DESIGN NORTHAMPTON WEEK [9/7/08 - 9/13/08]

INSTITUTIONAL SPONSOR:	The Northampton Design Forum
CHARRETTE VENUE:	Available Potential Enterprises, Ltd Gallery 126 Main Street Northampton, Massachusetts 01060
NOTRE DAME URBAN DESIGN TEAM:	**Students:** Kalinda Brown Dan DeGreve Josh Eckert Scott Ford Aaron Helfand Crystal Olin **Professor:** Philip Bess

Opening Presentation / September 7, 2008
University of Notre Dame School of Architecture Graduate Program in Urban Design

I. Space is a Thing: an urban thing....

a) Space and Anti-space

II. Elements of the City: What is Urban Form?

a) City as environmental order, economic order, moral order, and *formal / material order*

b) Urban *formal order*: a network of streets and blocks, with a mix of daily life activities within pedestrian proximity (120 - 200 acres)

c) Urban spatial types: plaza, square / boulevard, avenue, street, alley

d) Urban building types: foreground and background

III. Ten Characteristics of Good Towns and Neighborhoods

IV. The Transect and Transect-based zoning

V. Traditional Architecture and Urbanism as "The Original Green"

TEN CHARACTERISTICS OF GOOD TRADITIONAL TOWNS AND NEIGHBORHOODS*

Cities and towns are cooperative human enterprises and artifacts that exist to promote the best life possible for their citizens, and the fundamental unit of town planning and urban design is the neighborhood. The moral, economic, and environmental benefits of traditional towns and neighborhoods are greatly influenced by certain formal features. Good towns and neighborhoods exhibit most or all of the following ten characteristics, which may be regarded as guiding principles for good town and neighborhood planning.

1) **A good town or neighborhood has a discernible center**, usually a main street (sometimes a public square), typically bordered by buildings containing shops, offices and/or residences, and sometimes civic buildings. A transit stop (in small towns usually a bus) should be located in or along this center, with stops occurring not more than one-half mile apart.

2) **A good town or neighborhood has a more or less discernible edge** where the town ends and another town or a public park or the rural landscape or waterscape begins.

3) **A good town or neighborhood is pedestrian friendly**, and accommodates not only automobile drivers but also those who choose to walk or who are unable to drive. Most of the residences in the town are within a five-to-ten minute (one-quarter to one-half mile) walk of the town center.

4) **A good town or neighborhood has a variety of dwelling types.** In addition to detached single-family houses, these may also include row-houses, flats, apartment buildings, coach houses, and/or flats-above-stores. The consequence is that the young and the old, singles and families, the working class and the wealthy, can all find places to live. Small ancillary buildings are typically permitted and encouraged within the backyard of each lot. In addition to parking, this small building may be used as one rental unit of housing or as a place to work.

5) **A good town or neighborhood has stores and offices located at and/or near its center.** These stores should be sufficiently varied to supply the weekly needs of a household.

6) **A good town or neighborhood has an elementary school to which most young children can walk.** This walking distance should not be greater than one mile. Also, there should be small parks and other recreation facilities dispersed throughout the town not less than one-quarter mile or greater than one mile apart.

7) **A good town or neighborhood has small blocks with a network of through streets.** This network would include major and minor streets, commercial and residential streets, arterial and local streets; but is emphatically *not* a system of feeder roads and dead end *culs de sac.* This network provides multiple routes to various town destinations, and *helps disperse traffic congestion.* Streets within the town have planter strips and/or sidewalks, are relatively narrow, and may be (in America typically are) lined with trees. This slows down traffic and creates an environment better suited for pedestrians as well as moving and parked cars.

8) **A good town or neighborhood places its buildings close to the street.** This creates a strong sense of the town's center and streets as places, and of the town itself as a place.

9) **A good town or neighborhood utilizes its streets for parking.** Parking lots and garages rarely front the streets, and are typically relegated to the rear of buildings, often accessed by lanes and/or alleys.

10) **A good town or neighborhood reserves prominent sites for civic buildings and community monuments.** Buildings for religion, government, education, the fine arts and sport are sited either at the end of important streets vistas or fronting a town square.

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* The "Ten Characteristics of Good Traditional Towns and Neighborhoods" are *not* copyrighted, but rather represent common traditional urban design and town planning ideas most recently re-popularized and articulated by the Congress for New Urbanism (CNU).

Traditional Urban Spatial and Building Types

I. Spatial Types
- **Linear Spaces**
  - Avenue
  - Boulevard
  - Street
- **Centralized Spaces**
  - Plaza / Piazza (hard surface)
  - Square (planted surface)

II. Building Types
- **Background Buildings**
- **Foreground Buildings**

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What's Wrong With Sprawl?

Listed below are some of the problems commonly associated with sprawl, problems that are either direct consequences or unintended byproducts of sprawl's formal patterns of development:

- sprawl systematically separates different human activities from each other and makes them accessible only by car, which makes it impossible for people to both live and work, shop, play, learn or worship within the context of a walkable neighborhood

- sprawl effectively de-mobilizes and disenfranchises those without cars and those unable to drive, notably children (whose parents must become chauffeurs) and the elderly

- sprawl injures the common good by concentrating both wealth and poverty; by separating people by income, age, and race; and by failing to provide a genuinely public realm shared by all

- because sprawl separates housing settlements by class, it promotes extreme inequality of educational opportunity

- sprawl hastens the loss of agricultural lands and wilderness, and the mono-cultural single-use unwalkable settlements it creates are not worth the tradeoff

- sprawl, by its automobile-dependent lifestyle, both increases air pollution and discourages national energy self-sufficiency in a period of global political conflict

- sprawl, by its automobile-dependent lifestyle, contributes to North America's currently unprecedented rates of obesity

- sprawl is ugly, and produces nothing in the public realm worthy of civic and aesthetic contemplation

- although suburbia has become a cultural ideal, it is a contradictory ideal because sprawl consumes the landscape that is the very substance of its promise; and finally

- sprawl is culturally problematic and undermines the common good because its dynamic is self-contradictory. Sprawl is unable to deliver on its promise of convenience, mobility, natural beauty, individual freedom and well-being for all. Hence the phenomenon that often the persons most recently arrived at the fringes of suburbia are also the persons most vociferously opposed to its continuing extension, the political phenomenon that has come to be known as NIMBYism—"Not In My Back Yard."

THE RURAL-TO-URBAN TRANSECT

The Rural-to-Urban Transect is a diagram of human habitat describing the relationship of the rural environment to traditional urban environments. The Rural Transect proper (zones T1 and T2) designates areas generally not subject to human settlements larger than the family, and differentiates between natural landscapes (both raw and preserved) and cultivated landscapes. The Urban Transect refers in turn to that range of human habitats that support human flourishing, within which human settlements are part of a sustainable eco-system that includes both natural and cultivated landscapes. This range of human habitats, depicted as "Transect-zones," progresses from less dense human settlements (T-3) to more dense human settlements (T-6); but each urban Transect-zone denotes a walkable and mixed-use human environment wherein *within each Urban T-zone* many if not most of the necessities and activities of daily life are within a five-to-ten-minute walk for persons of all ages and economic classes.

Transect-based zoning: The Transect, as a system of classification deploying the conceptual range rural-to-urban, can be employed to arrange in useful order the typical elements of urbanism, within which continuum every urban element finds its place. The continuum of the Transect, when subdivided, forms the primary basis of the following zoning categories, listed from most rural / least dense to most urban / most dense: Natural (T1), Rural (T2), Sub-Urban (T3), General Urban (T4), Urban Center (T5), and Urban Core (T6). These categories zone primarily for density and building type rather than for use, because it is a premise of Transect-based zoning that a mix of uses is desirable and that uses change over time. All Urban Transect zones therefore allow broadly for adjacent residential, commercial, and light industrial uses, though some of these uses are designated as primary and some secondary to particular building types.

What Is A Charrette? by Bill Lennertz of the National Charrette Institute

A charrette is a rigorous and inclusive planning process undertaken by an inter-disciplinary design team over a brief time period. The term "charrette" is derived from a French word meaning "little cart" and refers to the final intense work effort expended by architecture students to meet a project deadline. This intense burst of activity is similar to the environment of the charrette process described below.

The result of the modern-day charrette is not just momentary, but profound change. After a charrette, people have been heard to say: "I have been practicing transportation engineering for 20 years and until today I never knew why the fire department needs 20 feet of street clearance," or "Now I understand why alleys are so important," or "This is the most exciting professional experience I have had since college," and "I may not agree with the entire proposal, but my concerns were listened to and considered; I like how I was treated." Achieving such change requires a carefully planned and orchestrated process that starts well before the actual charrette and continues long after it.

There are four guiding principles for a charrette that brings about real change:

1) INVOLVE EVERYONE FROM THE START: That is, anyone who might build, use, sell, approve or attempt to block the project. When involved at the inception, people are more likely to contribute their unique talents and viewpoints for the betterment of the project. Local citizens, officials, and approval board representatives meet and work with the design team throughout the charrette to create a plan, which incorporates their concerns. The charrette process gives the plan mutual authorship and a vision shared by all participants. This is especially important for those who will officially review the plan for a public agency or body. Having contributed to it, they are in a position both to understand and to support its rationale. This approach is initially more work, but, in the long run, it will save time in rework and most certainly produce a higher quality product with a greater chance of implementation.

2) WORK CONCURRENTLY AND CROSS-FUNCTIONALLY: All design work must be done concurrently by a cross-functional team that usually includes architects, planners, engineers, economists, market experts, staff, and citizens, incorporating user input, so that decisions are measurable and realistic every step of the way. This cross-functional team working together from the start, further assures elimination of rework because the design work is continually reflecting the wisdom of each specialty. During the charrette, the collaboration of the design and development disciplines also helps to produce a set of finished documents that address all aspects and phases of a project. Detailed designs are undertaken individually or in small groups. At other times, larger caucuses occur, and often there are simultaneous meetings. Periodically everyone gets together for a briefing, discussion or presentation.

3) WORK IN SHORT FEEDBACK LOOPS: A feedback loop happens when a design is proposed, reviewed, changed, and represented for further review. The shorter this cycle, the greater the level of influence and buy-in by the reviewing parties. In conventional planning processes, the design team presents plans to the community and input is gathered through various methods such as surveys, or small discussion groups. The designers then retreat to their office and return weeks later with a revised plan. Often during these weeks, some degree of misunderstanding occurs in the community. People who attended the meeting come away with different understandings. People, who don't like to speak in public, speak to others in the parking lot afterwards. The result is often a crystallization of opinions against the plan that send the design team back to step one. In a charrette, the participants are told to come back the next evening to review the changes. The misunderstandings are resolved quickly before they have had a chance to crystallize. With conventional planning methods the design and feedback cycle can last up to four to six weeks. The charrette shortens it to 24 hours. During the day, and often late into the night, the charrette studio is a forum for ideas with the unique advantage of this immediate feedback. At the same time that someone is designing a street, another is locating a tree, and an engineer is determining the effects on drainage. Questions to design problems are answered on the spot. Most importantly, simultaneous brainstorming and negotiation during a Charrette can change minds and encourage unique solutions to problems. The number and variety of solutions and ideas generated and considered is far greater than those under conventional planning methods. A better product results from this creative effort.

4) WORK IN DETAIL: True buy-in can only be achieved by designing in detail. This way the critical issues surface and are addressed. This can only be accomplished by looking at details (building types, block sizes, public space) and the big picture (site circulation, transit, land use, and major public amenities), concurrently. Studies at these two scales also inform each other and reduce the likelihood that a fatal flaw will be overlooked in the plan.

CHARTER OF THE NEW URBANISM

The Congress for the New Urbanism views disinvestment in central cities, the spread of placeless sprawl, increasing separation by race and income, environmental deterioration, loss of agricultural lands and wilderness, and the erosion of society's built heritage as one interrelated community-building challenge.

We stand for the restoration of existing urban centers and towns within coherent metropolitan regions, the reconfiguration of sprawling suburbs into communities of real neighborhoods and diverse districts, the conservation of natural environments, and the preservation of our built legacy.

We recognize that physical solutions by themselves will not solve social and economic problems, but neither can economic vitality, community stability, and environmental health be sustained without a coherent and supportive physical framework.

We advocate the restructuring of public policy and development practices to support the following principles: neighborhoods should be diverse in use and population; communities should be designed for the pedestrian and transit as well as the car; cities and towns should be shaped by physically defined and universally accessible public spaces and community institutions; urban places should be framed by architecture and landscape design that celebrate local history, climate, ecology, and building practice.

We represent a broad-based citizenry, composed of public and private sector leaders, community activists, and multidisciplinary professionals.

We are committed to reestablishing the relationship between the art of building and the making of community, through citizen-based participatory planning and design.

We dedicate ourselves to reclaiming our homes, blocks, streets, parks, neighborhoods, districts, towns, cities, regions, and environment.

We assert the following principles to guide public policy, development practice, urban planning, and design:

The region: metropolis, city, and town

1. Metropolitan regions are finite places with geographic boundaries derived from topography, watersheds, coastlines, farmlands, regional parks, and river basins. The metropolis is made of multiple centers that are cities, towns, and villages, each with its own identifiable center and edges.

2. The metropolitan region is a fundamental economic unit of the contemporary world. Governmental cooperation, public policy, physical planning, and economic strategies must reflect this new reality.

3. The metropolis has a necessary and fragile relationship to its agrarian hinterland and natural landscapes. The relationship is environmental, economic, and cultural. Farmland and nature are as important to the metropolis as the garden is to the house.

4. Development patterns should not blur or eradicate the edges of the metropolis. Infill development within existing urban areas conserves environmental resources, economic investment, and social fabric, while reclaiming marginal and abandoned areas. Metropolitan regions should develop strategies to encourage such infill development over peripheral expansion.

5. Where appropriate, new development contiguous to urban boundaries should be organized as neighborhoods and districts, and be integrated with the existing urban pattern. Noncontiguous development should be organized as towns and villages with their own urban edges, and planned for a jobs/housing balance, not as bedroom suburbs.

6. The development and redevelopment of towns and cities should respect historical patterns, precedents, and boundaries.

7. Cities and towns should bring into proximity a broad spectrum of public and private uses to support a regional economy that benefits people of all incomes. Affordable housing should be distributed throughout the region to match job opportunities and to avoid concentrations of poverty.

8. The physical organization of the region should be supported by a framework of transportation alternatives. Transit, pedestrian, and bicycle systems should maximize access and mobility throughout the region while reducing dependence upon the automobile.

9. Revenues and resources can be shared more cooperatively among the municipalities and centers within regions to avoid destructive competition for tax base and to promote rational coordination of transportation, recreation, public services, housing, and community institutions.

The neighborhood, the district, and the corridor

1. The neighborhood, the district, and the corridor are the essential elements of development and redevelopment in the metropolis. They form identifiable areas that encourage citizens to take responsibility for their maintenance and evolution.

2. Neighborhoods should be compact, pedestrian-friendly, and mixed-use. Districts generally emphasize a special single use, and should follow the principles of neighborhood design when possible. Corridors are regional connectors of neighborhoods and districts; they range from boulevards and rail lines to rivers and parkways.

3. Many activities of daily living should occur within walking distance, allowing independence to those who do not drive, especially the elderly and the young. Interconnected networks of streets should be designed to encourage walking, reduce the number and length of automobile trips, and conserve energy.

4. Within neighborhoods, a broad range of housing types and price levels can bring people of diverse ages, races, and incomes into daily interaction, strengthening the personal and civic bonds essential to an authentic community.

5. Transit corridors, when properly planned and coordinated, can help organize metropolitan structure and revitalize urban centers. In contrast, highway corridors should not displace investment from existing centers.

6. Appropriate building densities and land uses should be within walking distance of transit stops, permitting public transit to become a viable alternative to the automobile.

7. Concentrations of civic, institutional, and commercial activity should be embedded in neighborhoods and districts, not isolated in remote, single-use complexes. Schools should be sized and located to enable children to walk or bicycle to them.

8. The economic health and harmonious evolution of neighborhoods, districts, and corridors can be improved through graphic urban design codes that serve as predictable guides for change.

9. A range of parks, from tot-lots and village greens to ballfields and community gardens, should be distributed within neighborhoods. Conservation areas and open lands should be used to define and connect different neighborhoods and districts.

The block, the street, and the building

1. A primary task of all urban architecture and landscape design is the physical definition of streets and public spaces as places of shared use.

2. Individual architectural projects should be seamlessly linked to their surroundings. This issue transcends style.

3. The revitalization of urban places depends on safety and security. The design of streets and buildings should reinforce safe environments, but not at the expense of accessibility and openness.

4. In the contemporary metropolis, development must adequately accommodate automobiles. It should do so in ways that respect the pedestrian and the form of public space.

5. Streets and squares should be safe, comfortable, and interesting to the pedestrian. Properly configured, they encourage walking and enable neighbors to know each other and protect their communities.

6. Architecture and landscape design should grow from local climate, topography, history, and building practice.

7. Civic buildings and public gathering places require important sites to reinforce community identity and the culture of democracy. They deserve distinctive form, because their role is different from that of other buildings and places that constitute the fabric of the city.

8. All buildings should provide their inhabitants with a clear sense of location, weather and time. Natural methods of heating and cooling can be more resource-efficient than mechanical systems.

9. Preservation and renewal of historic buildings, districts, and landscapes affirm the continuity and evolution of urban society.

8/20/2004
The Asphalt Rebellion:
Vibrant and beautiful, not fast and ugly
Jay Walljasper
Elm Street Writers Group

Americans see auto traffic as an inevitable by-product of modern life. Some mourned the loss of the calm and quaintness of life before the automobile, but most seemed thrilled about going more places in less time. So we have built ever more, ever faster roads, including the interstate highway system - the largest, most expensive public works project in history - and spent billions of dollars widening roads and ripping up millions of trees, tens of thousands of houses, and thousands of communities.

But now citizens are fighting back. They are working to restore peace and community to their neighborhoods, where walking is now often a frustrating, unpleasant, and dangerous pastime, and where speeding drivers imperil their children, pets, and their elderly and disabled friends. It is traffic speed, not volume, that most threatens pedestrians. For example, a British study found that 40-miles-per-hour cars are 17 times more lethal to pedestrians than 25-mile-per-hour cars.

Children are the biggest losers, says Australian David Engwicht, who fought a road expansion in his neighborhood and wrote a book about entitled Reclaiming Our Cities and Towns: Better Living with Less Traffic. He notes that kids cannot play in the streets anymore without adult supervision. They are reduced to watching Sesame Street, "a make-believe street where children play safely and go exploring."

For thousands of years, Engwicht writes, streets were places for people to socialize, as well as pathways for carriages and pack animals. Today, streets are only for automobiles, thanks mostly to several generations of transportation planners who focused exclusively on speedy vehicles and regarded pedestrians and bicyclists as nuisances.

Lowering speed limits is one logical response. But people pay less attention to speed limits than to the look of a street in choosing their speed: Wide, open streets encourage them to zoom. Now many people are heralding a new idea - traffic calming - as a better way to slow drivers down. It works by visually reminding drivers of people who are on foot, on bicycles, and in wheelchairs or baby strollers. Speed bumps, narrowed streets, four-way stops, brightly painted crosswalks, on-street parking, median strips, slightly raids crosswalks, and curbs that extend into intersections all make streets safer for pedestrians.

Opponents may claim that traffic calming simply shoves speeding traffic onto someone else's street, but studies show exactly the opposite: It decreases both speed and traffic. People make fewer auto trips, either by doing more errands per trip or by switching to biking, walking, or transit. Coast to coast, Americans are embracing traffic calming - in Boston, plans were abandoned for a 10-lane highway in favor of a four-lane boulevard; in California, people are mapping safe walking routes to school. After 75 years as pawns in the transportation system, pedestrians are asserting their rights to enjoy the health, fun, and community-building qualities of walking.

"It's easy to become a pedestrian advocate," notes Ellen Vanderslice, whose harrowing attempts to cross a busy neighborhood street with two toddlers in Portland, Ore., turned her into an activist. "Find people who feel the same way and get a group together."

Ms. Vanderslice's is part of what Governing magazine executive editor Alan Ehrenhalt calls **"the asphalt rebellion" against "an obscure but immensely important book: *A Policy on Geometric Design of Highways and Streets.*"** The book was for decades the bible for traffic engineers, who invoked it with Ten Commandments authority to reject concerns about neighborhood projects.

Asphalt rebels contend that aesthetics, property values, and community life don't figure in that bible's calculations - only how much pavement it takes to keep traffic moving quickly. So when engineers insist that safety always guides their decisions, asphalt rebels point out that many road widenings make travel far more dangerous for bicyclists, pedestrians, children, and old people. They point out that in New York City, for example, the second leading cause of death for children ages five to fourteen is being hit by a car. They question whether designing streets to

accommodate illegal speeds, as engineers often do, actually promotes safety. They point to studies that demonstrate that narrow streets are the safer streets. For example, Longmont, Colo., looked at 20,000 accidents over 8 years and found that "as street width widens, accidents per mile per year increase exponentially." This defies the traditional views that narrow streets are safety hazards.

Prodded by environmentalists, neighborhood groups, preservationists, parents, and other asphalt rebels, many communities are rethinking traffic issues. Eugene, Ore., once required streets to be at least 28 feet wide; it now allows some to be just 20 feet wide. Wellesley, Mass., nixed a widening plan for its main street, and instead widened the sidewalks. Even auto-happy southern California's San Bernardino, Riverside, and Beverly Hills narrowed major commercial streets. And Vermont frequently allows officials to relax the design bible's standards.

Even some traffic engineers are questioning whether moving cars quickly is a community's top goal. Orlando traffic engineer Walter Kulash says, **"When you ask the public, 'Would you rather take twelve more seconds to get where you're going and have this be a tree-lined, wonderful street?' the answer is always, 'We want it to be vibrant and beautiful, not fast and ugly.'"**