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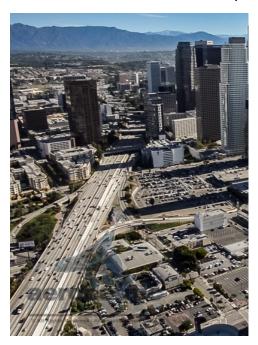
New Urbanism by Len Beyea

If you've ever spent time in a small village, or in a town center that dates back at least a couple of centuries, you may have noticed a few things that make such places so distinct from a modern American city. Houses tend to be close together, and often above shops and services. Living and working spaces are mixed together on the same street, and often in the same building. Destinations are mostly in close proximity and neighborhoods can be easily traversed

on foot. Public spaces – squares, parks, fountains, tree-lined walkways or even just a water well with a patio around it – are numerous and serve as focal points of community activity. And if you arrived at these places in a car, you may have found parking scarce, some streets designated as pedestrian-only, and perhaps some not even wide enough for a vehicle, at least unless the side-view mirrors are folded in.



As automobile ownership expanded in an era of cheap fossil fuels, cities expanded with the automobile's wider reach, and land speculation and industrial-scale housing construction created whole new urban landscapes of almost entirely residential buildings, with as much as



60% of the land area dedicated to streets and parking lots. These new urban spaces confronted planners and policy-makers with new challenges: higher cost of infrastructure and utility services, increased water consumption, increased air and water pollution, economic inequity, high dependence on automotive transportation, loss of community cohesion, longer commutes, increased traffic congestion, and a generally unpredictable cycle of economic boom and bust from one undistinguishable neighborhood to another. These challenges also had a negative effect on public health, as walking to a destination became impractical, air pollution afflicted lungs and eyes and skin, and vast acreages of pavement limited the presence of beneficial vegetation and increased hot weather temperatures in urban areas by as much as 22° F during some hours of the day, incidentally adding to air conditioning energy use. On top

of all this, the awareness of the effects of burning fossil fuels on the global climate has brought the need to reduce transportation energy use into focus. In attempting to address these challenges, planners and civic leaders looked at the still-thriving historical villages and town centers and came up with some new/old ideas. Terms that have been used for these concepts include urban villages, transit-oriented development, and walkable communities. The term that has emerged to encompass these ideas as a whole is New Urbanism.

Generally the principles of New Urbanism include the following:

- **Higher-density urban centers** or "nodes" around which lower-density development spreads in decreasing density along transportation corridors. The "<u>urban transect</u>" is a concept that develops this idea further.
- Mixed uses, with residential, retail, services, and workplaces all within the same neighborhood, with commercial and institutional spaces serving and, to a large extent, employing local residents. Rather than zoning for function, areas are zoned for density and intensity of infrastructure services, with mixed uses encouraged or even required (e.g. all ground floor spaces on principal street frontage may be commercial, and upper floors for professional offices, with everything facing away from the street on upper floors designated residential.
- Walkable neighborhoods, with wider sidewalks and more or larger public spaces in areas of greater density and services. Instead of designing for maximum automobile access, neighborhoods are designed for ease of pedestrian and bicycle access, often with limited parking that is located behind, rather than in front of stores and businesses.
 - Walkable neighborhoods typically have public spaces conducive to social contact, such as extra-wide sidewalks, plazas to accommodate outdoor dining in front of restaurants, or landscaped areas with benches or picnic tables. Walkable neighborhoods give priority to pedestrians, so vehicle crossings



- may be limited, traffic may be routed to the periphery of urban cores, or overcrossings may be provided.
- **Integration with public transit**, with higher-density nodes interconnected with other nodes, transit stops designed into public spaces, and convenient stops between nodes to provide access from outlying areas.

The Congress for New Urbanism sets forth the following defining 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

These new urbanist concepts are slowly being put into practice in cities all over the United States and the world. They are proving to be quite popular – raising property values, decreasing commute times, creating more opportunities for neighborhood-scale businesses, and achieving higher densities and a better quality of life.

The urban sprawl that has characterized most development in the United States since the end of World War II turns out to be too



expensive to expand or maintain, too energy-intensive, too hard to get around in, and lacking in the very amenities that urban life was supposed to bring. New Urbanism principles and practices offer solutions that can be applied to both new and existing urban spaces and may be the beginning of a vast urban transformation.

Changing cities to higher density transit-oriented development with walkable neighborhoods is proving to reduce dependence on private automobiles, to reduce infrastructure costs per resident, and to create more vibrant neighborhoods. But so far it is not consistently making those neighborhoods more affordable or more diverse. Some of this may simply be attributed to the fact that most of these new developments are occurring in more affluent cities and are primarily market-driven, with no additional mechanisms to provide affordable housing. In addition, construction costs are at historic highs, so new housing tends to be more expensive anyway. It is clear that, absent appropriate regulations, incentives or subsidies, higher density alone in high-demand areas is not enough to drive housing costs downward.

Len Beyea is a long-time Santa Cruz resident who works in the field of commercial/industrial energy efficiency and green buildings. He has a degree in Environmental Planning from UCSC and worked as a planning professional from 1977-1982.

Useful links:

Congress for New Urbanism - http://www.cnu.org

New Urbanism - http://www.newurbanism.org

Center for Applied Transect Studies (CATS) - https://transect.org/index.html

Geography of Transport Systems - https://transportgeography.org/

University of Michigan automobile blog - http://www.autolife.umd.umich.edu/

Form-Based Codes Institute, an organization fostering planning codes using physical form (rather than separation of uses) as the organizing principle for the code – https://formbasedcodes.org/

Center for Applied Transect Studies, a group developing case studies and model codes for designing urban spaces using the transect method based on new urbanism concepts – https://transect.org/

Smartcode, an open source form-based code using the transect approach – http://smartcodecentral.com/

Book by Frumkin, Frank, and Jackson about public health issues associated with automobile-centered planning – https://islandpress.org/books/urban-sprawl-and-public-health

Book by Carlton Reid covering history of paved streetshttp://www.roadswerenotbuiltforcars.com/

Old Urbanist blog – http://oldurbanist.blogspot.com/ (Includes blog articles as well as lots of links to other resources)

The Hub for Great Suburban Design - http://buildabetterburb.org/

Article about the amount of space cars take up in cities and proposals for change – https://www.vox.com/a/new-economy-future/cars-cities-technologies

Article on the effects of automobile land use on urban population density – https://www.citylab.com/transportation/2013/02/cars-and-robust-cities-are-fundamentally-incompatible/4651/

Article on parking and land use -

https://www.citylab.com/transportation/2015/12/parking-los-angeles-maps-study/418593/