What's new in Historic Preservation



Mike Jackson, FAIA
Illinois Historic Preservation Agency

Sustainability (green) is...

 "Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs."

 Source: World Commission on Environment and Development, 1987, Brundtland Report

The Future of Preservation

- Preservation 1.0 19th Century origins
 - House Museums
- Preservation 2.0 20th Century origins
 - Historic districts
 - Main Street Districts
 - Adaptive use
- Preservation 3.0 21st Century beginning
 - Regeneration and resiliency
 - Community scale
 - Old Is The New Green

Preservation Protocol

- Survey
 - Comprehensive, evolving
- Interpret
 - Basis of designation
 - Local Landmarks
 - National Register
 - Protect
 - Regulatory Programs, Planning
 - Benefit Programs, Incentives

Survey

- Comprehensive, Statewide
 - Re-survey of early programs
- Windshield vs intensive
- What's Online
 - Google, Bing maps, tools













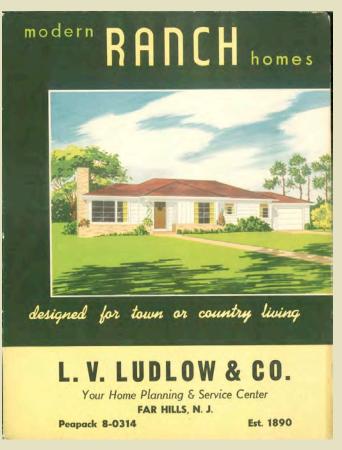


Survey: What's new

- Post WW II resources 50 year test
 - Automobile era
 - Ranch houses



Mid century, not modern



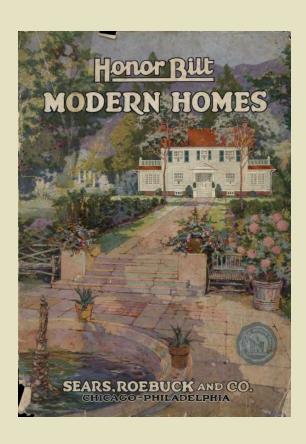
What's new – survey

- Who's history
 - Under served communities
 - African American
 - Ethnic communities
- Under recognized resource types
 - Rural
 - Vernacular & Ancillary Buildings



Survey – Kit homes







Aladdin Homes

Sears Homes

Liberty Homes

Interpretation: What's new

- History
 - Memory
 - Continual evolution of the story
- Architecture
 - Integrity: Change over time
 - Expanding context
 - New resource types
 - Cultural landscapes

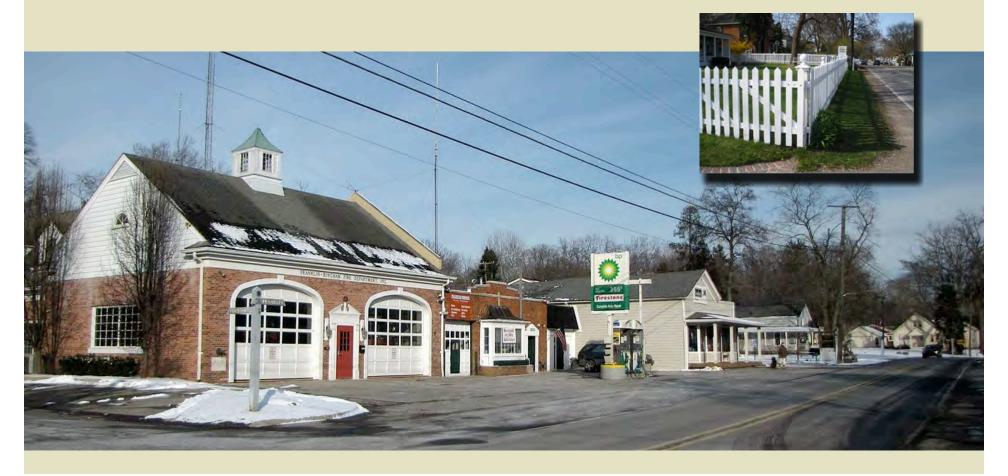
Interpretation

- Significance
 - Criteria for NR evaluation
- Integrity related to period of significance
 - Expanded knowledge base
 - Complexity of evolution (change over time)



Interpretation: Cultural Landscape

 Increasing awareness integration of the human and natural landscape



Interpretation – Streetscape Cultural Landscape



Any city without sidewalks doesn't love its children. Margaret Mead

Interpretation: What's new

- Cultural landscape
- Streetscape
- Heritage gardens



Ribbon driveway



Old Concrete

Protection: Designation

- National Register of Historic Places
 - A nation wide planning tool for public agencies
 - Voluntary, no federal controls
 - National, regional and local significance
- National Historic Landmark
 - The highest level of significance
- Local Landmark designation
 - Locally binding, rarely voluntary
 - Review of exterior alterations
- Eligibility as a regulatory trigger
- Heritage Corridors
- Non-governmental certifications (USGBC)

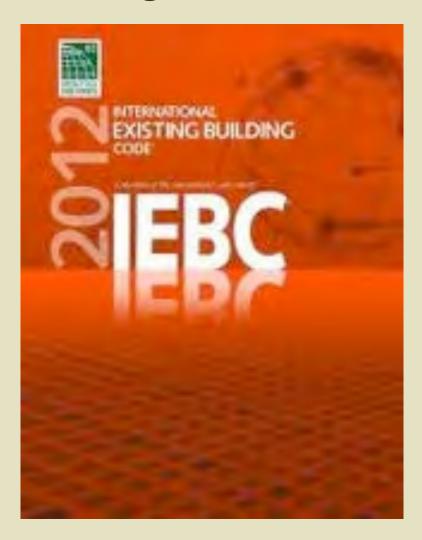
Protection: What's new

- Incentives
 - Federal Tax Credits
 - State Tax Credits
- Local incentives
 - TIF or SSA programs
- Planning
 - Main Street programs
 - Conservation Districts
- Regulatory Flexibility



Protection: What's new

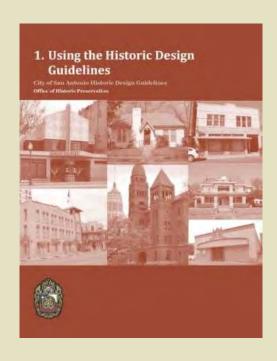
Building Codes & Preservation



International Existing Building Code

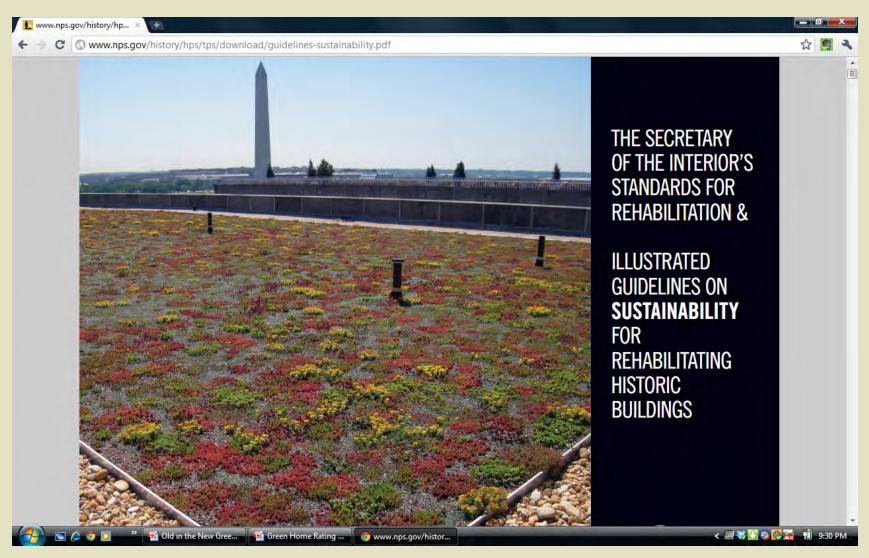
Protection: Design Review

- NPS: Secretary of the Interior's Standards
- National Assoc. of Preservation Commissions
 - Online Directory
 - http://napc.uga.edu/resources-links/online-design-guidelines/



Design Guidelines

Protection: Sustainability



www.nps.gov/history/hps/tps/

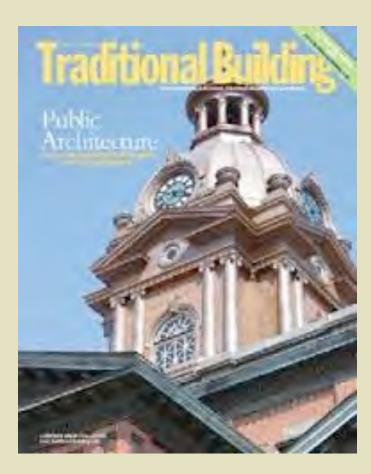
Protection: Sustainability



Solar Panel Locations

Protection: The Marketplace

- Availability of skills and products
- Online resource directories



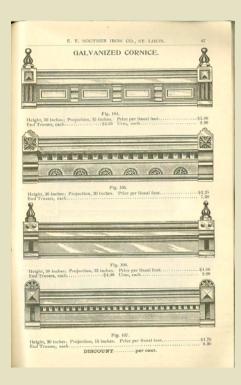


Protection: Online Resources

Building Technology Heritage Library







www.archive.org.details/buildingtechnologyheritagelibrary

Protection: The Marketplace

The Challenge of Substitute Materials







Substitute wood products

Protection: What's new

- Planning tools
 - Local design guidelines
 - Main Street districts
 - Special service areas
 - Form-based zoning ordinances



Normal IL Form based Zoning ordinance

What's new: reuse

- The White Elephant problem
 - Churches
 - Schools
 - Assembly buildings



Churches of Streator IL

Bookstore in a church



Dominican Church Maastricht, Netherlands

Reuse Success Stories

Main Street commercial buildings



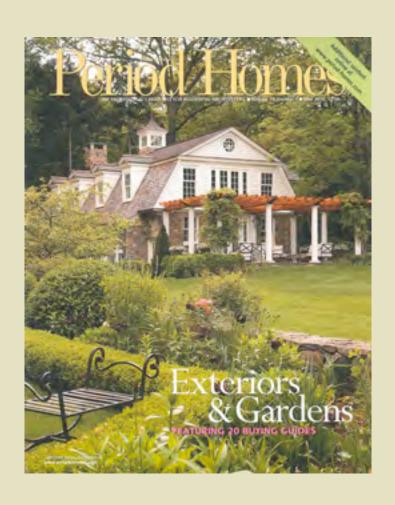
Reuse Success Stories

House as offices



Good transition use between a commercial and residential districts.

Infill Buildings





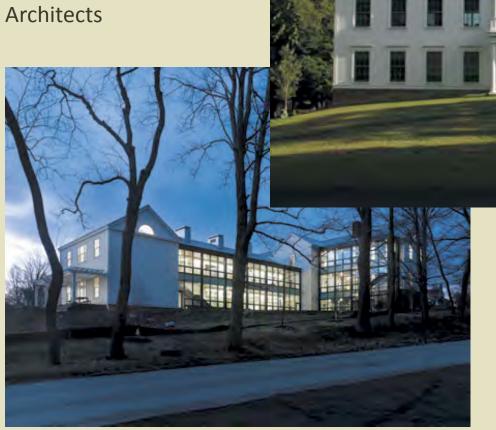
CONTEXT \ CONTRACT

New Architecture in Historic Districts 1967–2009

Infill Buildings

Math & Science Center Millbrook NY

Voith & Makovich Architects



Preservation 3.0

Historic Preservation = Heritage Conservation

Community scale - Local Systems



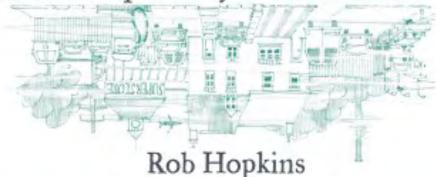
Living Futures Conference

Transition Town



THE TRANSITION HANDBOOK

From oil dependency to local resilience



Founder of the Transition movement

"If your town is not yet a Transition Town, here is the guidance for making it one.

We have little time, and much to accomplish." — Richard Heinberg, author of Peak Everything







REduce

REuse

REcycle

Applies to packaging

REduce

REuse

REtrofit

REspect

Applies to historic buildings

The greenest building is...

The one you don't build.

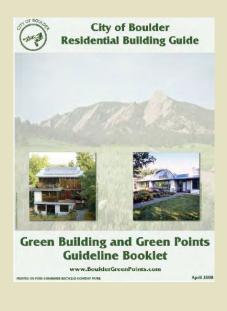
The one that already exists.

The one that lasts the longest.

The one with the most LEED points.

Green Rating Systems

There are more than 25 green building rating and certification systems in the U.S, Canada and England and most of these are aimed at the new construction.







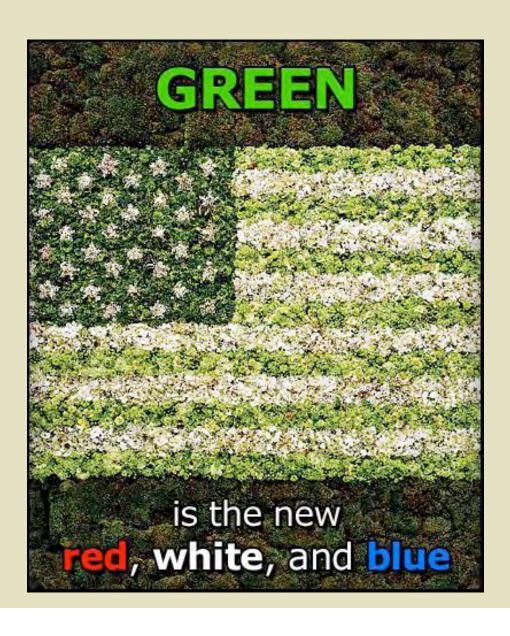








Green Building Metrics



- Location/Site
- Energy
- Water
- Resources
- Healthy Bldgs

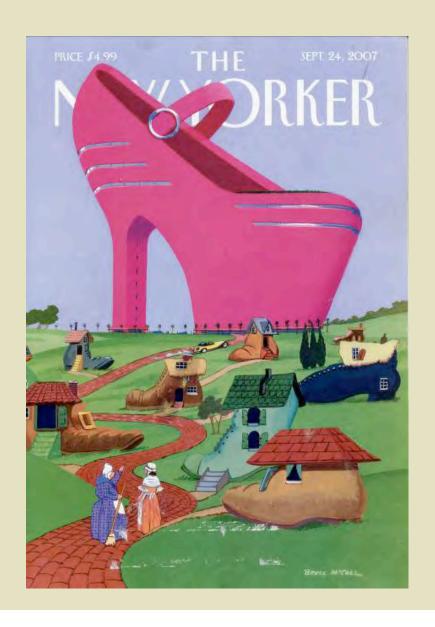
The Home Energy Challenge

Year Built KBtu/sq ft/yr Annualcost 74.5 \$ 1 •Prior to 1950 1950 to 1969 66.0 \$ 1.33 59.4 \$ 1.30 1970 to 1979 51.9 \$ 1.17 1980 to 1989 48.2 \$ 1.06 1990 to 1999 44.7 \$ 1.01 2000 to 2005

Pre-1950 homes need a 40% improvement to be equal to the typical home today.

Source: Residential Energy Consumption Survey, 2005

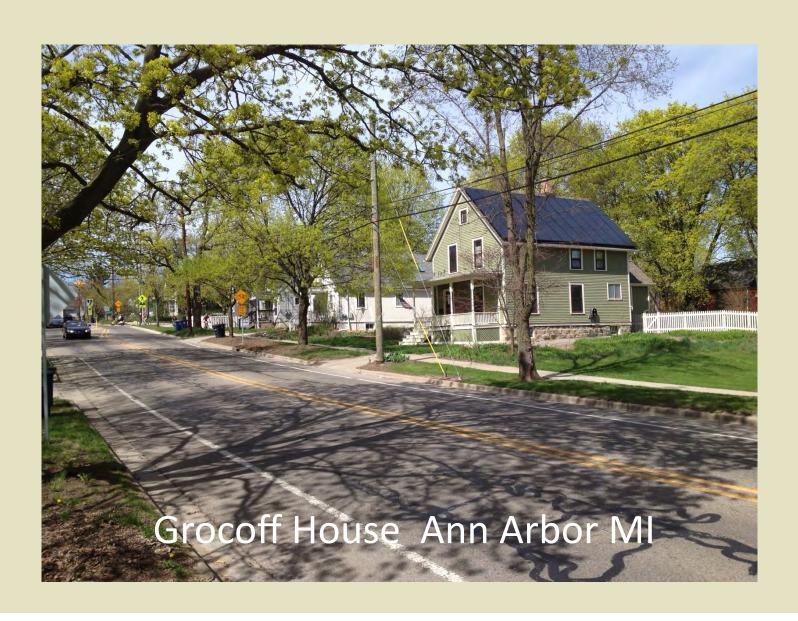
House Size Matters





- Vermont Builds Greener
 - -First green home rating system to integrate house size matrix as well as energy intensity.

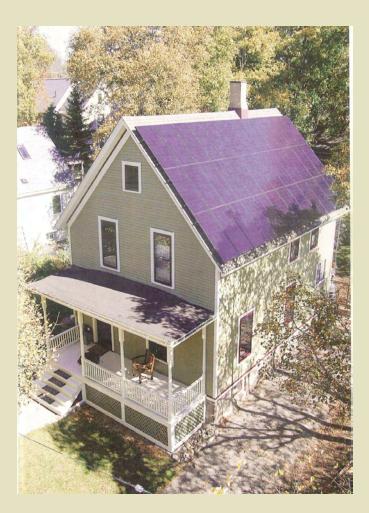
Green rehab case study



Net Zero Preservation

Historic rehab
Net Zero with solar PV
Geothermal
Restored windows + storm
Cellulose wall insulation
Foam rafter insulation

Green Power option?



www.greenovationtv.com

Resource Reuse: A Better Equation



- "the environmental impact of replacing an element is far greater than reusing the element already in place."
- The EcoHomes rating systems gives the full material credit to building reuse when 80% of seven major systems are retained.

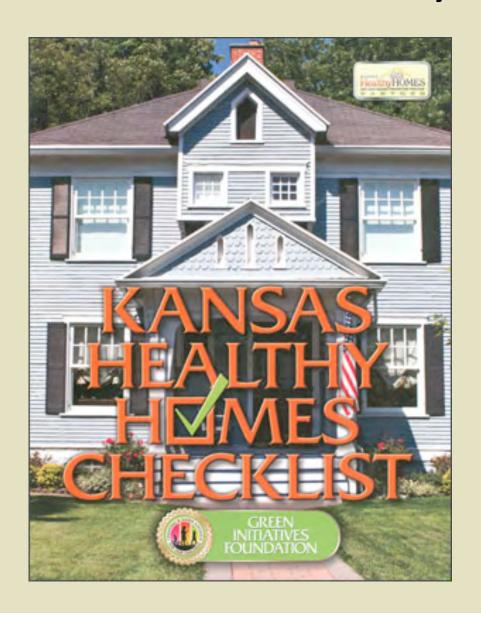
Water Efficiency



Embodied Water = 600+ gls

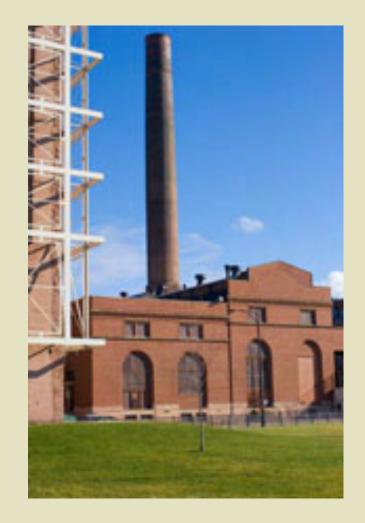
Average Daily Household Water Use: 300 Gallons

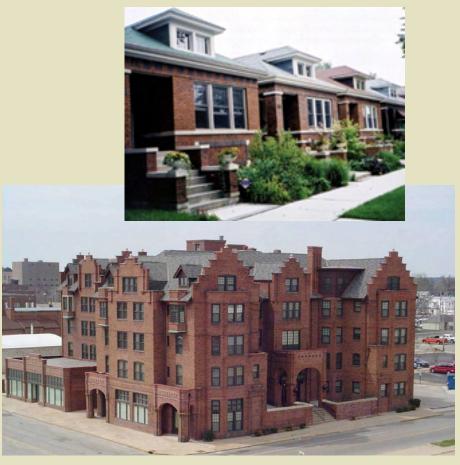
Healthy Homes



Clean Chemically safe Well maintained Hazard free Lead **Asbestos** Mold

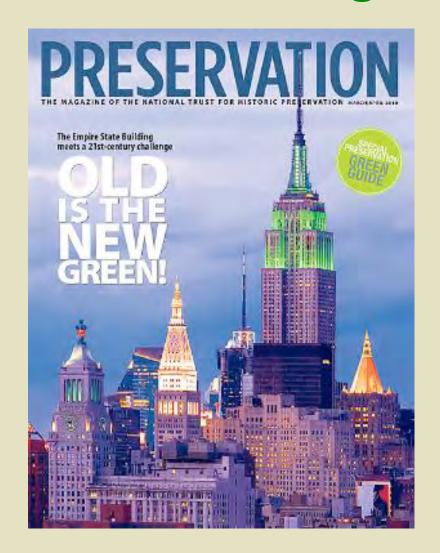
Green Historic Rehabs





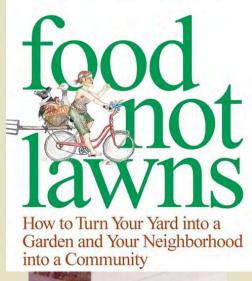
Historic certification LEED Certification

Old is the new green.



TOP 10 COUNTDOWN

No. 10 – Urban Chickens and Gardens









No. 9 - Clothesline

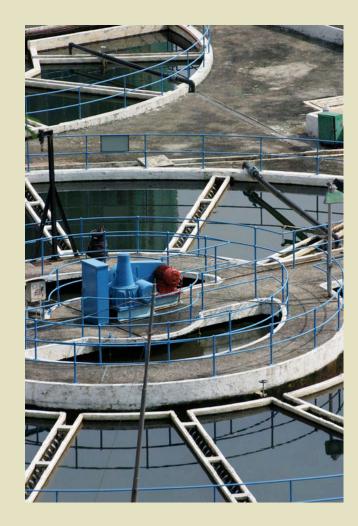


Clothes line = Solar Clothes Dryer*
*still illegal in many communities

No. 8 The Cistern



Cistern (4,000 gl)

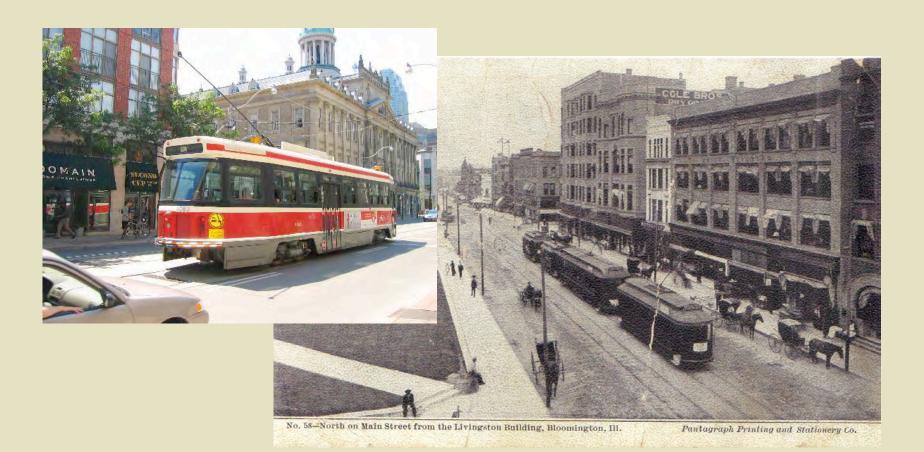


Reduce waste water treatment plants

No. 7 Detached Garages



No. 6 STREETCARS



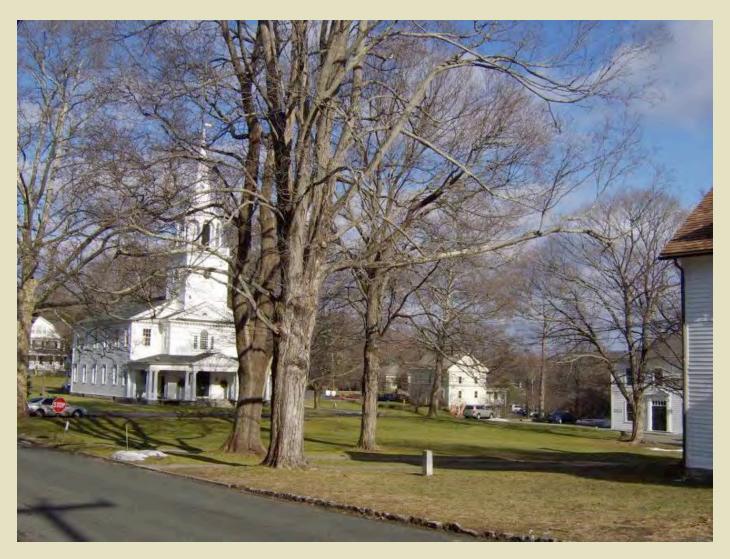
Complete Streets: Streetcars Bicycles, Pedestrians, Sidewalks

No. 5 Streetwall



Galena IL: Main Street

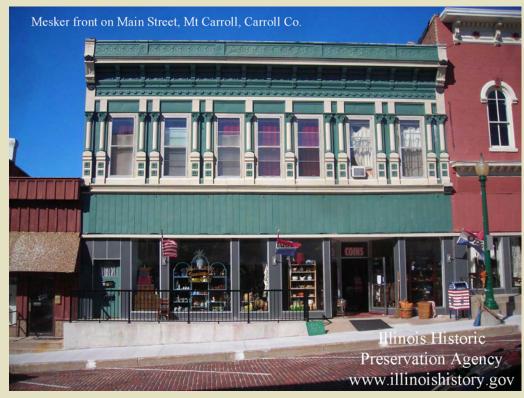
No. 4 Urban Parks



Washington CT Village Green

No. 3 Mixed –Use Buildings

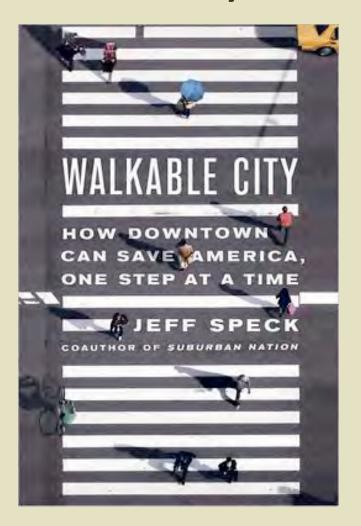




No. 2 walkable density

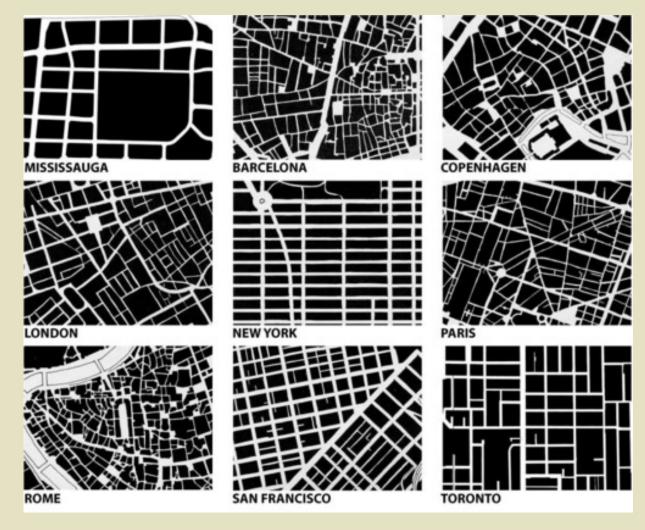


Franklin TN



What's the ideal urban density for walkability?

No. 1: Urban Grid



Interconnected

The City of the Future ??





Jetsonian vs pre-automobile

"...the ability of future generations to meet their own needs..."

Thank You



Mike Jackson, FAIA
Illinois Historic Preservation Agency