

**SAVING THE WORLD THROUGH ZONING: SUSTAINABLE COMMUNITY DEVELOPMENT CODE REFORM**

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**CLARION**

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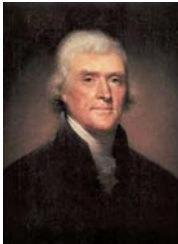
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**What is a Sustainable Community?**

"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)

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### 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**

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

**SKI** =  
**SPENDING** the  
**KID'S**  
**INHERITANCE**



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### 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 = 6<sup>TH</sup> major species extinction event looming??



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### Local Sustainability Programs

Typical Focus: Gov't Operations

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



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### Local Sustainability Programs

WHAT'S MISSING??

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



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### 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 PRIMARILY ON HOUSING



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### 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




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### THINK GLOBALLY... ACT LOCALLY

- DON'T WAIT:
  - Mandatory elements in comp plans
  - States preempting/suing local govts.
  - Federal laws...GHGs; ESA; MBA, MS4
  - Save money
  - Adaptation alternative is expensive and uncertain




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### 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.




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### THREE PATHS TO SUSTAINABILITY

**THINK B-I-G!!**

- **BARRIERS**
  - > Remove barriers to alternative energy systems
- **INCENTIVES**
  - > Offer expedited permitting for green building projects (e.g., green roofs)
- **GAPS**
  - > Fill regulatory gaps ~ tree protection standards; water-efficient landscaping



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### Sustainable Code: Energy Conservation/Alternative Energy

- **Remove Barriers**
  - Allow alternative energy systems by right and .... clothes lines
  - Fine-tune non-conforming use/building regs to allow "green" renovations
  - Promote mixed-use and transit-oriented development



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### Sustainable Code: Energy Conservation/Alternative Energy

#### • Create Incentives

- Standardized solar permit regs
- Green building expedited permitting (Miami-Dade County)
- Density bonus for green roof (Portland)
- Reduced vehicle parking for enhanced bike facilities



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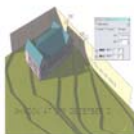
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### Sustainable Code: Energy Conservation/Alternative

#### • Fill Regulatory Gaps:

- Enact solar access protection provisions
- Require cool roofs
- Add energy-saving standards to lighting code
- Create priority parking for alternative fuel vehicles/ require charging stations



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### Sustainable Code: Green Infrastructure

#### • Remove Barriers

- Allow pervious pavement in parking lots
- Permit street-side swales to replace curb/gutter in low-traffic areas
- Provide flexibility in meeting parking requirements--count on-street spaces, allow off-site parking within walking distance



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### Sustainable Code: Green Infrastructure

- Create Incentives

- Grant density bonus and storm water management credit for green roofs
- Permit street-side swales to replace curb/gutter in low-traffic areas



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### Sustainable Code: Green Infrastructure

- Fill Regulatory Gaps

- Adopt standards requiring minimum % of parking lot to drain into landscaping
- Consider strengthening hillside/steep slope protection provisions



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### 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



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### 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



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### 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)



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### Sustainable Code: New Issues...New Mindsets

- Recycling
- Community Health and Safety
- Water Conservation



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**THE TIME IS RIPE:  
PEOPLE ARE READY!!!**

Rooftop garden on car



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**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



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**Sustainable Code Implementation:  
Low-Hanging Fruit Strategy**

**Energy Conservation**


- Allow clothes lines
- Require cool roofs

**Housing Choices**

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

**Green Infrastructure**

- Give density bonuses and expedited permits for green roofs



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## Sustainable Code Implementation: Use Menus With Point Systems As A First Step

Article 8, Building Design Standards  
Section 8.0, Tables as Written in Building Design  
Subsection 8.0.3, Building Design Codes

C. Table of Design Options

Option	Description / Comments
Provide clear rating under the City of Austin Green Building program	Each one of the rating agencies has one point for being a part of Green Building, points from other agencies.
Provide for floor plans in building permits (1 point for each floor plan)	See Article 8, Definition
Provide facade 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 criteria of the Green Building program	See definition D.4, below
Require compliance to the regulatory operating of Section 8.0.3 for green buildings & building materials	Require that the building meeting at the address of the building.
Complex with neighborhood design guidelines	Complex with neighborhood design guidelines.
Require building to be at least 75% of the floor area be green building materials	See definition D.4, below
Provide accessible roof	The specific features and design shall be approved by the Director. Features may include but are not limited to: accessible green roof or building facade.
Integrate solar panel generation into building design	Integrate solar panel generation into building design.



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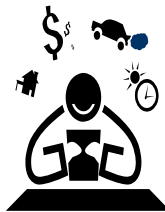
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## Addressing Costs & Benefits of Sustainable Codes



- **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



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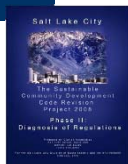
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## THE TIME IS RIPE: LOCAL GOVERNMENTS ARE LEADING THE WAY!!!

**SALT LAKE CITY GREEN**  
<http://www.slccgreen.com/CodeRevision.htm>



**OMAHA SUSTAINABLE PLAN AND CODE REVIEW**  
<http://www.cityofomaha.org/eomaha/>

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[WWW.LAW.DU.EDU/RMLUI](http://WWW.LAW.DU.EDU/RMLUI)



**Sustainable Community Development Code**  
A Code for the 21<sup>st</sup> 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**

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**SUSTAINABLE COMMUNITIES  
BEGIN WITH  
SUSTAINABLE PLANS AND  
DEVELOPMENT CODES**

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