



Smart Growth 101

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State and local governments have been trying to manage growth for most of the past century, pitting:

- Individual rights against the collective good
- Freedom against government control
- Communal benefits against individual benefits



The Three Ages of Environmentalism

- Preserving our wilderness:
Creating the National Park System
(early 1900s)
- Protection from polluters:
Addressing the environment as a
public health crisis (mid-1900s)
- Livability: Linking the environment
with economic prosperity and
quality of life (late 1900s to today)





A Fourth Age of Environmentalism

- Green building
- Energy efficiency
- Sustainability



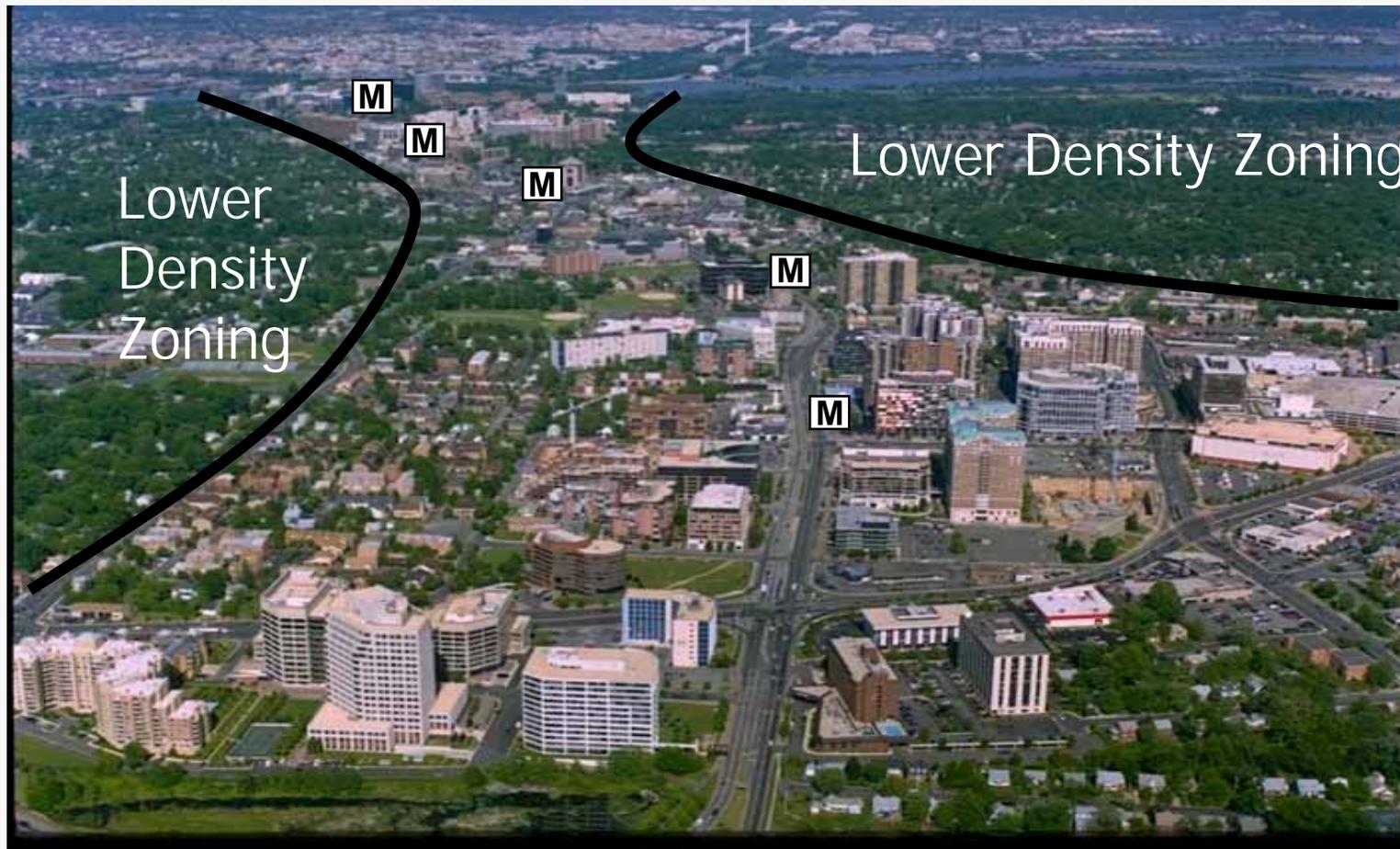
What Is a Sustainable Community?

A sustainable community is an urban, suburban or rural community that has more housing and transportation choices, is closer to jobs, shops or schools, is more energy independent and helps protect clean air and water.

Smart growth approaches can help communities become more sustainable.



What a Smart Growth Community Can Look Like



Because of this style of development, just under 3% of the land mass of Arlington County, VA, generates 37% of the county's tax base.



Photo courtesy of Jeff Speck, NEA

A sustainable community in rural New York.

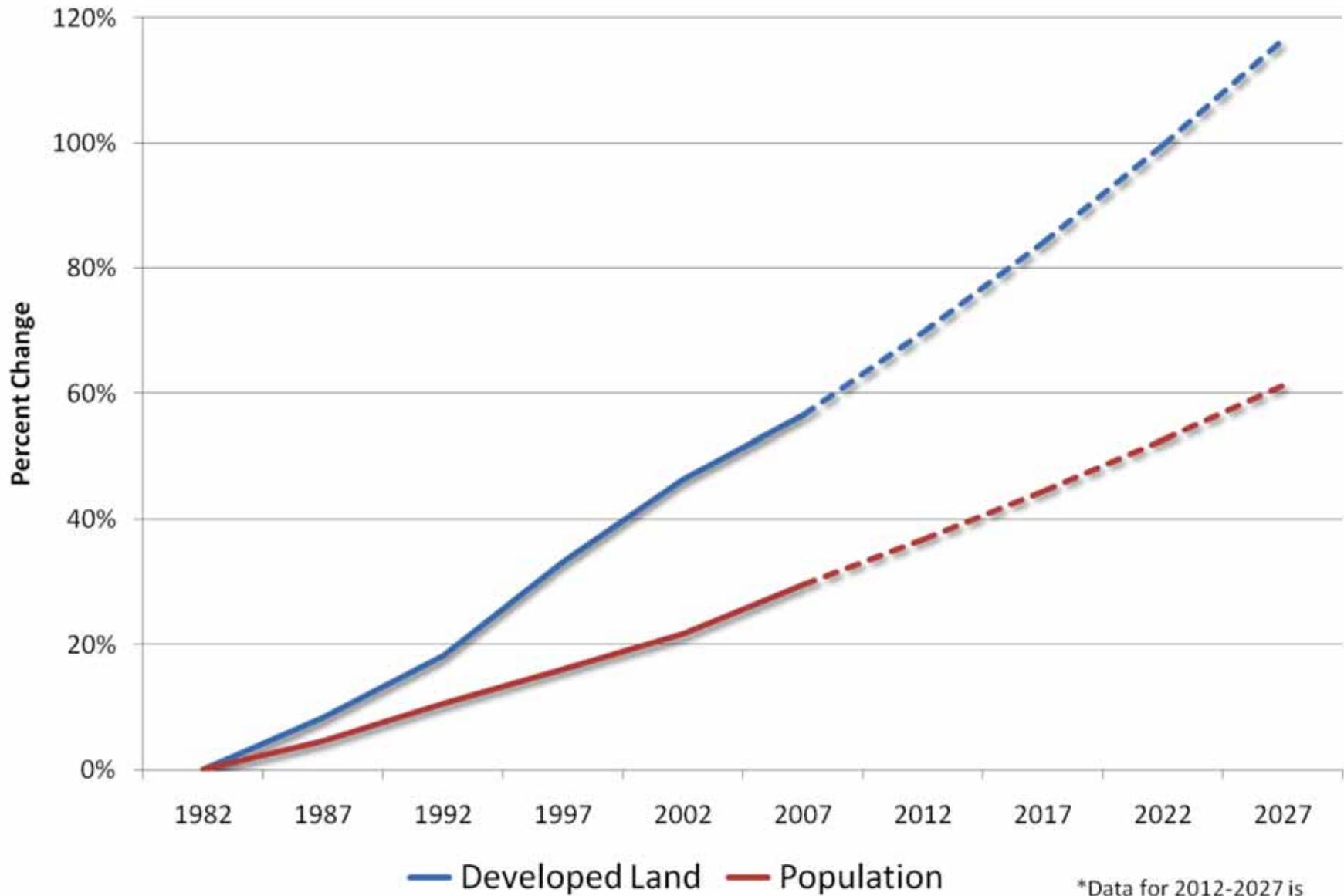


Smart Growth = Balance

- For nearly a century, the development playing field has been tilted:
 - Away from center cities and older suburbs,
 - Toward the urban fringe
- Smart Growth Thesis:
 - Shifting toward a more balanced development pattern can provide significant environmental and economic benefits.



U.S. Population Growth and Land Consumption, 1982-2027



*Data for 2012-2027 is extrapolated.



Some Call this Phenomenon “Sprawl”

“A form of urbanization distinguished by leapfrog patterns of development, commercial strips, low density, separated land uses, automobile dominance and a minimum of public open space.”

— Oliver Gillham, *The Limitless City*
(Washington, DC: Island Press, 2002)



Abandoned Cities





Abandoned Suburbs



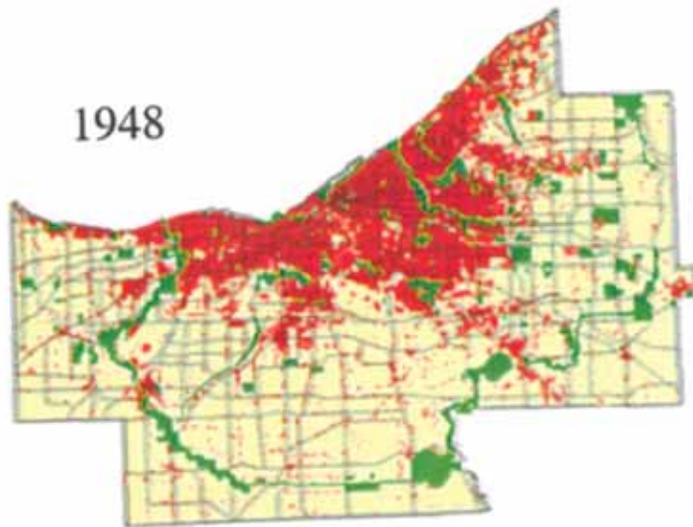


Large Lot Development in Rural Areas

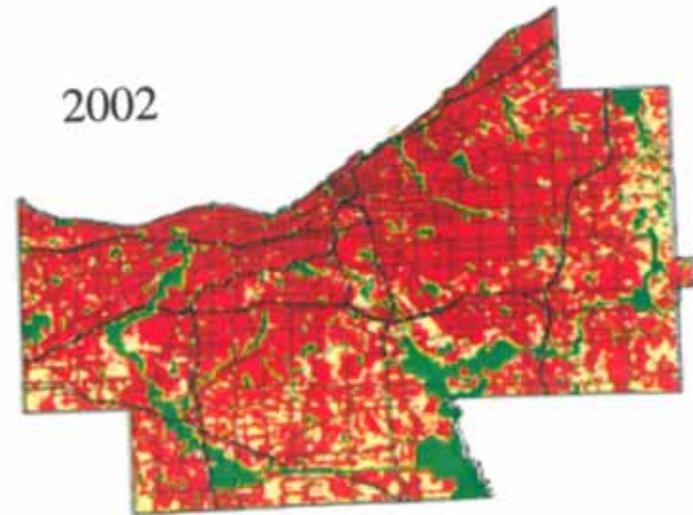




Expansion with Little Population Growth



U.S. Census 1950
1,389,582 pop.



U.S. Census 2002
1,393,978 pop.



How to Explain this Land Use Shift?

- Land use laws that separates uses
- An automobile-oriented culture
- Concerns about schools and public safety
- Racism and racial tension
- Inadequate ecological awareness
- Global economic change in an information age
- National policies and spending programs
- Methods of local government revenue generation
- Owners' concerns over property values

Barriers to Smart Growth

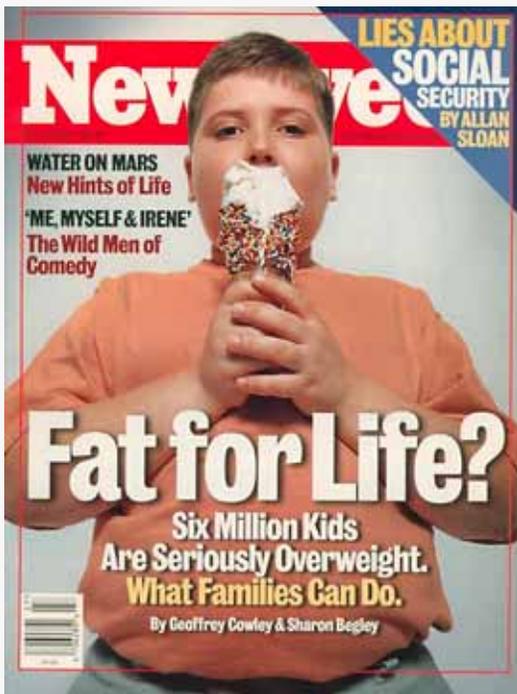
- Local governments influence development choices by mandating:
 - Minimum lot sizes
 - Separation of uses
 - Minimum numbers of parking spaces
 - Minimum setbacks and street widths
 - Density limits
 - Minimum acreage requirements for schools
 - Single housing types
- State and federal governments provide:
 - Water infrastructure and regulation
 - Transportation
 - Sometimes inflexible funding rules
 - Environmental requirements



EPA's smart growth program –
the Office of Sustainable Communities –
works to remove
or modify these actions when they
become barriers.



Why Should We Care?



- *Fiscal*: Expensive for services and infrastructure
- *Health*: Reduced physical activity, high rates of obesity and related diseases
- *Social*: Race and class segregation, loss of the public realm
- *Environmental*: Land and resource consumption, air and water pollution, climate change



Air Quality Impacts of Land Use



- Since 1990, GHG emissions from personal vehicles have risen 14% and emissions from trucks have risen 74%*
- Buildings and transportation together account for about 2/3 of U.S. GHG emissions.**

* Source: US EPA Greenhouse Gas Inventory, April 2012

** Source: US EPA 2009 Inventory of Greenhouse Gas Emissions and Sinks

*FHWA
**US EPA 2009 Inventory of Greenhouse Gas Emissions and Sinks



Water Quality Impacts of Land Use



- More than 70% of urban water bodies are polluted.
- Dispersed development produces almost 50% more stormwater runoff than compact development.

*HWA Highway Statistics Series

**US EPA 2009 Inventory of Greenhouse Gas Emissions and Sinks



Habitat Impacts of Land Use



- Habitat destruction is the main factor threatening 80% or more of the species listed under the Endangered Species Act.

*FHWA Highway Statistics Series

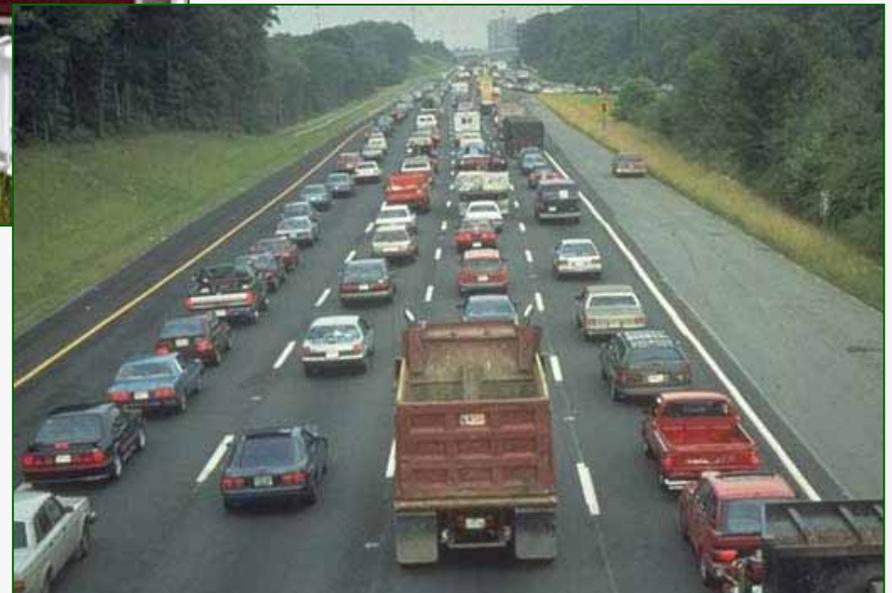
**US EPA 2009 Inventory of Greenhouse Gas Emissions and Sinks



Combined Housing and Transportation Costs



Most Americans spend more than 50% of their income on housing and transportation costs.





Benefits of Smart Growth Approaches

- Reduce emissions
 - An EPA-funded study found that more compact development along with complementary pricing strategies could reduce CO₂ emissions by 18-24% by 2050.*
- Reduce water demand
 - Households use 60% of the public water supply in the U.S.
 - But green building practices can reduce household water use by 20%.

* Source: Urban Land Institute, *Moving Cooler*, July 2009.



Benefits of Smart Growth Approaches

- Encourage brownfield cleanup and redevelopment
 - GAO estimates there are 425,000 brownfields sites nationwide.
 - Redevelopment helps preserve open space, cleans contaminated sites, and maximizes investments near transit and existing infrastructure.



The Can Company, Baltimore, Maryland



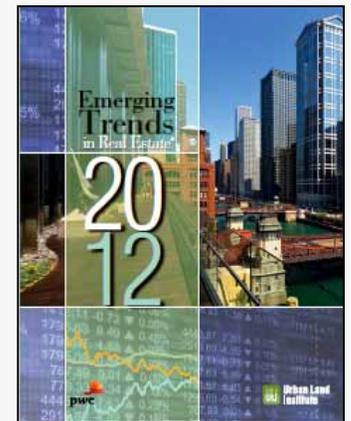
Benefits of Smart Growth Approaches

- **SAVES MONEY** through lower transportation and infrastructure costs.
- **CREATES JOBS** in construction, maintenance, rehabilitation of older buildings, or cleanup and redevelopment of brownfields.
- **INCREASES PRIVATE INVESTMENTS** by providing amenities like public transportation that tend to attract such investment.
- **MAKES MONEY** through higher property values from redeveloped shopping centers, reclaimed buildings or lots, or by providing places with more transportation or housing options.
- **MEETS MARKET DEMAND** at both ends of the demographic spectrum :
 - Helps Millennials who yearn for lively urban settings; and,
 - Baby Boomers who increasingly look for amenities — health care, theaters, or grocery stores —reachable by foot or transit.



Demographic and Economic Trends

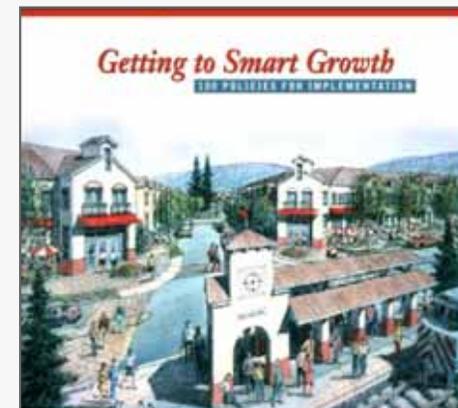
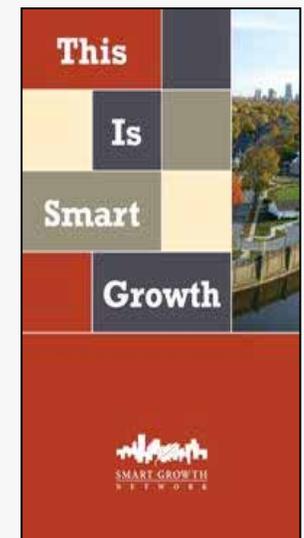
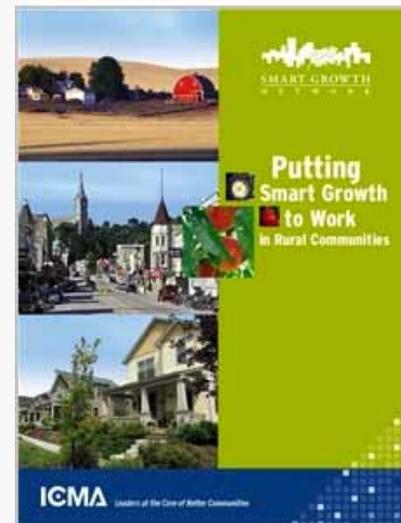
- At least 1/3 of potential homebuyers prefer walkable, compact communities.
- Millennials and baby boomers are particularly interested.
 - More than 2/3 of households today have no children living at home.
 - By 2050, almost 3/4 of households will have no children living at home.
- The 65-and-older cohort is projected to nearly double, from 13% to 20% of the population, by 2050.
- The annual report *Emerging Trends in Real Estate* consistently identifies smart growth neighborhoods as top investments.
- Green building now represents 25% of the real estate market.





Changing the Conversation

- Smart Growth Network – 45 partners
 - A national coalition that defines and advances smart growth practices
- National Smart Growth Conferences (since 1998)
- Smart Growth Online (smartgrowth.org)
- National Award for Smart Growth Achievement (since 2002)
 - 809 applications from all 50 states, Puerto Rico and D.C., 52 communities selected.





Changing the Rules

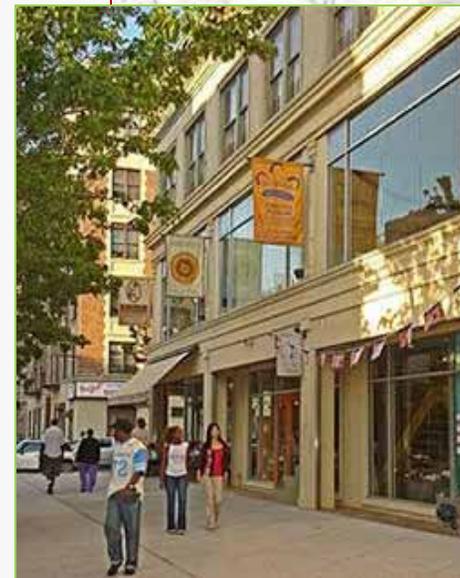
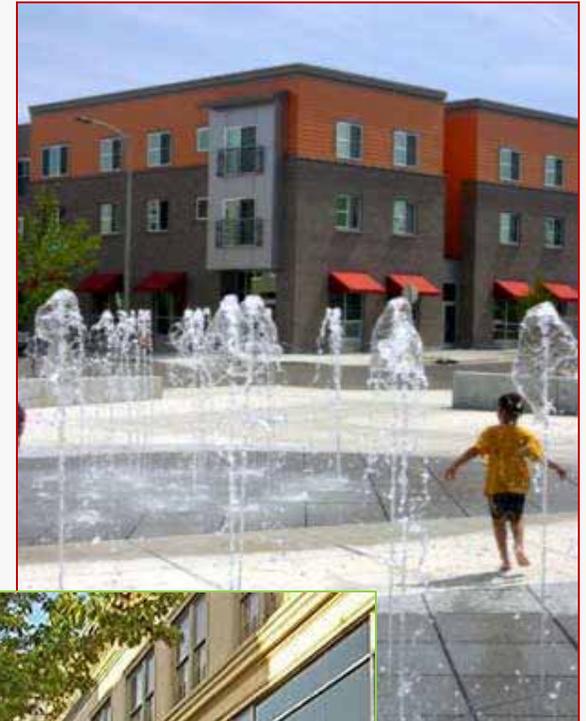
- Water infrastructure
 - EPA works with HUD, DOT and USDA to make green infrastructure approaches more commonplace.
 - USDA, HUD and EPA all fund water infrastructure using different criteria, processes. Can they be better aligned?
- 2011 SRF Procedures
 - EPA provides guidance to states on Water Infrastructure Sustainability.
- Green building
 - EPA works with the US Green Building Council, the International Code Council, and other standard setting organizations.





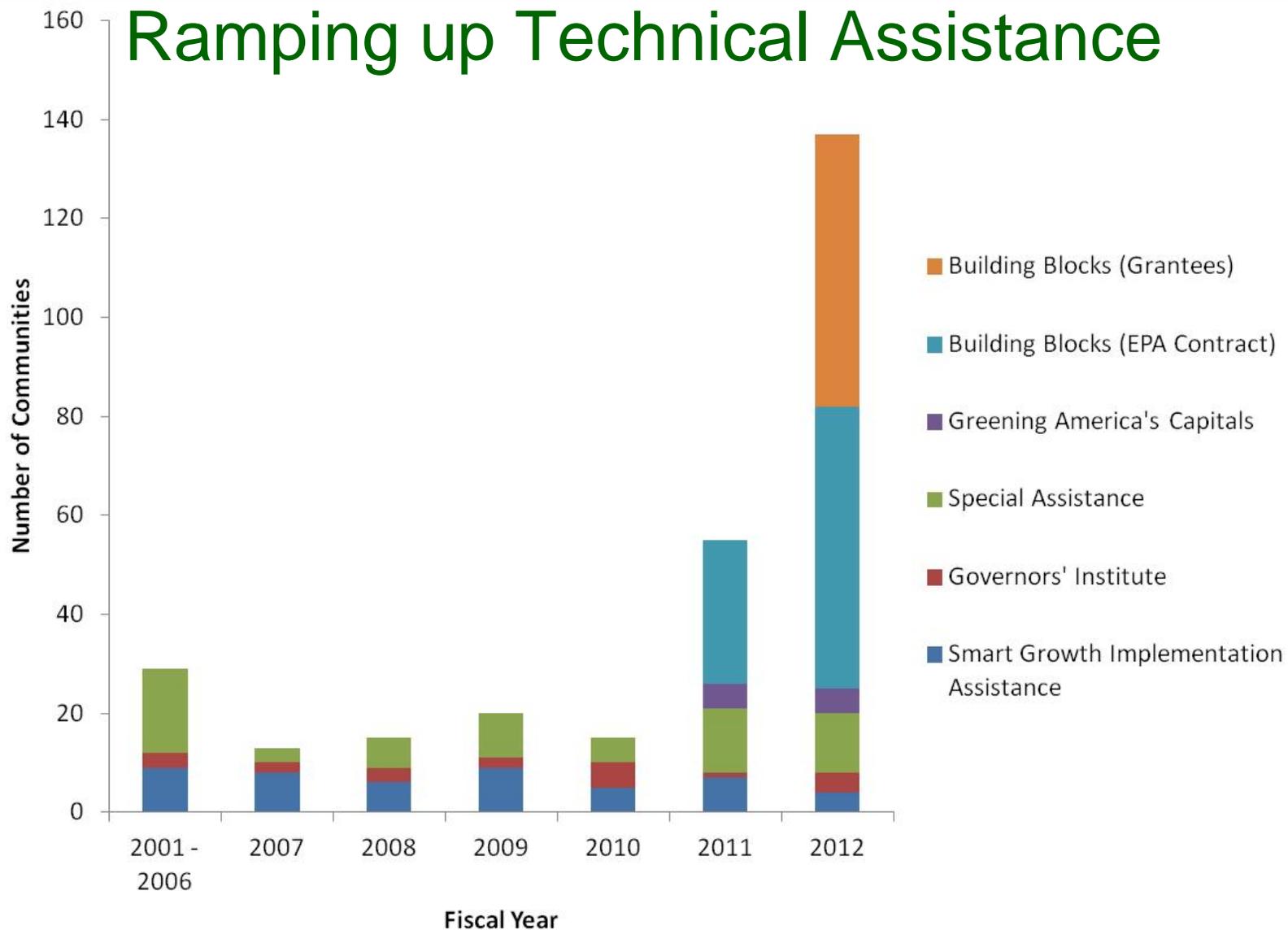
Helping the Willing

- Technical assistance to state and local governments – more than 50% of OSC's FY12 and FY13 work plans.
 - Cutting-edge issues (SGIA)
 - State policy changes (GICD)
 - High-visibility demo projects (GAC)
 - Tools to overcome common barriers (BB)



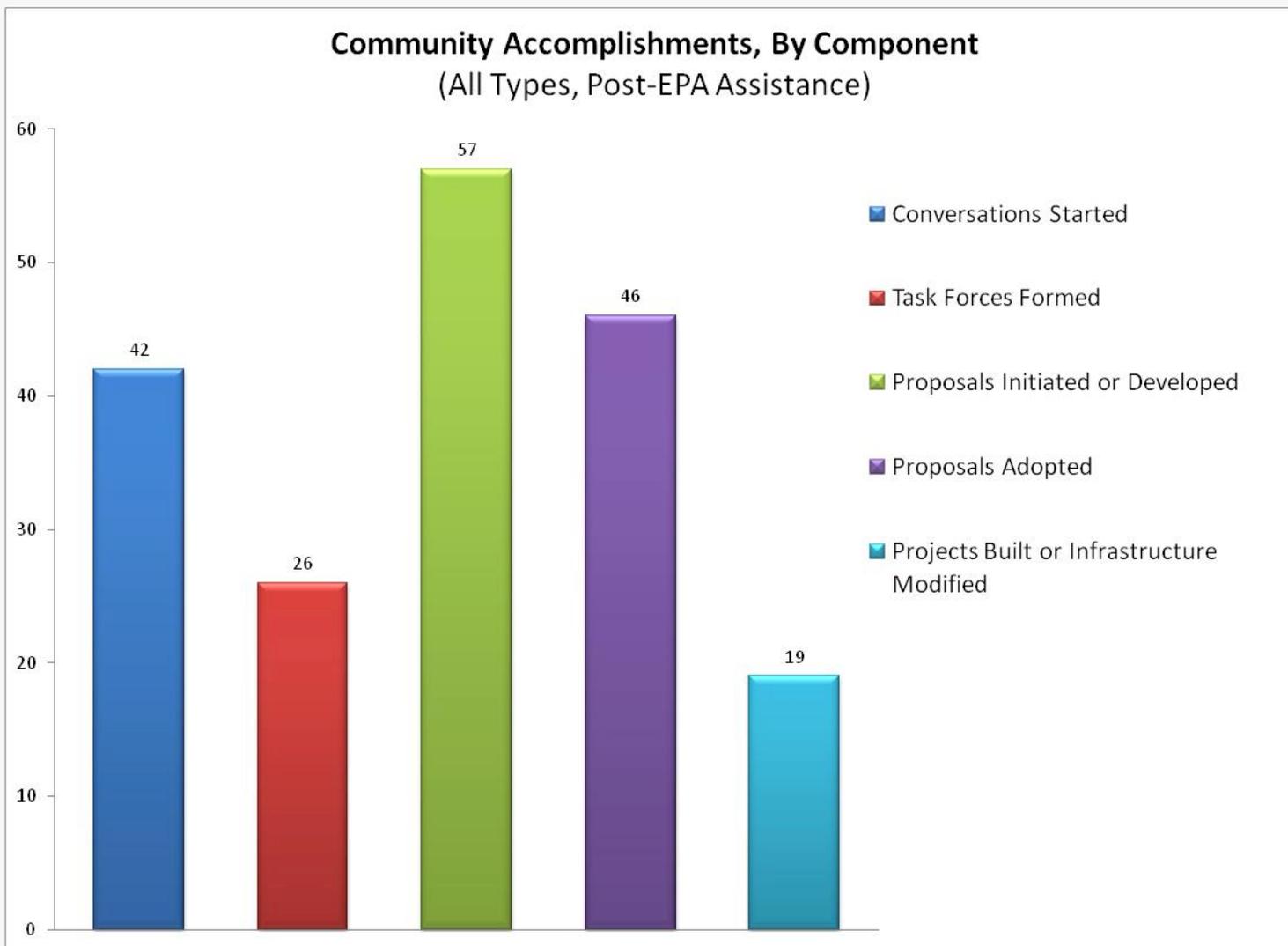


Ramping up Technical Assistance

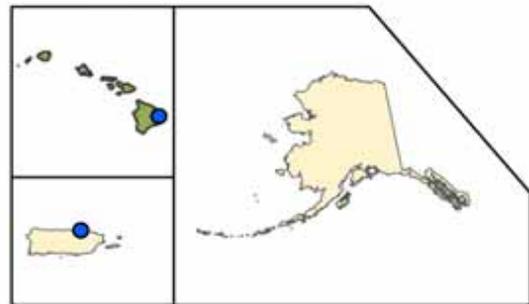
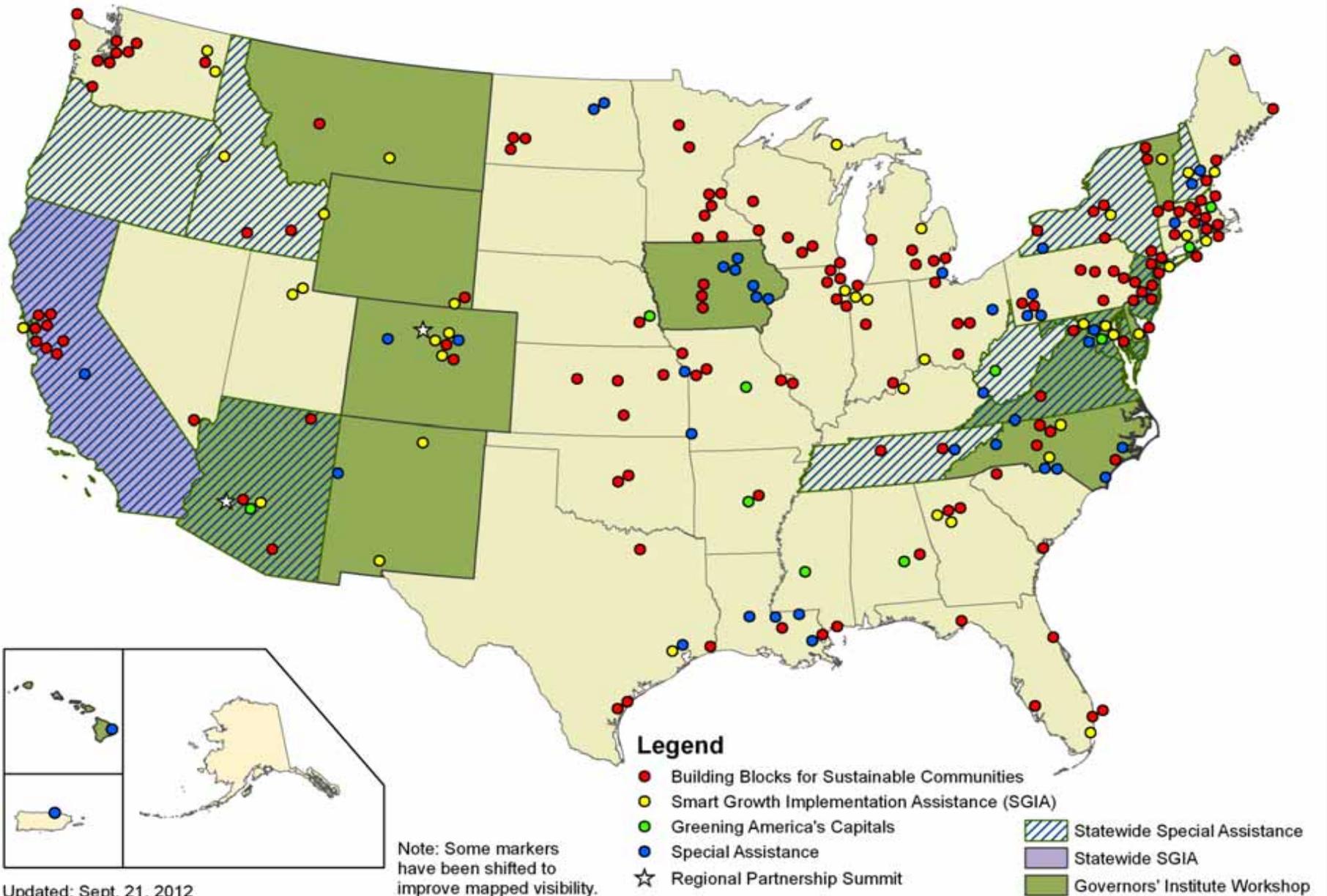




Results from Technical Assistance



OSC Technical Assistance and Workshops 2005 - 2012



Updated: Sept. 21, 2012



Partnership for Sustainable Communities



Livability Principles

1. Provide more transportation choices
2. Promote equitable, affordable housing
3. Enhance economic competitiveness
4. Support existing communities
5. Coordinate policies and leverage investment
6. Value communities and neighborhoods





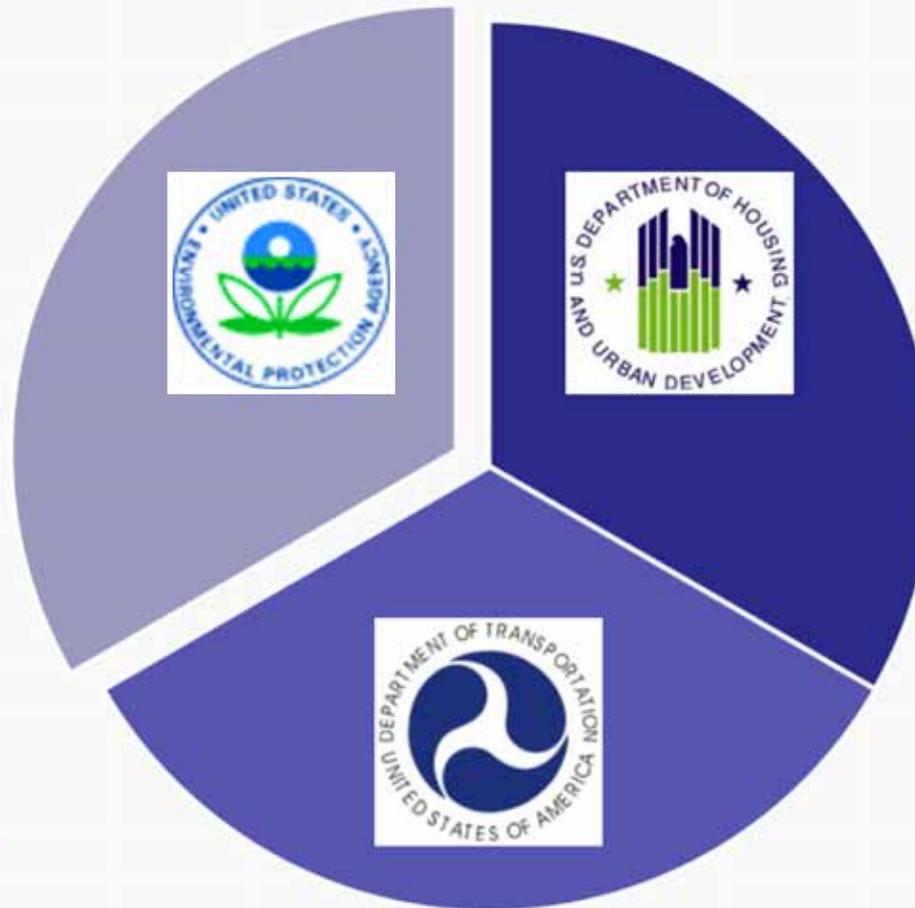
Roles in the Partnership

Environmental Protection Agency

- Brownfields Restoration
- Smart Growth Technical Assistance
- Water Infrastructure Funds
- Green Infrastructure
- Urban Waters

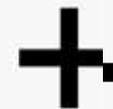
Department of Transportation

- TIGER Grants
- FTA Programs
- FHWA Flex Funding
- United We Ride
- FHWA Livability Efforts
- State/Metro Planning
- Railroad Infrastructure



Housing and Urban Development

- Community Development Block Grants
- Regional Planning Grants
- Municipal Challenge Grants
- Affordable Housing Programs



Department of Agriculture

- Rural Development



Embedding Partnership Principles in Federal Agencies

- Within EPA – Water, Brownfields, OEJ
- HUD – Multifamily housing on cleaned-up brownfield sites
- DOT – Tiger grant criteria, transit , high speed rail
- USDA – Rural development
- FEMA – Hazard mitigation and post-disaster recovery
- GSA – Criteria for siting federal facilities
- NOAA – New approaches to coastal development

- Alignment and Reciprocity



Five Forces Affecting Future Growth and Development



1. Population growth
2. Aging population
3. Climate changes
4. Energy costs and resources
5. International economic competition



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