

SAVING THE WORLD THROUGH ZONING: SUSTAINABLE COMMUNITY DEVELOPMENT CODE REFORM

Presented By:

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C L A R I O N

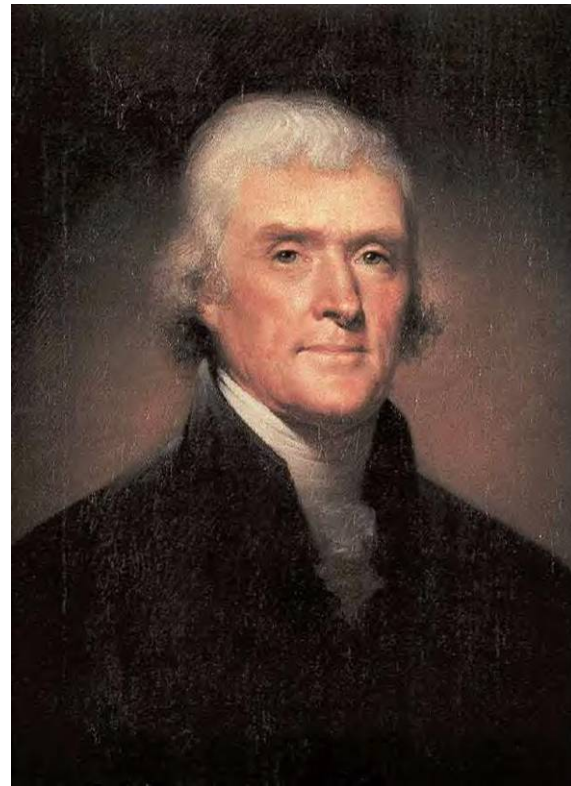
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Pima County
Sustainable Code Workshop
April 2012

What is a Sustainable Community?

“Then I say the earth belongs to each generation during its course, fully and in its own right, [but] no generation can contract debts greater than can be paid during the course of its own existence.”

– Thomas Jefferson (1789)



Sustainable Communities...

...meet the needs of the present while ensuring that future generations have the same or better opportunities. *Brundtland Commission 1987*

SUSTAINABLE COMMUNITIES ARE ABOUT PRESERVING CHOICES—ENVIRONMENTAL, ECONOMIC, AND SOCIAL



AMERICA'S BABY BOOMERS = THE **SKI** GENERATION

SKI =
SPENDING the
KID'S
INHERITANCE





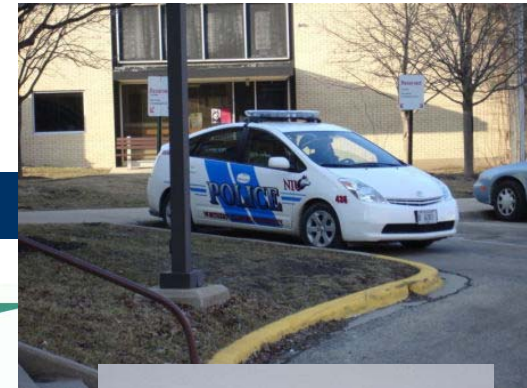
A SUSTAINABLE WORLD???

- **Fuel:** Oil production to peak in next 5-10 years...while world oil consumption increases by 50% by 2030.
- **Food:** China will demand more food in 2030 than the entire world produces today.
- **Health:** 34% of U.S. population obese. Obesity in children has tripled in last 3 decades. Costs the nation \$147 billion annually in weight-related hospital bills.
- **Climate:** Last decade--hottest on record; 99% of glaciers in Alaska in retreat; 5-foot sea level rise??
- **Biodiversity:** Habitat destruction...ocean acidification = 6TH major species extinction event looming??

Local Sustainability Programs

Typical Focus: Gov't Operations

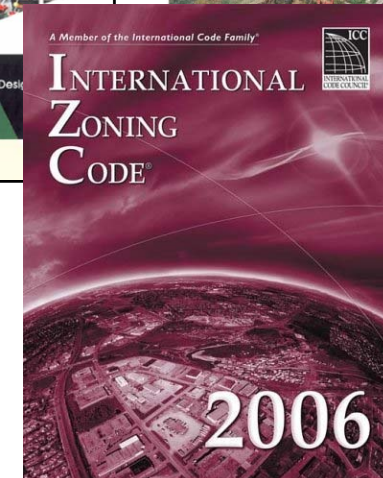
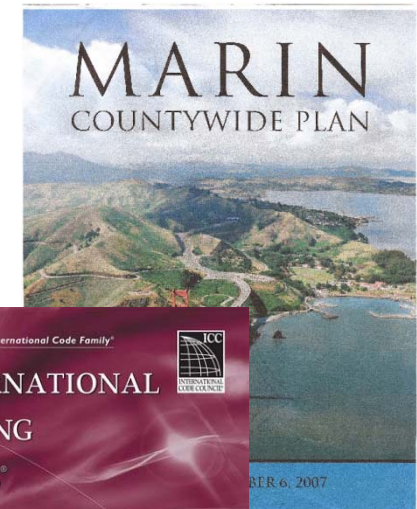
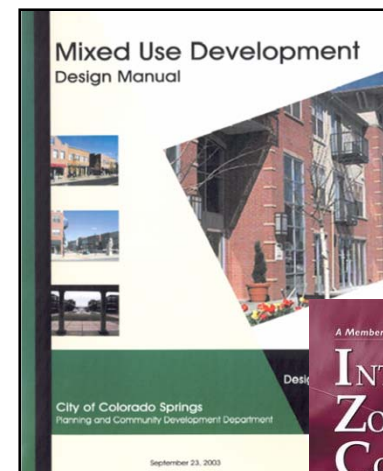
- Hybrid fleets
- Compact fluorescent bulbs
- Mass transit
- Plant street trees
- Green city buildings
- Purchase renewable power
- Recycling programs



Local Sustainability Programs

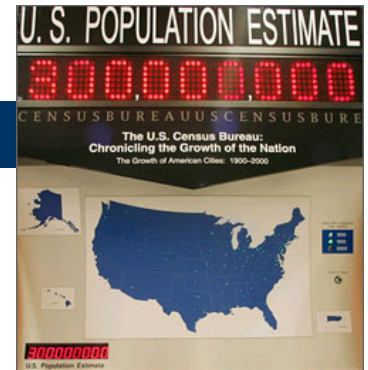
WHAT'S MISSING??

- Little focus on:
 - Development patterns/
private development
 - Development code
barriers to “green”
projects and industries
 - Code incentives



WHY DO DEVELOPMENT PATTERNS AND CODES MATTER??

- 100 MILLION MORE OF US BY 2043!!
- 50-70 MILLION NEW HOUSING UNITS
- BUT NEXT ECONOMY NOT BASED ON HOUSING



How Can a Development Code Support Sustainability?

- **Development codes CAN help address critical issues:**
 - CLIMATE CHANGE/CARBON EMISSIONS
 - RENEWABLE ENERGY
 - FOOD SUPPLY
 - HEALTH
 - NATURAL RESOURCE CONSERVATION
 - MOBILITY
 - HOUSING CHOICES
 - AND OTHERS



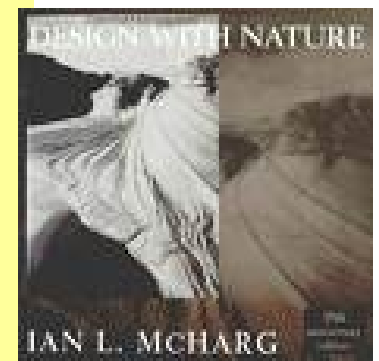
THINK GLOBALLY... ACT LOCALLY

- Development codes = powerful tool to accomplish community goals.
- DON'T WAIT:
 - Mandatory elements in comp plans
 - States preempting/suing local govts.
 - Federal laws...GHGs; ESA; MBA, MS4
 - Save money
 - Federal stimulus funding for code updates
 - Adaptation alternative is expensive and uncertain



KEY FEATURES OF A SUSTAINABLE CODE?

- Covers **new topics**: energy, health, food security, climate change, recycling—and relationships among them
- **Not just reactive or prescriptive**: removes barriers, creates incentives
- **Balances** environment, economics, social aspects of development
- **Tailored** regionally to climate and ecology...Design With Nature.



THREE PATHS TO SUSTAINABILITY

THINK B-I-G!!

- **BARRIERS**

- > Allow mixed-use development by right without special hearings or conditions

- **INCENTIVES**

- > Offer more flexible development standards for infill development or accelerated permitting for green building projects.

- **GAPS**

- > Fill regulatory gaps ~ tree protection standards



Sustainable Code: Energy Conservation/Alternative Energy

- Remove Barriers
 - Allow solar panels by right and clothes lines
 - Fine-tune non-conforming use/building regs to allow “green” renovations
 - Promote mixed-use developments

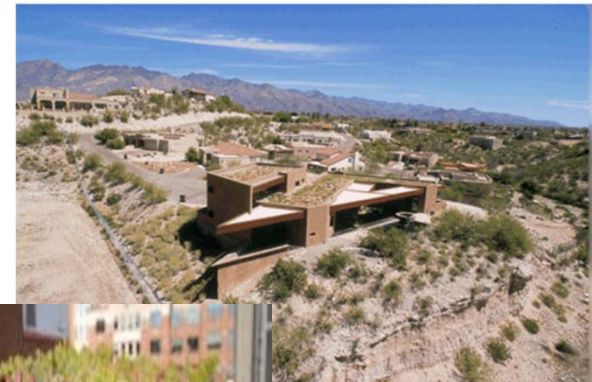
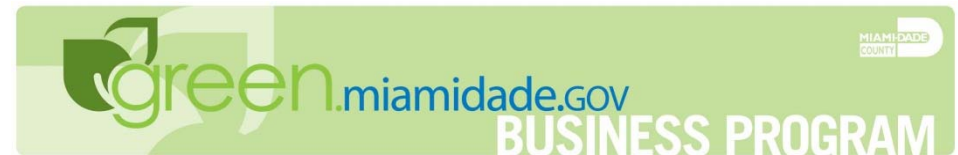




Original clothes line at Duerksen house in Buhler, KS., still standing...

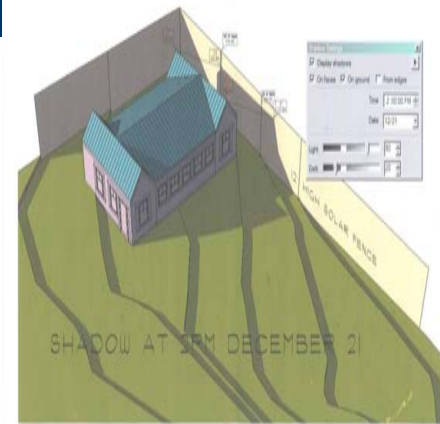
Sustainable Code: Energy Conservation/Alternative Energy

- Create Incentives
 - Green building expedited permitting (Miami-Dade County)
 - Open space credit for green roofs (Miami) or density bonuses (Portland)



Sustainable Code: Energy Conservation/Alternative

- **Fill Regulatory Gaps:**
 - Enact solar access protection provisions
 - Require cool roofs
 - Add minimum density requirements
 - Create priority parking for alternative fuel vehicles





Sustainable Code: Health/Safety

- Remove Barriers:

- Automatically reduce parking requirements for mixed-use/TOD projects
- Allow community gardens in all zone districts with off-site sales
- Define farmers market and permit in most zone districts.



Sustainable Code: Health/Safety

- Create Incentives:

- Offer bonus open space credit for maintaining public lands access and for community gardens, green roofs
- Reduce vehicle parking requirements for projects that provide bicycle facilities or adopt transportation demand management programs
- Increase density for MU along transit routes



Sustainable Code: Health/Safety



- Fill Regulatory Gaps:

- Require ped connectivity-- sidewalks, complete streets, and safe-street routes.
- Consider CPTED principles in development reviews
- Adopt standards for shade structures along sidewalks and in parking lots
- Adopt Wildland Urban Interface Standards (wildfire)



Sustainable Code: Housing Choices

- Remove Barriers:
 - Allow live/work units in commercial and office zones by right.
 - Permit detached accessory dwelling units by right in residential zone districts
 - Allow small and non-conforming lot development with contextual dimensional and compatibility standards



Sustainable Code: Housing Choices

- Create Incentives:
 - Offer density bonuses for projects with a mix of housing types and units
 - Grant parking reductions for affordable multi-family projects



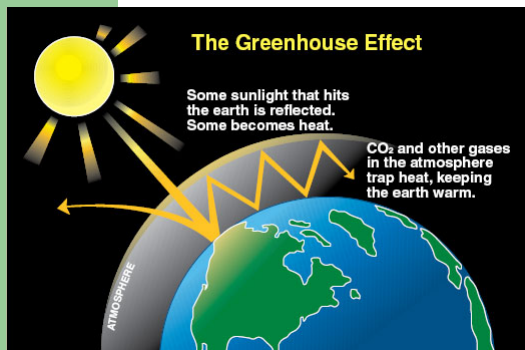
Sustainable Code: Housing Choices

- Fill Regulatory Gaps:
 - Enact affordable housing mitigation requirements (Denver)
 - Require mix of housing types or units in new developments (Chapel Hill, NC)



Sustainable Code: Other Issues

- Green Infrastructure
- Recycling
- Climate Change



THE TIME IS RIPE: PEOPLE ARE READY!!!

Rooftop garden
on car



CAN WE REVOLUTIONIZE ZONING???



EUCLIDEAN ZONING MILESTONES:

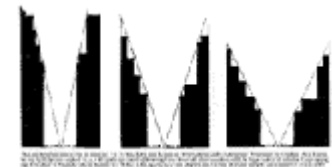
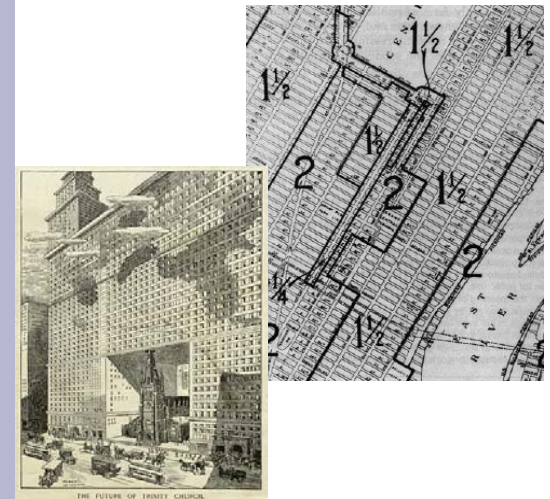
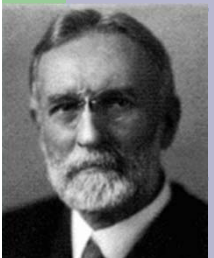
- 1916—New York City adopts city wide zoning scheme. Only 48 cities by 1921



1921—Standard State Zoning Enabling Act

1926—Upheld by U.S. Supreme Court

1926—425 zoned cities=1/2 U.S. population



Sustainable Code Implementation: Low-Hanging Fruit Strategy

Energy Conservation

- Allow clothes lines
- Require cool roofs

Community Health

- Permit community gardens by right in most zone districts

Housing Choices

- Allow live/work units in commercial zone districts
- Grant parking reductions for affordable housing



Sustainable Code Implementation: Use Menus As A First Step

Article 3: Building Design Standards
Section 3.3. Options to Improve Building Design
Subsection 3.3.2. Building Design Options

C. Table of Design Options

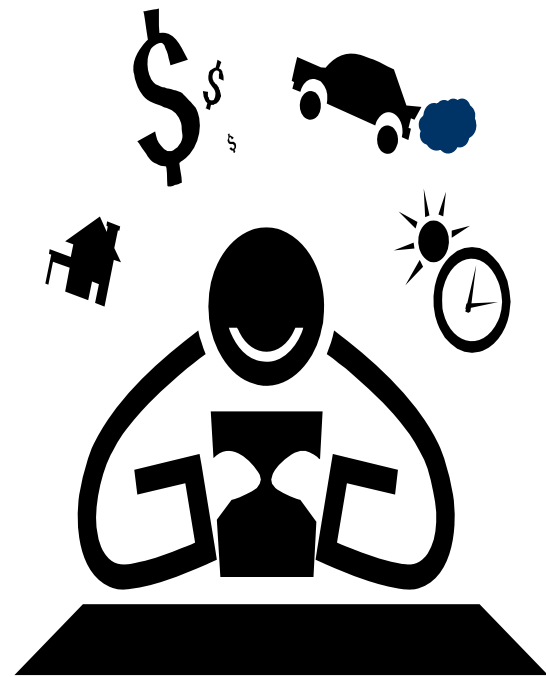
Option	Description / Comments
Group A: Each option worth 1 point	
Achieve star rating under the City of Austin Green Building program.	Each star of the rating qualifies for one point. No double credit for Green Building points from Group B.
Provide for liner stores in building façade. (1 point for each liner store)	See Article 5, Definitions
Provide façade articulation.	See definition D.1. below.
Provide primary entrance design.	See definition D.2. below.
Provide roof design.	See definition D.3. below.
Provide building materials meeting the standards of this section.	See definition D.5. below.
Improve storefronts to new regulatory standard of Section 3.2.2 for glazing type/size & shading.	Applies only for buildings existing at the effective date of this Subchapter.
100% of glazing on ground-floor facades that face any street or parking lot have a Visible Transmittance (VT) of 0.6 or higher.	
Complies with neighborhood design guidelines	
Group B: Each option worth 2 points	
Design building so that at least 75% of the façade facing the principal street consists of storefronts with at least two separate entrances facing the principal street	
Provide sustainable roof.	See definition D.4. below.
Integrate solar power generation into building design.	The specific features and design shall be approved by the Director. Examples may include, but are not limited to, rooftop solar panels or Building Integrated Photovoltaics.
Achieve Green Building rating of 2 stars.	



Addressing Costs & Benefits of Sustainable Codes



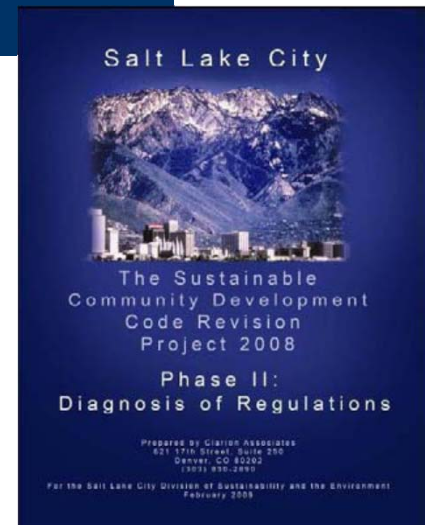
- **Strategy #1:** Stress Focus on Removing Barriers/ Creating Incentives
- **Strategy #2:** Demonstrate Site First Cost Savings
- **Strategy #3:** Think Beyond the Site— Long-Term and Community Impacts



THE TIME IS RIPE: LOCAL GOVERNMENTS ARE LEADING THE WAY!!!

SALT LAKE CITY GREEN

<http://www.slccgreen.com/CodeRevision.htm>



OMAHA SUSTAINABLE PLAN AND CODE REVIEW

<http://www.cityofomaha.org/ecomaha/>

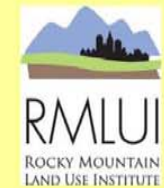
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Sustainable Community Development Code

A Code for the 21st Century

Beta Version 1.1



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**HERE'S TO THE CRAZY ONES...
THE ONES WHO ARE CRAZY
ENOUGH TO THINK THAT THEY
CAN CHANGE THE WORLD AND
ARE THE ONES WHO DO IT!**



Steve Jobs

SUSTAINABLE COMMUNITIES BEGIN WITH SUSTAINABLE PLANS AND DEVELOPMENT CODES

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