The Case for Improving Community Resilience—Everyone Benefits

Community resilience is a topic of growing concern around the country as challenges from many sources are impacting our communities. These include economic, weather, environmental and other disasters that may cause upheaval in a local economy, present city long term survival issues or create health challenges. The concept of “resilience” refers to the ability to recover from upsets from various sources. Resilience is one element that enables a community to sustain itself—remain vibrant and growing—into the future. Some communities have found it difficult to overcome the loss of the single major employer in their areas, substantial damage from tornadoes or changes due to demographics, and are now only a remnant of their former selves.

In a November 2012 National Academy of Sciences report focused specifically on disaster resilience, a central point was made—all of us should work toward community resilience, rather than just the emergency agencies or our leaders. And, if all Americans take responsibility for our individual and collective resilience, the benefits will extend beyond our ability to recover from hurricanes or tornadoes. An example of this was provided through a discussion of the Cedar Rapids, IA flooding that took place in 2008. Because Cedar Rapids had worked on a collective response to emergency circumstances—holding practice events, ensuring communications compatibility and widespread awareness of challenges for hospitals, making emergency response vehicles and access roads available—the community withstood loss of life and experienced fewer impacts from the flooding. They were able to recover their community’s equilibrium much more quickly.

Addressing flooding potential, the need for economic diversity, changes due to new transportation options (e.g., highways, rail lines), the need for a broader range of housing as demographics change, the potential for more teleworking through broadband installation enabling people to work from anywhere—all these attract business, younger residents, new types of investments, at the same time as they enhance resilience. These community assets also provide more opportunities and incentives for families to relocate to a city or for their children to stay once they reach adulthood. Many smaller communities are finding that they cannot retain their population as younger people move to work in urban areas. Establishing some of these components of resilience may encourage business growth from more diverse sources and help attract well educated, well-paid workers. Other contributors to resilience include parks and green space, more energy efficient buildings, more walkable and bikeable roadways. These contribute to the attractiveness of a community to business investments and new residents who will add to a community’s strength and resilience. Think more broadly!
Green infrastructure (GI) is an environmentally enhancing approach to management of rainfall and stormwater runoff. Through the use of natural or manmade systems that imitate natural processes, GI approaches enable water to infiltrate deeper into the soil, be absorbed and evaporated by plants, or recycled, reducing the use of drinking water (and the cost to purify it) to water lawns and gardens.

Green infrastructure approaches can offer real quality of life benefits to communities and neighborhoods, as well, as more parks, trees, landscaping or vegetated ponds are used to treat rain and stormwater, instead of it going into gutters, sewers or directly into streams that become polluted in the process. In addition, if the rainwater or stormwater is treated properly, it can be used as graywater in toilet systems. A number of communities in arid or rain deficient areas of Arizona and Florida are saving large amounts of expensive drinking water to irrigate golf courses and lawns, and in toilets by using treated stormwater.

Many southeastern communities, including Atlanta; Beaufort, SC; New Bern, NC; and Montgomery, AL are considering how to invest in green infrastructure to alleviate flooding that can occur from even typical summer cloudbursts in low-lying areas or those with clay-based soils. The other benefits of using more green infrastructure in the form of parks or roadway enhancements are that: they provide neighborhoods and business districts with cool retreats during summer heat, offer places to experience nature, and improve appearances over gray infrastructure (curbs, gutters, sewers).

Green infrastructure can also be less costly to build and maintain than gray infrastructure (see graph below). For example, in a subdivision in Sherwood, AR, the developer made the following design adjustments and saved 15% on his costs: traffic calming devices were used and street width was reduced; natural drainage areas were preserved and buffered by planted greenbelts; trees were kept close to curbs. These practices reduced development costs, resulted in higher sales prices for lots, and allowed for 17 additional lots on the same land. The developer made $2.2M more in profit, while enhancing the environment and the quality of life for residents.

The agencies that comprise the Partnership for Sustainable Communities—HUD, EPA and DOT—outlined their priorities for 2013 earlier this year. There are four key areas:

- Establish the linkage between community sustainability activities and job growth
- Enhance state and local capacity to facilitate more sustainable outcomes
- Improve the effectiveness and efficiency of our investments in place-making and economic stability
- Strengthen the ability of agencies’ Regional staff to act as key points of contacts for communities and improve collaboration among agencies

Points one and three are being supported by research papers that focus on the economic basis supporting investments in smart growth and sustainability. These are available at: www.epa.gov/smartgrowth.

As the focus of the Partnership shifts somewhat from funding large scale planning to helping communities work on focused efforts and implementation, establishing stronger relationships among federal staff and local communities is even more important. For a list of inter-agency contacts for Region 4, contact Anne Keller at: keller.anne@epa.gov.

HUD Louisville Field Office Director Krista Mills joined Mayor Greg Fischer, Congressman John Yarmuth, Louisville Metro Housing Authority (LMHA) Executive Director Tim Barry and a host of other officials and the public for the groundbreaking of the HUD HOPE VI project Sheppard Square. Once complete, there will be 454 new units including single family homes, townhouses and apartment buildings, which will be available by 2015. The entire development, from reusing demolition materials to ensuring that the project is LEED certified, focuses on ways to make the most of energy efficiency. There will even be electric charging stations that look like parking meters for residents’ vehicles. LMHA will start with two stations and install the infrastructure to add more. The LMHA’s maintenance vehicles, which are similar to golf carts, will be electric.

"The Louisville Metro Housing Authority leads our community in the development of livable homes and neighborhoods. In addition to using energy efficient construction methods, LMHA also addresses water conservation through its landscaping and paving infrastructure, as well as ensuring healthy indoor air quality by using materials that do not have chemicals in them," said Krista Mills, Field Office Director. She added, "HUD is proud to be a partner with an innovative developer like LMHA."

This is the third public housing neighborhood development undertaken by the Louisville Metro Housing Authority that will revitalize an important part of our community and provide mixed-income housing. Previous developments include nationally renowned Park DuValle and Liberty Green.
Since its earliest introduction post-Katrina, FEMA has been implementing a new approach to disaster recovery through the National Disaster Response Framework (Framework). The Framework provides a common understanding of roles, responsibilities and resources available for effective recovery. Six teams, called “Recovery Support Functions (RSF),” are organized to promote federal agency collaboration with states, tribes and communities to prepare for, respond to and recover from disasters. Led by the Federal Disaster Recovery Coordinator (FDRC), the RSF teams are comprised of a suite of federal agencies whose programs and expertise support a spectrum of recovery resources and technical assistance. Each RSF team has a Primary Agency (ies) and several supporting agencies that collaborate, both pre-disaster and in the Joint Field Office, to provide relevant input as states, tribes and communities develop recovery plans. The NDRF provides a flexible and scalable approach that can help communities experiencing small or large disasters. Building on the existing Emergency Support Functions (ESFs), the National Disaster Response Framework promotes community resilience in the long term recovery planning process. For more information see: [http://www.fema.gov/national-disaster-recovery-framework](http://www.fema.gov/national-disaster-recovery-framework).

**HRSA Interested in Green Infrastructure and Brownfields**

The Health Resources and Services Administration (HRSA), an HHS agency, plays a key role in funding the construction and operation of community health centers. While HRSA has been involved in the Partnership for Sustainable Communities here in Region 4 for about two years, the agency has recently expressed interest in a new topic: the use of Green Infrastructure (GI) in construction of health centers to improve stormwater management and add greenspace. As a result, Deputy Regional Administrator Natalie Perry organized discussions with HHS, HRSA, EPA and others about how their programs could facilitate the use of GI in new construction or even renovations. HHS has a group of architects and facilities managers who are very knowledgeable about the benefits of GI, and are motivated to assist any Primary Care Association (PCA) and its grantees on the topic. The PCAs present in each state consist of doctors and others who support community health and represent the Federally Qualified Health Centers funded through HRSA. These facilities can influence and educate communities and patients about smart growth in general, and GI, as an example. In addition, HRSA is working with PCAs to consider the benefits of building facilities on brownfields within communities. In so doing, the agency is fostering another smart growth principle—reusing properties that already have infrastructure such as sewer, water and electric connections, to revitalize communities and reduce costs.

**FEMA Hires Coordinators for National Disaster Response Efforts**

Each FEMA Region now has staff who will work before, during and after disasters strike to facilitate and coordinate sustainable recovery outcomes. In Region 4, these staff are Bob Haywood, Federal Disaster Recovery Coordinator; and Benjamin Alexander, Community Planning and Capacity Building Coordinator. Their roles enable them to engage federal, state, tribal and other regional agencies pre-disaster, build relationships and knowledge of relevant programs among agencies, and work toward more fruitful collaboration on post-disaster community engagement. FEMA has already benefitted from this organizational structure during the follow-up to Hurricane Sandy. Region 4 Partnership agencies are now working with Benjamin on non-disaster activities that are laying the groundwork for future success.
HUD Updates

Greenville, South Carolina’s sustainability initiatives, funded by HUD and DOT, are serving as a model for transportation options, infill and neighborhood development for a number of communities, including High Point, North Carolina and Macon, Georgia. The HUD- and DOT-funded Community Challenge project, “Connections”, is spearheading citywide planning updates that include housing, transit, and transit-oriented development. The contractor, Annett, Muldrow and Associates (AMA), is creating a detailed scoping document/map/transect that shows the overlay of Bus Rapid Transit into an existing corridor. When the document is completed, “Connections” staff will convene a meeting with the railroad right-of-way owner, Greenville County Economic Development Corporation, to solicit feedback and develop a formal agreement. “Connections” staff are currently developing the Green Craft Challenge, an initiative for the promotion of waste reduction, resource conservation and sustainable practices at a local elementary school. The grantee is convening a meeting with the West Greenville, West End, Southside and citywide neighborhood associations to also develop a community engagement plan. “Connections” staff are designing a project website, delivering a series of webinars, and developing a project newsletter.

USDA Updates

Agriculture Undersecretary for Rural Development Dallas Tonsager in March announced that USDA is accepting applications for funding to establish health care cooperatives and other health care projects to address needs in the Delta region. The United States Department of Agriculture remains focused on carrying out its mission, despite a time of significant budget uncertainty. The announcement highlights one part of the Department’s efforts to strengthen the rural economy.

These health care-related grants, which were authorized under the 2008 Farm Bill, are intended to help communities with up to 50,000 inhabitants address unmet health needs. Eligible applicants include consortiums or groups of regional institutions of higher education, health and research institutes, and economic development entities located in the Delta Region, which is comprised of 252 counties and parishes of the states of Alabama, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee.

The minimum grant award is $50,000. Funds may be used to develop health care cooperatives, services, educational programs and job training programs. For more information about how to apply for these grants, please see page 18308 of the March 26, 2013 edition of the Federal Register or by clicking here http://www.gpo.gov/fdsys/pkg/FR-2013-03-26/html/2013-06896.htm. Applications are due May 28, 2013.

USDA is working with the Partnership agencies in many locations and further our efforts in more rural communities.
The Community Livability for the East Alabama Region (CLEAR Plan 2030) is an action project working to connect jobs, housing, and transportation for the betterment of everyone in the Region through the development of an “umbrella” document. This document will contain several highly aligned elements including an economic and workforce development strategy, affordable/fair housing plan, transportation plan, water/sewer infrastructure inventory, and sidewalk inventory. These plans will coordinate with one another and contradicting elements will be eliminated to present a unified vision for the region. Funded by HUD in 2010 as part of the Partnership for Sustainable Communities, the project is focused on a 10-county (see map), largely rural area of Alabama around Anniston. The CLEAR Plan 2030 work is organized through six (6) Livability Resource Teams: (1) Transportation, (2) Housing, (3) Economic Competitiveness, (4) Community Engagement Policy, (5) Education, (6) Health. And the public is incorporated into every step of the project. Robin Caler and Ashley Myers Lead the project for the EARPDC.

EPA News and Updates

ORD Selects Two Region 4 Projects for Research

The EPA Office of Research and Development selected for funding a health-related research proposal prepared by Region 4 Environmental Justice staff and another on the development of indicators of sustainability that were submitted by Region 4 sustainability staff.

A Health Impact Assessment will be conducted in the Proctor Creek area of southwest Atlanta, to evaluate the benefits of employing green infrastructure and other approaches to resolve persistent flooding and associated community impacts there. This project will include assistance from ORD in Cincinnati, the Georgia Health Policy Center at Georgia State University, the Fulton County Health Department, CDC, the City of Atlanta and EPA Regional Staff. Contact Tami Thomas-Burton @ 404-562-8027 for further information.

The project to develop community-relevant indicators of sustainability will be conducted on a national basis with support from ORD in Gulf Breeze, FL, staff from EPA Regions 1, 2, 4 and 7. This project responds to requests from communities that participated in the ORD Listening Sessions in 2011 for help on indicators that make sense to on-the-ground local staff and communities. For further information, contact Anne Keller at 404-562-9237.
About a year ago, the City of Atlanta and U.S. DOT kicked off the start of the Atlanta Street Car Project, a Tiger II PSC project that will build a 2.6 mile long route connecting key locations in downtown Atlanta with the historic Sweet Auburn and Martin Luther King districts. Re-routing underground utilities delayed the project, but it is now on track for completion in Spring 2014. The Street Car will wind past the Georgia Aquarium, World of Coca Cola, CNN Center and the Martin Luther King Historic District, connecting with MARTA and eventually with the Atlanta Beltline, providing a multi-modal transportation system for the area. Through the Beltline, riders will be able to travel from downtown to a large area served by the latter project once it is completed in about 10 years. Mayor Reed of Atlanta and the U.S. DOT envision the investment of $47M by the federal government and $26M by the City and Atlanta Downtown Investment District will stimulate a new boom in mixed use development that will bring more residents to the area and generate business for restaurants, stores and entertainment spots. This type of development has revitalized many cities that went through a loss of business as residents moved elsewhere.