

Visualizing Density

Julie Campoli • Alex S. MacLean

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Julie Campoli, and Alex S. MacLean
Aerial photographs © 2007 Alex S. MacLean

This CD contains the Density Catalog section of the book
Visualizing Density by Julie Campoli and Alex S. MacLean,
which was published by the Lincoln Institute of Land Policy,
Cambridge, MA.

This CD is made available for educational purposes only,
as a way for planning officials, planning board members,
citizens, educators, and others to share information about
residential density in public meetings, classrooms, and
other such venues.

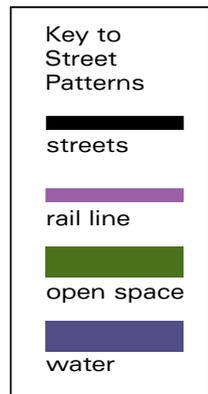


The Density Catalog

Chicago, Illinois

Density is easy to calculate. Divide the number of persons by the number of square miles, or the number of housing units by the number of acres, and you will know the density of a given area. But, although measuring density is a rational process, our perception of density is neither rational nor quantifiable. What does a place look like? How does it feel to be there? These qualitative factors, not numbers, determine how we perceive density. We react to the physical environment, which can be shaped in countless ways. How we arrange the streets, buildings, and open spaces of cities and neighborhoods affects the perception, or feeling, of density.

This density catalog shows both physical qualities and numerical measures. It contains aerial photographs of more than 250 neighborhoods across the country, noting the density in housing units per acre for each site. Four photographs of each location are included—a close-up view, a context view, a neighborhood view, and a plan view. Yellow lines superimposed on each context image show the extent of the area measured. Street pattern diagrams drawn at the same scale show the differences in street and open space layout. The catalog is organized by density level, from low density (less than 1 unit per acre) to high density (296 units per acre).



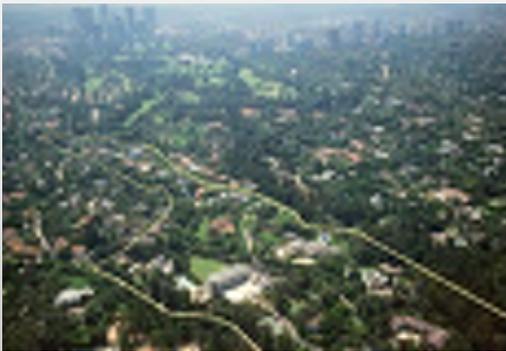
The catalog provides an impartial view of many ways to design neighborhoods. It includes a broad sample of contexts and regions, as well as design approaches. The format is objective, with the sites represented consistently. Your evaluation of these places, however, will be subjective. You will find some neighborhoods attractive and others unappealing. As you browse the images, notice the variety within a given range. For example, 13 different sites have a density between 8 and 9 units per acre. They share a similar measured density, but each has a distinct physical character. It is not density that makes a neighborhood appealing or appalling, but form—the street layout, arrangement of buildings, quality of architecture, and use of open space.

This collection of images is an introduction to the visual form of residential density, but it is also a planning and design tool. Use it to gain consensus on the form that density should take in your community. It will help you and others understand the link between density and design, and enable you to conjure mental images of density you can live with.

LESS THAN 1 UNIT PER ACRE



Beverly Hills, CA 0.2 units / acre



context



neighborhood



plan



street pattern



Hollister, CA 0.3 units / acre



context



neighborhood



plan



street pattern



Broomfield, CO 0.3 units / acre



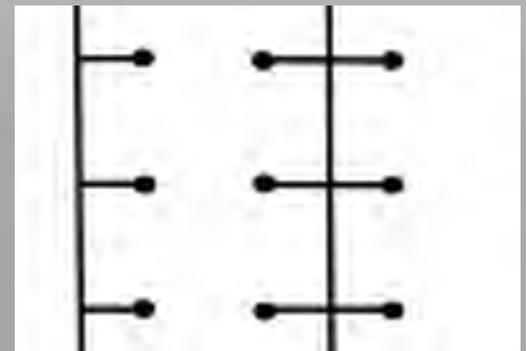
context



neighborhood



plan



street pattern



Longview, WA 2.0 units / acre



Phoenix, AZ 2.1 units / acre



Beverly Hills, CA 2.2 units / acre



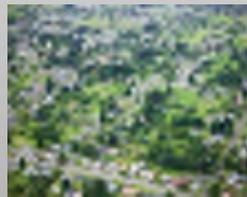
context



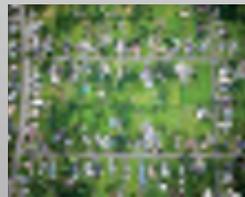
context



context



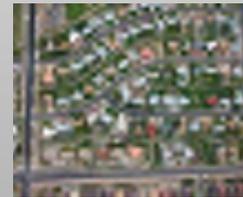
neighborhood



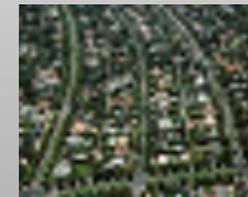
plan



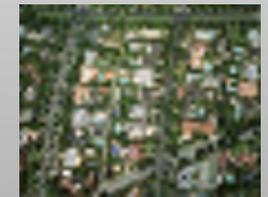
neighborhood



plan



neighborhood



plan



street pattern



street pattern



street pattern





Tucson, AZ 3.4 units / acre



context



neighborhood



plan



street pattern



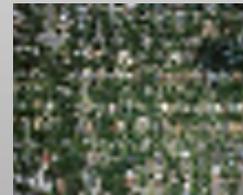
Kansas City, MO 3.5 units / acre



context



neighborhood



plan



street pattern



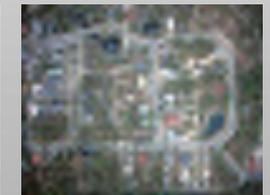
Beaufort, SC 3.6 units / acre



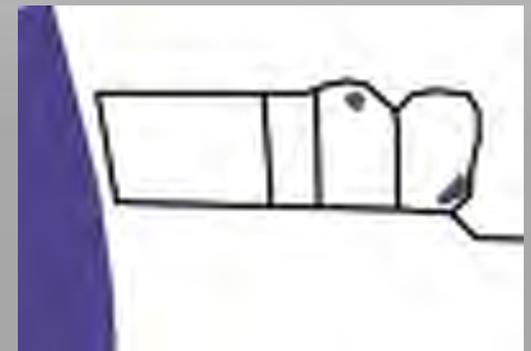
context



neighborhood



plan



street pattern



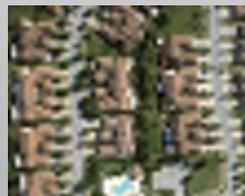
Tampa, FL 4.5 units / acre



context



neighborhood



plan



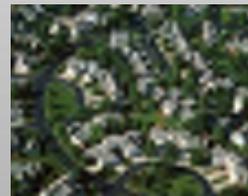
street pattern



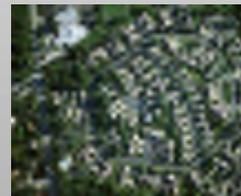
Kansas City, KS 4.5 units / acre



context



neighborhood



plan



street pattern



Anthem, AZ 4.5 units / acre



context



neighborhood



plan

street pattern not available

4 TO 5 UNITS PER ACRE



Hollister, CA 4.8 units / acre



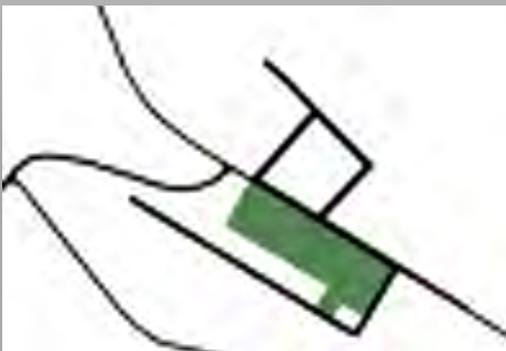
context



neighborhood



plan



street pattern



Tampa, FL 4.9 units / acre



context



neighborhood



plan



street pattern



Levittown, NY 5.0 units / acre



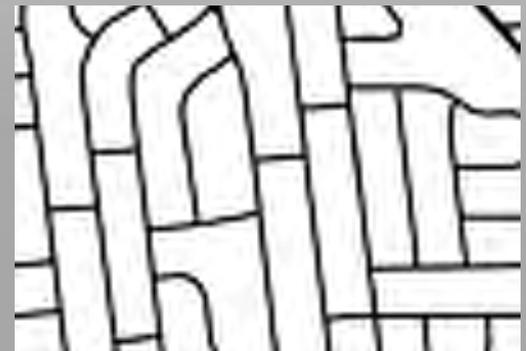
context



neighborhood



plan



street pattern

5 UNITS PER ACRE



Orlando, FL 5.3 units / acre



Longmont, CO 5.3 units / acre



Tampa, FL 5.3 units / acre



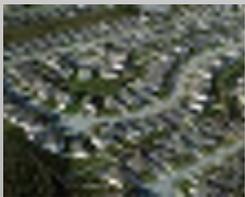
context



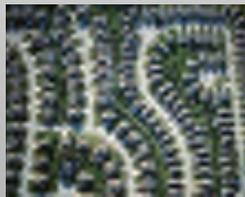
context



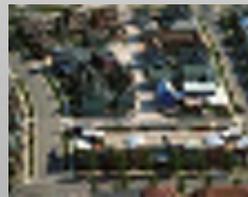
context



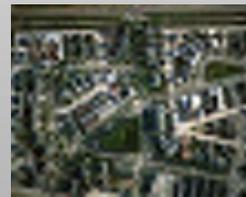
neighborhood



plan



neighborhood



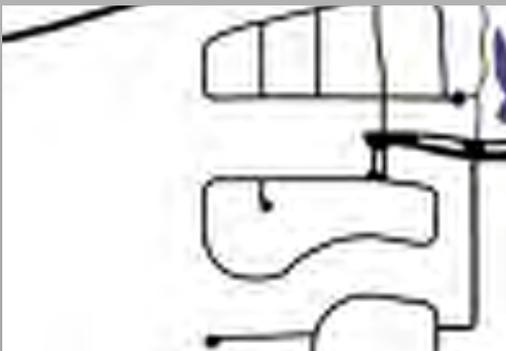
plan



neighborhood



plan



street pattern



street pattern



street pattern



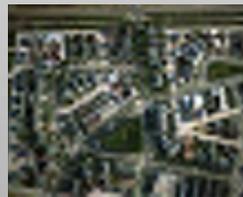
Longmont, CO 7.7 units / acre



context



neighborhood



plan



street pattern



Boca Raton, FL 7.8 units / acre



context



neighborhood



plan



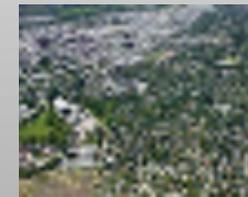
street pattern



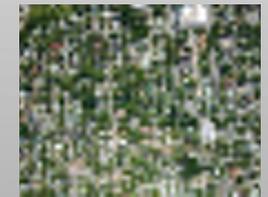
Boise, ID 7.8 units / acre



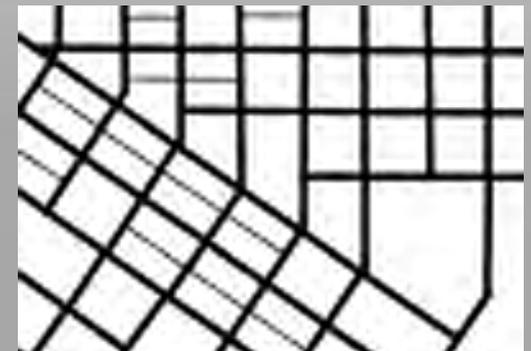
context



neighborhood



plan



street pattern

8 TO 9 UNITS PER ACRE



Portland, OR 8.9 units / acre

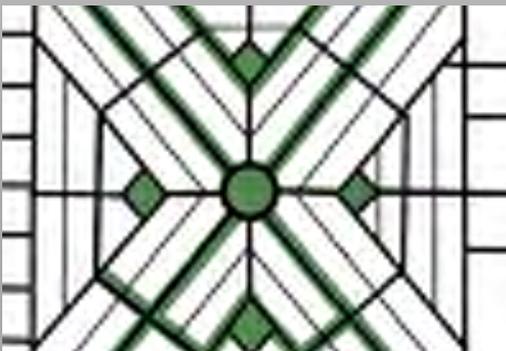


context



neighborhood

plan



street pattern



Tampa, FL 9.0 units / acre

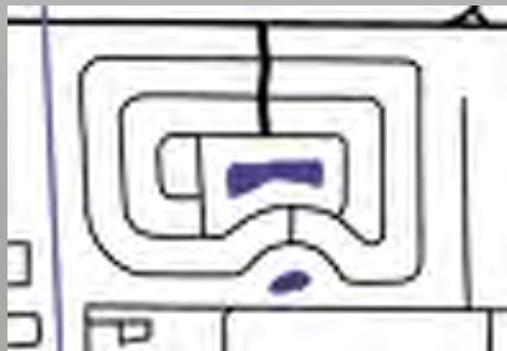


context



neighborhood

plan



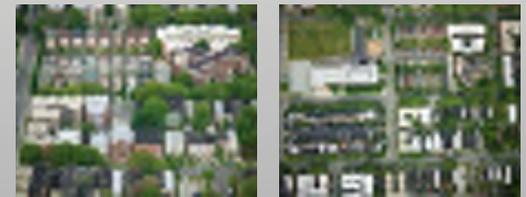
street pattern



Chicago, IL 9.0 units / acre

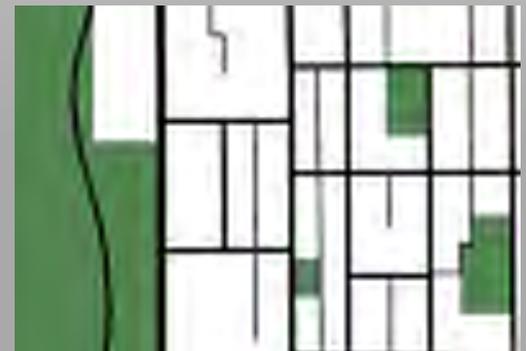


context



neighborhood

plan



street pattern



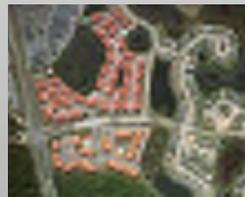
Tampa, FL 10.5 units / acre



context



neighborhood



plan



street pattern



Boise, ID 10.6 units / acre



context



neighborhood



plan



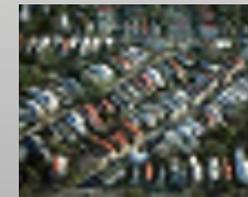
street pattern



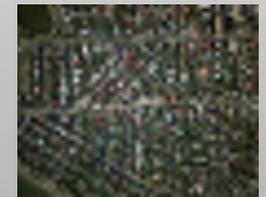
Charleston, SC 10.7 units / acre



context



neighborhood



plan



street pattern

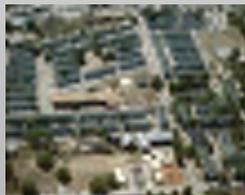




Tampa, FL 15.6 units / acre



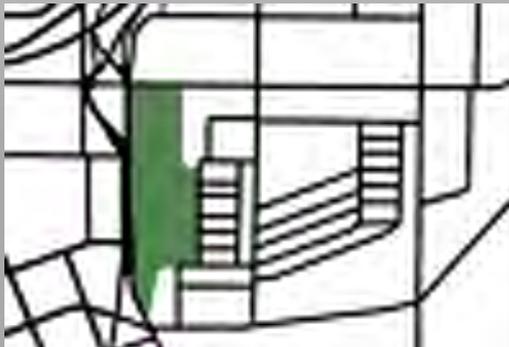
context



neighborhood



plan



street pattern



Cleveland, OH 16.0 units / acre



context



neighborhood



plan



street pattern



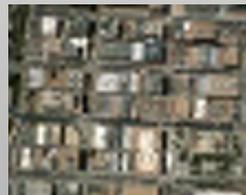
Denver, CO 16.1 units / acre



context



neighborhood



plan



street pattern



Dorchester, MA 18.4 units / acre



Tampa, FL 19.0 units / acre



Cleveland, OH 19.2 units / acre



context



context



context



neighborhood



plan



neighborhood



plan



neighborhood



plan



street pattern



street pattern



street pattern





Tampa, FL 29.9 units / acre



context



neighborhood



plan



street pattern



Phoenix, AZ 31.5 units / acre



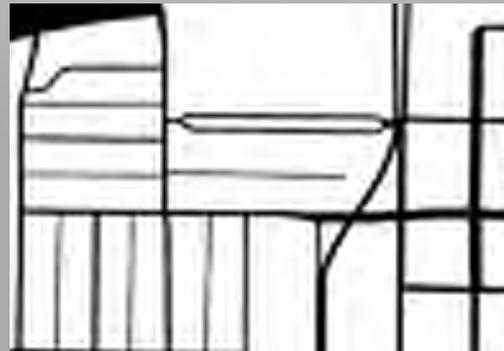
context



neighborhood



plan



street pattern



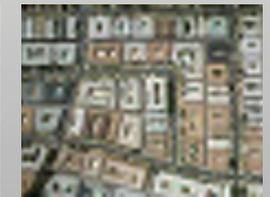
Los Angeles, CA 31.8 units / acre



context



neighborhood



plan



street pattern



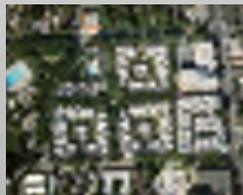
Mtn. View, CA 49.3 units / acre



context



neighborhood



plan



street pattern



San Francisco, CA 52.5 units / acre



context



neighborhood



plan



street pattern



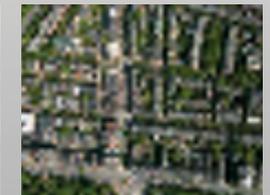
Boston, MA 52.9 units / acre



context



neighborhood



plan



street pattern

MORE THAN 100 UNITS PER ACRE



Seattle, WA 100.1 units / acre



Las Vegas, NV 104.8 units / acre



New York, NY 112.2 units / acre



context



context



context



neighborhood



plan



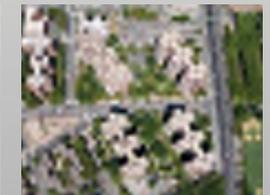
neighborhood



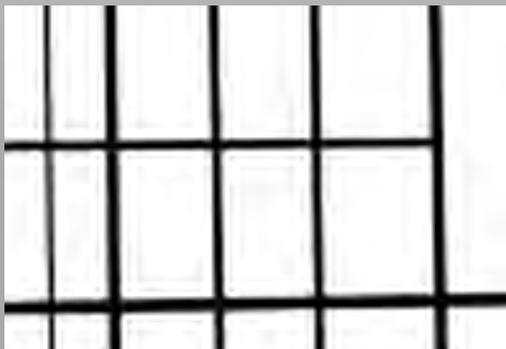
plan



neighborhood



plan



street pattern



street pattern



street pattern



MORE THAN 150 UNITS PER ACRE



Chicago 152.2 units / acre



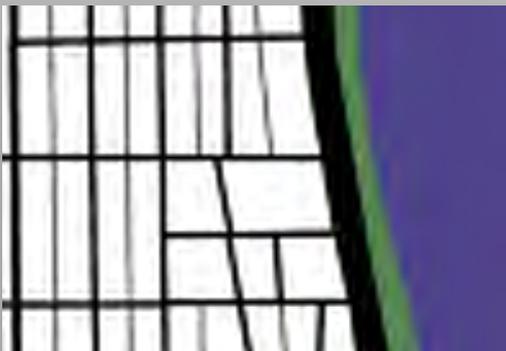
context



neighborhood



plan



street pattern



Portland, OR 161.3 units / acre



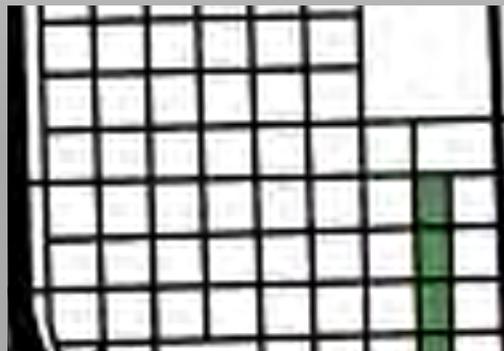
context



neighborhood



plan



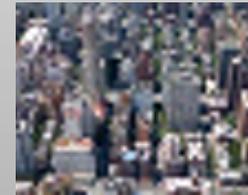
street pattern



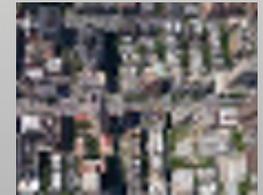
New York, NY 199.5 units / acre



context



neighborhood



plan



street pattern



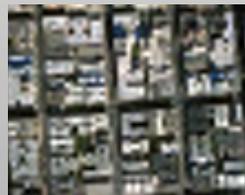
San Francisco, CA 222.0 units / acre



context



neighborhood



plan



street pattern



New York, NY 288.0 units / acre



context



neighborhood



plan



street pattern



New York, NY 296.0 units / acre



context



neighborhood



plan



street pattern