

Pathways to Urban Sustainability: Lessons from U.S. Metropolitan Cities

Roundtable on Science and Technology for Sustainability
National Academies

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Presented by
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Urban Sustainability

“...About 80 percent of Americans live in urban areas, and the economic health and social vitality of our urban communities are critically important to the prosperity and quality of life for Americans....”

Excerpt from
The White House Executive Order
Establishment of the White House Office of Urban Affairs
19 February 2009

Background

- ▶ Roundtable on Science and Technology for Sustainability established Urban Sustainability as area of focus
- ▶ First forum on Urban Sustainability held in Washington, DC on 23 September 2009
- ▶ Mr. Adolfo Carrion, White House Czar on Urban Affairs, asked National Academies to provide avenues for urban areas to dialogue regarding pathways to sustainability
- ▶ Regional U.S. Forums proposed

Pathway Forward...

- ▶ **Regions Identified-to-Date:** California (Los Angeles), Texas (Houston), Arizona (Tucson), Massachusetts (Boston), Georgia (Atlanta)
- ▶ **Initial Forum:** Metropolitan Atlanta
 - Engage Partners and Stakeholders
 - Define Urban Sustainability
 - Determine Geographical Area
 - Identify Area(s) of Focus

Established Partnerships

- ▶ Thomas Weyandt, Director, Comprehensive Planning, Atlanta Regional Commission
- ▶ Cyrus Bhedwar, Director, Southeastern Region, International Council for Local Environmental Initiatives (ICLEI)
- ▶ Mandy Mahoney, Director of Sustainability, Office of the Mayor, City of Atlanta
- ▶ Catherine Ross, Ph.D., Director of Center for Quality Growth & Regional Development, Georgia Institute of Technology
- ▶ William Edwards, Co-chairman, Fulton County Board of Commissioners

The Nature of Sustainability

<http://www.gcbl.org/economy>



“...balancing environmental responsibility, economic need and social stability while ensuring that the needs of the present are not met at the expense of future generations.”

Atlanta Regional Commission *Fifty Forward Sustainability Report*

What is Sustainable Urban Development?



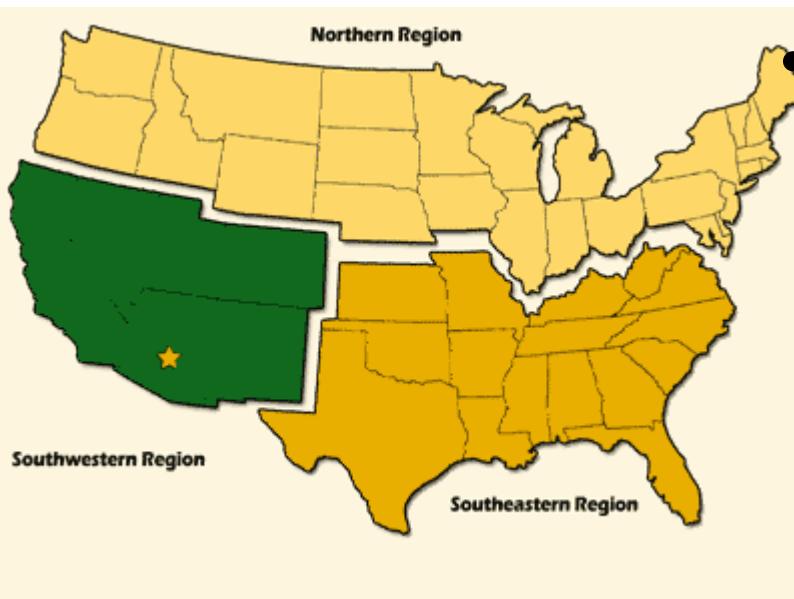
“...continuing maintenance, adaptation, renewal, and development of a city’s physical structure and systems and its economic base in such a way as to enable it to provide a satisfactory human environment with minimal demands on resources and minimal adverse effects on the natural environment.”

Richard Stern. et al., 1992

Defining the Urban Atlanta Region



- City of Atlanta
 - Population of 500,000
- Atlanta Regional Commission
 - Population of over 4,000,000

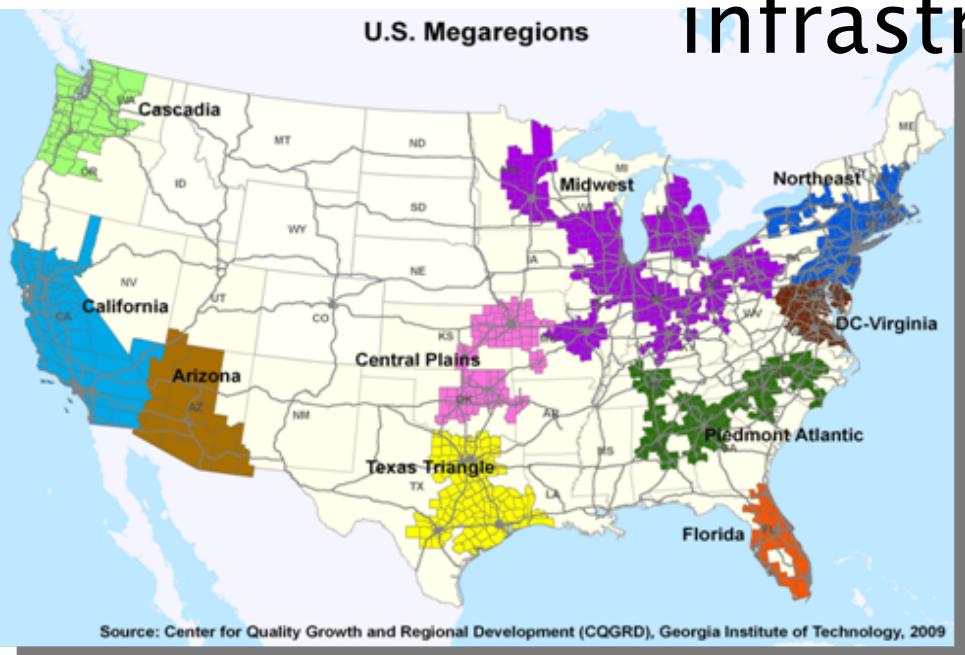


- Southeastern United States
 - Population -----



Piedmont Atlantic MegaRegion (PAM)

MegaRegions are large networks of metropolitan centers and their surrounding areas that have existing economic, environmental and infrastructure relationships.

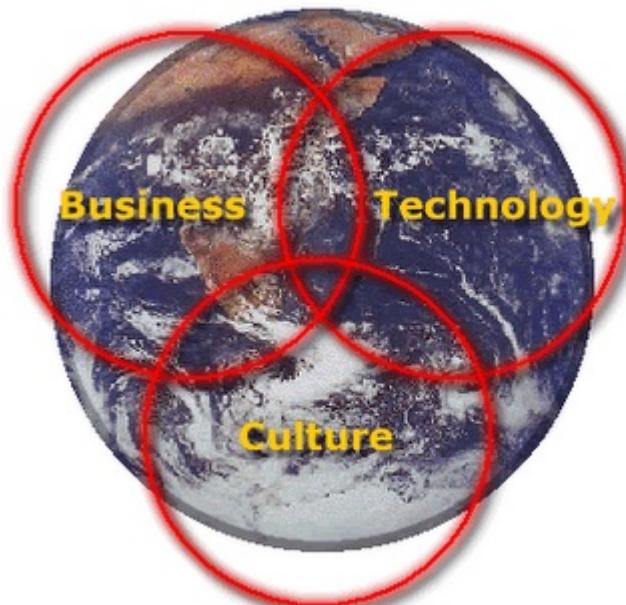


Major Cities:

- Atlanta, GA
- Birmingham, AL
- Charlotte, NC
- Raleigh–Durham, NC

Why is PAM Important?

- ▶ Globalization
- ▶ Economics
- ▶ Water
- ▶ Transportation



- ▶ Fastest growing area in the United States
- ▶ \$1.2 Trillion of Gross Domestic Product
- ▶ 10% of U.S. GDP
- ▶ Water supply and water quality result in expansive litigation
- ▶ Traffic congestion costs over \$3.5 billion

Drivers of Sustainability



- ▶ **Economy**
World's economy is driven by availability of energy
- ▶ **Environment**
Belief of scientific community that emissions from combustion of fossil fuels contribute to global warming
- ▶ **Society**
Availability of reasonably-priced energy has increased productive capacity and educational opportunities; and improved quality life

If availability of energy is threatened, so are these social advances.

*Sustainability – Metro Atlanta Futures Forum
ARC Fifty Forward*

Recommended Areas of Focus

Science, Technology and Innovation

- ▶ **Transportation – Cost of Congestion**
- ▶ **Water Security – Extensive Litigation**
- ▶ **Energy**
- ▶ **Demographics and Diversity**
- ▶ **Land Use and Housing**

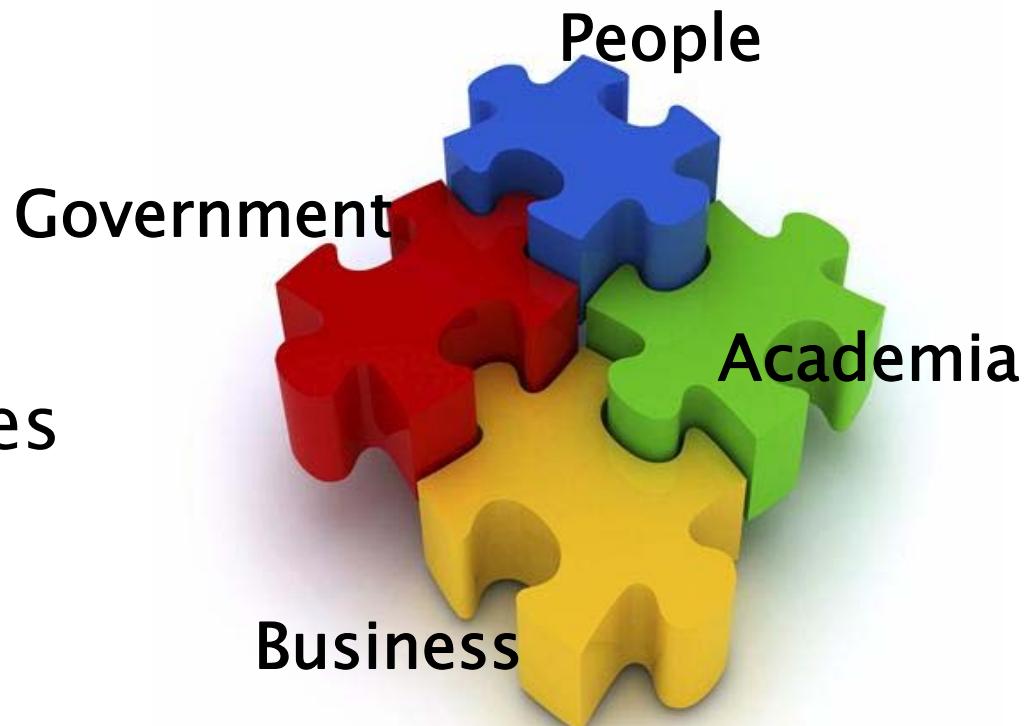


Job Creation

Transportation

Added Needs and Considerations

- ▶ Facilitate Partnerships
- ▶ Information Clearinghouse
- ▶ Cultural Differences
- ▶ MegaRegions are Unique



Next Steps

- ▶ **Convene Planning Committee**
- ▶ **Determine Date (July??) and Location**
- ▶ **Define Agenda**

