

INSTITUTIONAL SPONSOR: The Northampton Design Forum

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“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

---The Bruntland Commission on Environment and Development, United Nations 1983

“Traditional urbanism and architecture provide the only comprehensive approach to the challenges of environmental sustainability. Only their enduring lessons address the full spectrum of issues involved: from regional land use and resource management, to the development of healthy communities and lifestyles, to durable, energy-efficient, non-toxic built environments. In addition, both beauty and the character of the citizenry must be understood as integral components of a sustainable culture. A place must be loved if it is to be sustained; and love entails happy and willing sacrifice.”

---G.K. David, University of Notre Dame

“Cities and regions that thrive in the 21st century will be differentiated by their lively neighborhoods and business districts, cultural and recreational attractions, great sense of place, protected natural areas, and deep pride in local character, products and foods. They will achieve this through an open collaborative process with their citizens.”

---Philip Myrick, Project for Public Spaces

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University of Notre Dame School of Architecture Graduate Program in Urban Design

- I. Introduction & background
- II. Observation of existing conditions
- III. History of development in Northampton
- IV. The threat of sprawl
- V. *Sustainable Northampton*
- VI. *Envisioning Sustainable Northampton* Design Proposals
 - a. Reinforcing the historic centers:
Downtown, Leeds, Baystate, Florence
 - b. New development: Village Hill
 - c. Retrofitting sprawl: King Street
- VII. Conclusion

PRINCIPLES OF SUSTAINABLE NORTHAMPTON

Support a diverse and integrated community where all residents have the opportunity to excel on a social, economic, and academic level and to lead healthy, independent and successful lives.

Act as a part of a broader region through the resources connecting us beyond our municipal borders, such as watersheds, rivers, roads, economy, culture, or common goals.

Significantly improve energy efficiency in city buildings and programs, reduce greenhouse gas emissions, and encourage conservation and use of alternative and renewable energy sources throughout the community.

Support a wide variety of housing types that increase rental and homeownership units to create and preserve a range of affordability and choice in housing options.

Support artists and the arts, local culture, history, and education at all levels as vital to a successful, well-balanced community.

Connect municipal capital improvements directly to goals of *Sustainable Northampton*.

Adopt land use patterns that maintain a mix of urban and rural areas; concentrate development in neighborhood, village, and commercial centers supported by adequate infrastructure, including public transit; promote energy efficiency; and protect environmental, open space, and agricultural resources.

Recognize and foster the unique history, character and function of each residential, commercial, mixed use, and open space neighborhood.

Recognize that a diverse and vibrant economy is integral to a successful community and support business and job development that contribute to the community and the city's long-term sustainability.

Make the city increasingly more walkable, bikeable, and transit-oriented.

Improve citizens' lives through continuous, high quality education.

Operate the city as a democratic enterprise that is responsive and responsible to the fiscal, economic, social, and environmental interests of its citizens.

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.

* 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).

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.

Additional Resources:

Project:

Notre Dame Studio website: <http://sites.google.com/site/northamptoncharrette/>

Northampton Design Forum: <http://northamptondesignforum.blogspot.com>

City of Northampton Office of Planning and Development: www.northamptonma.gov/opd

University of Notre Dame School of Architecture: <http://architecture.nd.edu>

Sustainability:

LEED for Neighborhood Development (LEED-ND): <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=148>

Original Green: www.originalgreen.org

Light Imprint Handbook: <http://www.lightimprint.org/>

Urbanism:

Congress for the New Urbanism: www.cnu.org

Form-Based Code Institute: www.formbasedcodes.org

The Smart Code: www.smartcodecentral.com

The Prince's Foundation: <http://www.princes-foundation.org/>

New Urban News: www.newurbannews.com