustainable materials and systems, developers who want to produce quality affordable housing now have to address the basic issues of site planning, site engineering and building development. Creating an ordinary mixed-use multi-family development — already a complicated undertaking — becomes exponentially more so once you begin to carefully consider the location, parcel configuration, community memory and environmental context of the land and proposed new housing programs. Add in innovative site layouts, deeper understanding of programmatic options and the flow of natural systems across and through the parcels, and it becomes clear that these residences are not typical merchant-built projects. But this

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1 by Brad Berton, January 2007
complexity of interests that new financing, ecological and mixed-income housing opportunities can prosper.

“Affordable housing has the same rules as market-rate. If you talk to an architect, it’s about personal space, sustainability, such as cross-ventilation, and shared space. Achieving this in affordable medium-density multi-family housing requires a design process and program that allows the architect and client to make everything in the program an opportunity to individualize the building to resident cultural and location particularities.”

—Julie Eizenberg, Urban Habitats Symposium University of Virginia, September 2005

Laying the groundwork for an affordable, compact and sustainable medium-density housing development demands a process where everyone involved — the client, the architect and the residents — take advantage of every creative opportunity during the design, financing, policy and implementation of the development. Only then can we hope to create connective, livable, familiar and green urban habitats that flourish from the moment they’re occupied and grow to reflect the cultural environment of their locations.

In culling through the competition-entry submissions and case studies, we have tried to highlight many of these basic places of opportunity in hopes of cultivating a process that grows as others bring their experiences to this table. Building on the work of the books, Planning To Stay and Good Neighbors: Affordable Family Housing (see Resources, page xx), we have organized four prime areas for design opportunities.

**Design Opportunity: Count Again**

One thing hasn’t changed: the essential challenge in affordable design has been to provide the residents more for less. Basic issues of capital costs of land, development and construction remain, and to meet the programmatic goals of an urban habitat, it means we have to look at both short-term capital and long-term resident and building operating costs. This creates a different, nonconventional spreadsheet of costs. For example developers, architects and contractors are turning to pre-assembled building methods to reduce expensive onsite construction time and building waste. Concern over rising resident operating costs reset the designs of our site, landscape and building plans to reduce heat/cooling bills, harvest the sun for home energy and water for the gardens and toilet, provide for interior room flexibility for life-cycle changes, and structure the soil to support the growth of large cooling shade trees and grading. These issues themselves are not new, but we have typically counted them as separate activities and budgets.

We have also physically hidden many of them, burying them under ground in stormwater drainpipes as we sealed our homes against natural ventilation and cut landscape budgets during construction. The new method of counting is to stack and overlay the budgets to achieve multi-functions and service from each activity, which provides additional material for shaping the architecture and landscape architecture. For example, a surface
rain-harvesting “woonerf” or parking mews can replace conventional stormwater pipe. The new counting takes the old site development budget for pipe and transfers or converts the funds to support the foundation for a major community natural open space. The change also helps the city reduce stormwater run-off and street deterioration costs. Even changing standard building dimensions inside the house can help. Smaller units can seem more spacious with less square footage if ceilings are bumped up from 8’ to 9-1/2 or 10 feet, which gives room to hang ceiling fans in the bedrooms and allows breezes to circulate through the rooms and daylight to illuminate living spaces.

We also need to be more conscious of our assumptions when we count the number of units being placed on any particular parcel of land. The quantity of this calculation is very familiar — we know it as density — but its quality in any instance is not absolute. San Francisco’s high-density neighborhoods average 35 units per acre and average homes costs over $500,000 each. The calculation required for urban habitats is intensity: how the activity and mix of families sustain healthy natural processes in relation to each watershed, each neighborhood center, and each transit stop.

**Design Opportunity: Composite Arrangement**

Life in any climate does not begin and end at the building enclosure. Urban habitats take advantage of the foreground, the middle ground, and the background of our dwellings. Blending boundaries even as they defining them, they make use of every square inch at their disposal. In trailer courts and in small-home neighborhoods, residents demonstrate how to turn shared boundaries such as side-yards, building walls, and even roofs into opportunities to create more living space. Building walls are turned into bays with operable doors that open onto narrow side gardens, bringing light and activity into small kitchens. Flat roofs are turned into places to share a view of the surrounding community, grow potted tomatoes or flowers in the summer sun, or build a distinctive pergola complete with whirligigs. In these communities, the land-use and real estate term “mixed-use” requires an investment in design time and resident freedom to turn the typical constraints of this housing type’s dividing walls into opportunity spaces.

In fact, we need to enrich the impoverished term “mixed-use” by the recognition that these places are an active composite of living arrangements. Their varied living patterns can inform and shape a project’s site plan, architecture and landscape architecture — but it takes time, a lot of thought and a concerted effort to take full advantage of these composite arrangements.

Typically this type of new multi-family project is referred in planning and real estate parlance as an infill planned community. The City of Charlottesville development process designates this site as a planned community zone. This is a good policy: it designates the importance and value a piece of land has as a mixed-use parcel that benefits from wise developments serving not only the neighborhood but also city-wide planning goals. The kind of planned community we are talking about is anything but a gated community or isolated low-income apartment.
The goal of the Urban Habitats competition — to design and build housing that supports the residents and lifestyles of displaced trailer court residents and attract a unique market place niche of local service working families and University faculty — describes a richer arrangement of households. In planning, the idea of infill is rooted in the tradition of adding new housing units into decayed neighborhoods, where a particular set of parcels has become available due to abandonment.

At Sunrise the key point is that this parcel contains an active and thriving residential habitat that need not, indeed, cannot be displaced. As a result, the competition sought to translate the memory and lifestyles of the trailer court and small-home neighborhood into the composite forms of the new “infill” project. This adds new building stock that is not available in the existing neighborhood. For more than a decade now, the Belmont neighborhood has been an attractive place to find a home for young couples and families moving to Charlottesville. Meanwhile, long-time Belmont residents are aging, and, after living in the neighborhood for thirty years or more, they want housing options better suited to assisting and supporting them in their elder years. Can they remain in the neighborhood by moving down the street to a compact flat in the new Sunrise park project?

Urban habitats requires replacements and addition of new affordable market-rate housing, expanding the definition of planned community beyond simply adding new units on a neighborhood’s empty lots. The goal is infill more than affordable units to help sustain the existing community, by adding new housing stock, infrastructure or building methods. This new arrangement recognizes that development programs and projects can and should mix “infill” activities that add missing community components with “refill” processes capable of carrying forward existing onsite resources and adjacent needs in a more sustainable and quality composition. An urban habitat approach to planned communities embodies and fulfills CCDC and HHfDC’s mission of creating housing and community diversity. “Diversity” is a word that may be too widely used to retain its edge, but it reflects a genuine belief that the inevitable heterogeneity of life is key to providing affordable and sustainable urban habitats.

Design Opportunity: Inside and Out Living
Residents of trailers and small homes like those at Sunrise immediately recognize the savings from lower mortgages, rents and maintenance and operating costs improves their access to a outdoor amenities, indoor natural lighting and flexible room layout. Urban habitats redirect the whole concept of open space design, converting it from a mere development set-aside or amenity into an aesthetic community signature attraction and a means of sustaining productive ecological systems that do more than maintain an artificial urban landscape. It takes more than just mowing the lawn once a week, but cultivating the interests of local gardening experts — or even inspired amateurs — can nurture habitats that compliment the buildings’ cooling and heating systems.

[NOTE: I move the chunk above from the end. I’m not sure that this next passage actually talks about “inside + out”]
In the last ten years, the multi-family housing development community and municipal officials have expanded their basic development and land-use language to capture the diverse, complex and changing programmatic objectives for housing policy and development. One current phrase is “mixed-use residential development,” which reflects the maturation and diversity of both city and suburban community residential marketplace. This is an important first step in recombining land-uses such as commercial and residential that had previously been separated.

The typical building section is three stories of residential apartments or condominiums built atop one floor of street-level commercial and/or office space. What this phrase does not encompass the emerging next generation or families seeking a more heterogeneous living environment whose development program, site organization, architecture and landscape architecture merge different expressions of cultural lifecycles and the operation of natural processes. This next iteration integrates a combination of activities, or composite development, where the intersections between activities are fused, its multiplicity is celebrated and energies shared in productive ways.

**Design Opportunity: Succession and Change**

The planning and design of a project may begin and end at certain points in time, but its construction, change, expansion, maturation and contraction will not. A building takes on a life of its own, based on external circumstances and parameters at any given moment, and its evolution is governed by multiple decisions of innumerable people over time. The idea of recognizing and understanding what can and can’t be controlled is fundamental to this book. The challenge, then, for designers, residents, developers, and officials is how to anticipate and allow for succession and change.

This realization hinges on the notion that affordable housing depends on sustaining a dynamic living community and environment rather than just the development of a static building and open space. Urban habitats recognize that affordable housing projects have to accommodate two timelines of development activity.

The first follows a time dimension that ecologists call “succession” – the process by which one ecological habitat evolves from one type of habitat to the next, like a forest moving from mixed oak and hickory to beech. The introduction of sustainability technology and natural tactics as fundamental building infrastructure can represent such successional changes in the housing development, with historic and transformative effect. For example, multi-family housing buildings have relied upon the use of a double-loaded corridor to serve a set of apartments with a common hallway to their front door. Now we want to cool these apartments by natural and not mechanical ventilation. To reduce energy costs and improve air quality, we recognize the need to change the apartment dimensions and lay-out. Floor plans need multiple openings at each end and ceilings need to be higher in order to draw a breeze through the home. Single-loaded balcony access ways are therefore replacing double-loaded corridors to allow sunlight and air flow though the home. The morphology of multi-family buildings is diverging from standard merchant-built products, becoming becoming taller and thinner with a wider range of floor plan layouts.
Sunrise Park’s primary program was not to displace existing trailer residents but to make them active agents in the design and development of the new community development. This conversion of their “trailer” equity into reduced rents or even home ownership represents another example of succession. Their new “urban habitat” is part of the old environment moving into the vocabulary of a whole new housing density and new neighborhoods looking for new housing prototypes.

The other parallel development timeline is the concept of “change.” Typically we’ve associated the word with the definitions outlined for succession above. We feel that change should describe the everyday, seasonal and lifecycle processes that maintain household access and connections into the community common wealth, as well as being comfortable and contributing to a healthy environment. Changes focuses on those activities, physical additions and other cultural accommodations that are needed to adjust a home and garden to the seasons, changing family configuration or new modes of aesthetic expression. This might as simple as adding a lattice structure to a roof garden that supports growing grape wines or flowering wisteria to shade the house and add character to the community. The home porch is wide enough to pull the dining table out for summer evening dinner over looking the neighborhood.

((Image Belmont Small Home Neighborhood Plan))

**Urban Habitat Matrix**

4 New Multifamily Frames + 4 Development Opportunities = 16 Points of Design Engagement