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## Developing Our Young Teens A Future City Model

Marcia Amidon and J. Tedrowe Bonner  
Rubicon Seven, LLC

Sociology



Ecology



Technology



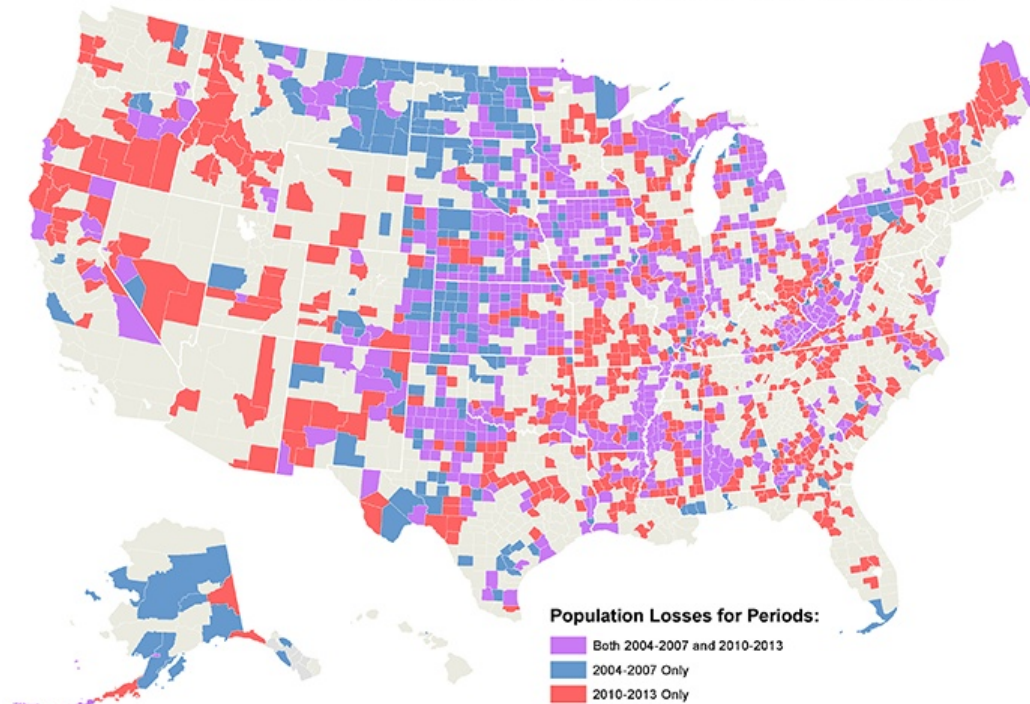
# What Are We Talking About?

1. A demographic shift of crisis proportions: People are moving to cities.
2. The Future City Competition started addressing this shift nearly 25 years ago.
3. What role could permaculture play?



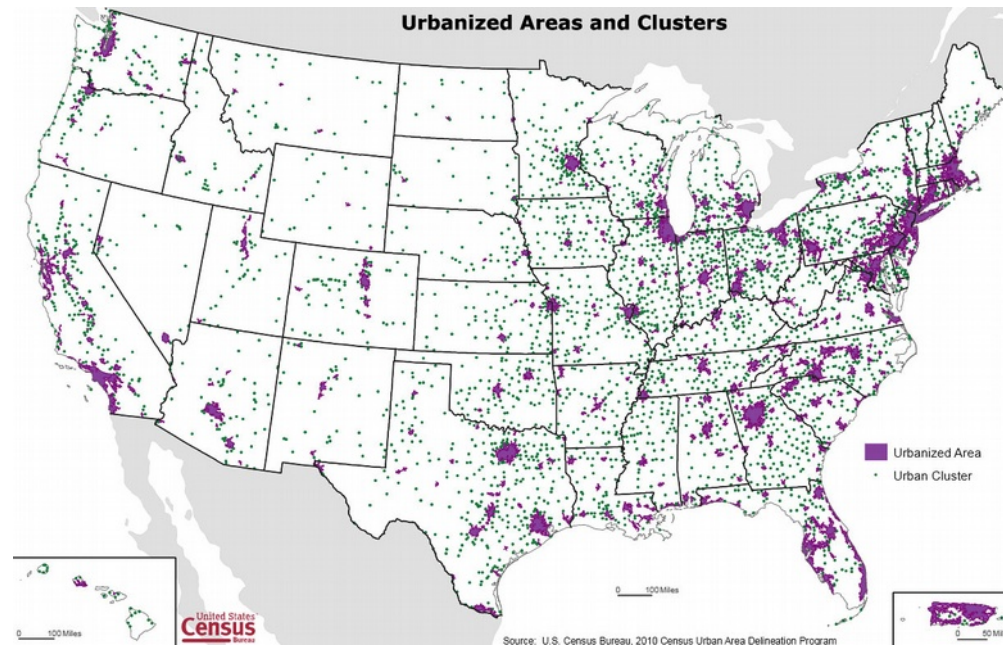
# The Great Transition

Population Loss Counties, Outside Large Metropolitan Areas, 2004-2007 and 2010-2013



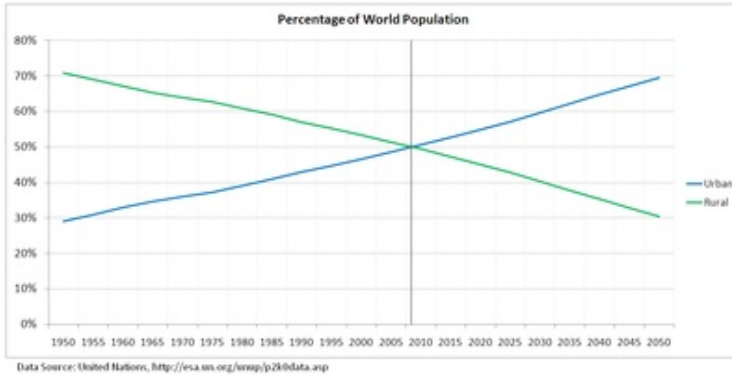
Source: Frey, William H. 2014. "A Population Slowdown for Small Town America." Brookings Institution, Washington, D.C.

# Urbanization: A Massive Shift

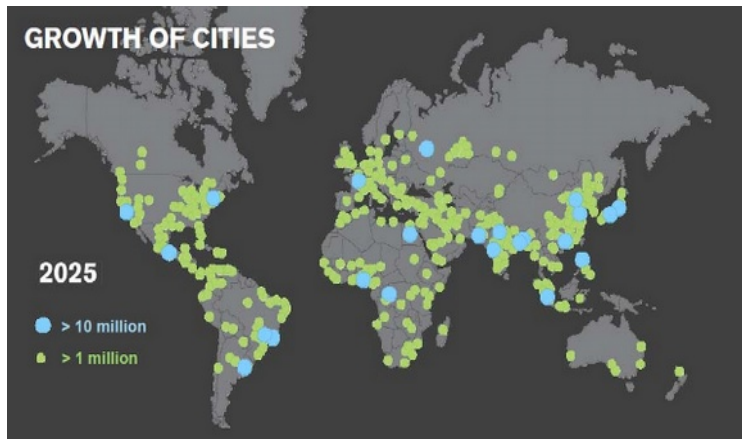




# Global Movement From Rural to Urban



- Globally, more people (54%) now live in urban areas than in rural areas.
- by 2050, it is expected to be 66%
- In 2025, 630 million of us will live in 37 megacities
- The urban population of the world has grown from 746 million in 1950, to 3.9 billion in 2014



# Urbanization

**1900** | 2 out of every 10 people lived in an urban area



**1990** | 4 out of every 10 people lived in an urban area



**2010** | 5 out of every 10 people lived in an urban area



**2030** | 6 out of every 10 people will live in an urban area



**2050** | 7 out of every 10 people will live in an urban area



Defined by UN HABITAT as a city with a population of more than 10 million



# The Changing Faces of Rural and Urban





# The Story of Future City

Welcome to the 22<sup>nd</sup> Annual Future City Competition!



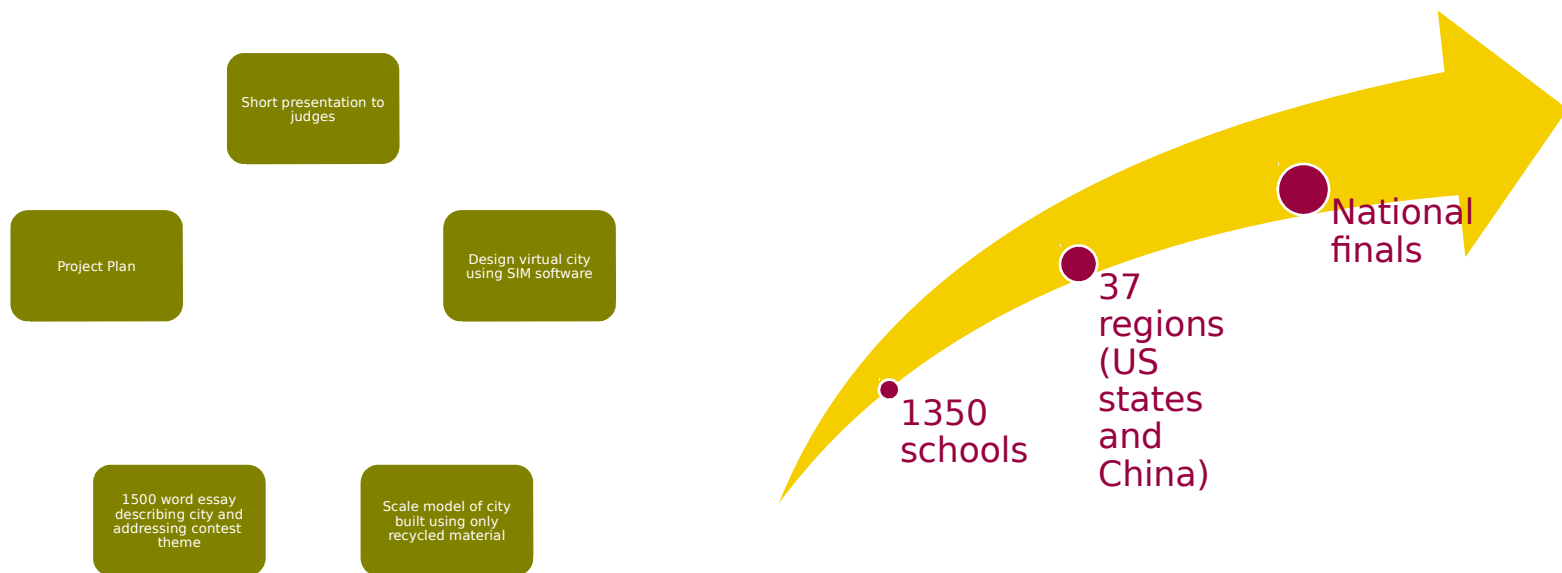


- Develop students in STEM topics
- Promoting national diversity around STEM
- Promoting gender equality in the fields of engineering and science
- Generating partnerships with industries



# fuTuRe City

## COMPETITION





- students ages 12-14
- 40,000 students in total participate every year
- 1350 schools involved
- Participation from every state in the US, plus China



# Taking Children Seriously

## The 2015 National Future City Finals





# Taking Our Planet Seriously

## The 2015 National Future City Finals



**Past themes: storm water management, green energy**

**2015 Theme: Feeding Future Cities**

**2016 Theme: Waste Not, Want Not**



# Characteristics of Preteen Students

“[These students are] an untapped resource, idealistic and enthusiastic.”



- Wide range of intellectual development
- Intensely curious
- Like to learn with peers in groups
- Problem-solving skills



Source: "Characteristics of Middle Grade Students," *Caught in the Middle* (1989). Sacramento: California Department of Education.



# Characteristics of Preteen Students



- Independent, like to argue
- Academic goals second to personal
- Social concerns dominate thoughts and activities
- Facing decisions that have lifelong consequences.



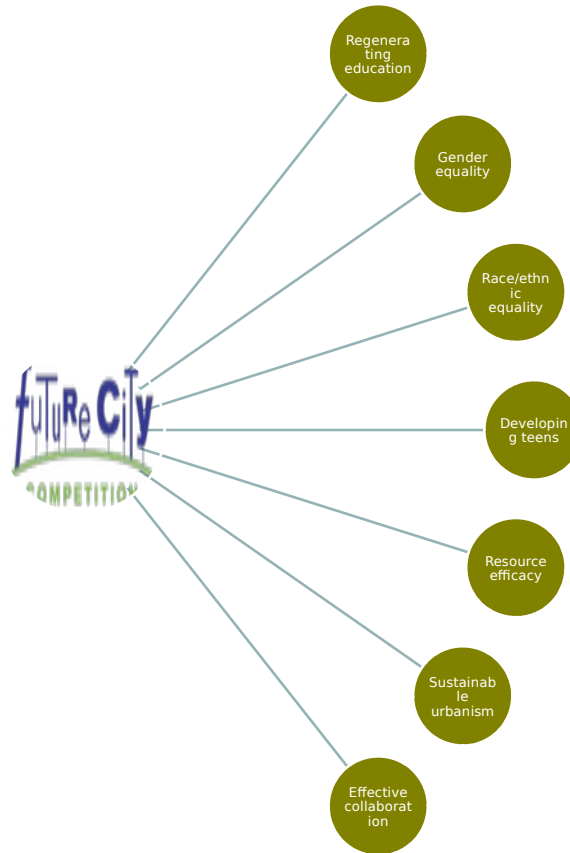
Source: "Characteristics of Middle Grade Students," *Caught in the Middle* (1989).  
Sacramento: California Department of Education







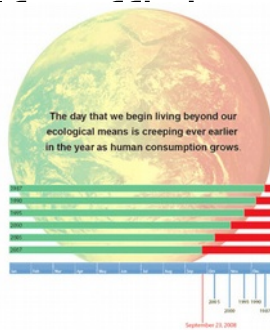
# Future City: An Elegant Stacking Function





# Is Future City Generating Sustainability?

- Engineering as a field has historically been resource-intensive
- There is a growing awareness in the Future City competition of the need to create an “ecocity.” (Richard Register)
- No one knows how to create a regenerative city.
- No one knows how to have cities be resource se



# The Ecocity: How Are Permaculturists Creating This?



Richard Register's drawing  
for Ecocity Berkeley, CA

- Work within institutional frameworks
- Understand integrative design and collaboration (Bill Reed)
- Need to be grounded in solid research
- Science, not pseudoscience



## In Summary:

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- The Future City competition is a highly successful model for developing our youth, and understands the future.
- Future City knows how to create partnerships.
- Permaculture's strength is regeneration, and our cities can learn from this.



# The Faces of Our Future





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Thank you to the Future City competition and  
Maggie Dressel  
Future City photographs courtesy of KRR  
Photography



