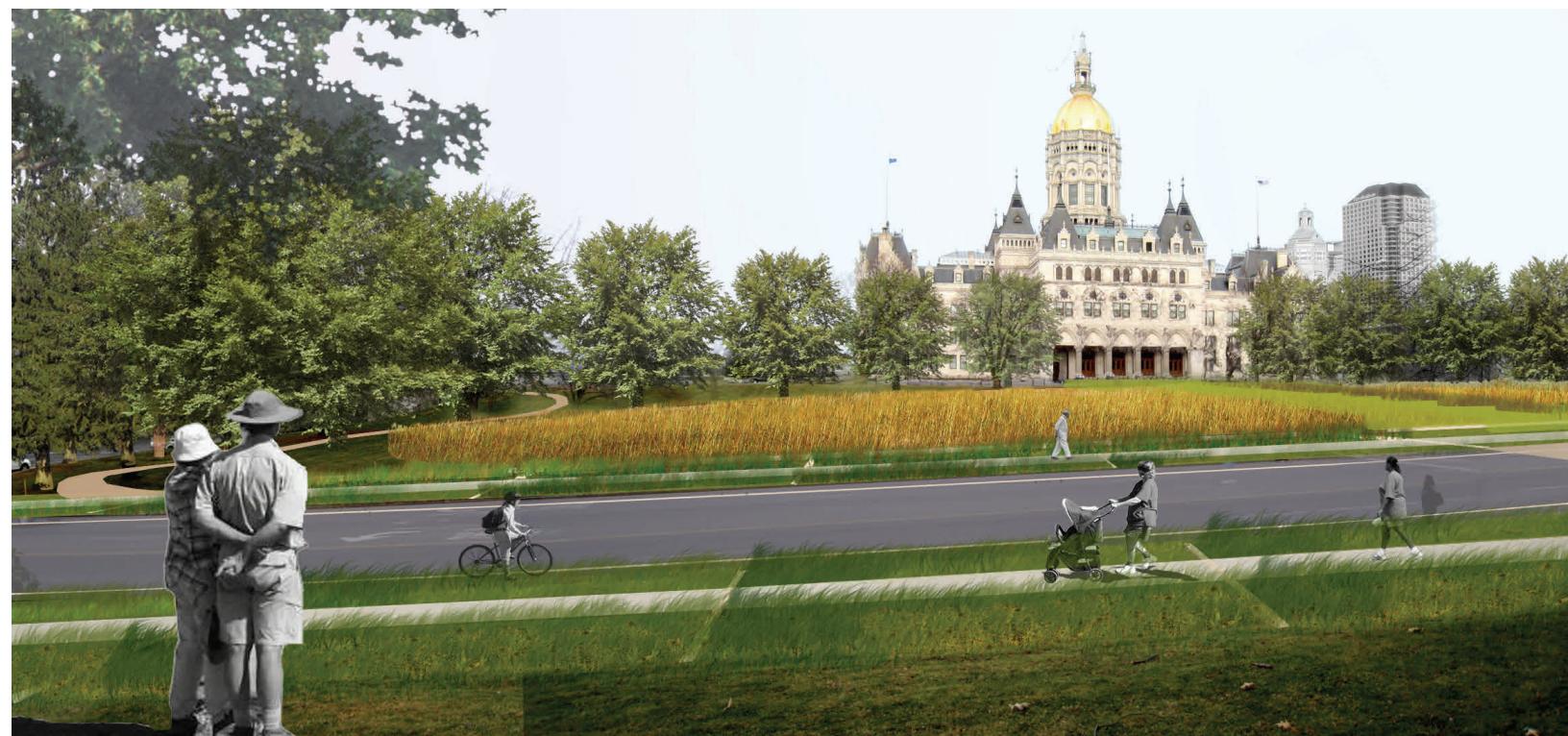


US EPA ARCHIVE DOCUMENT



# LESSONS FROM GREENING AMERICA'S CAPITALS PROJECTS

FIVE HELPFUL HINTS FOR COMMUNITIES WANTING TO BE GREENER

*Cover image: View of Connecticut State Capitol with native grass meadow and rain gardens. Image courtesy of Nelson Byrd Woltz.*

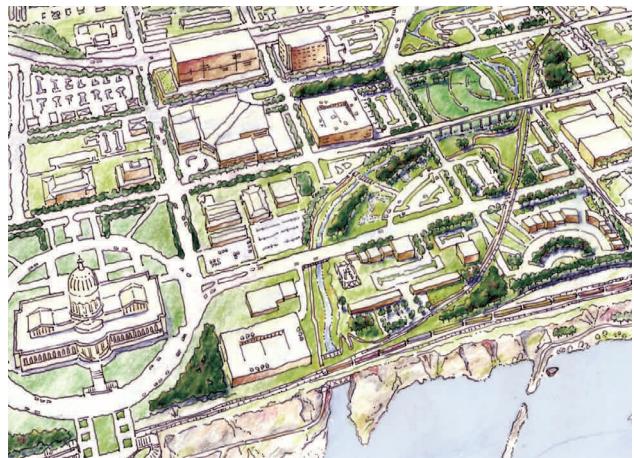
Greening America's Capitals helps state capitals develop an implementable vision of distinctive, environmentally friendly neighborhoods that incorporate innovative green infrastructure strategies. EPA provides this design assistance to state capital cities selected through a competitive process, and hires a team of designers to help each city with a particular design problem. The design team develops a set of options that the cities can pursue. The cities benefit from collaboration among EPA, the U.S. Department of Housing and Urban Development (HUD), the U.S. Department of Transportation (DOT), and other agencies through the HUD-DOT-EPA Partnership for Sustainable Communities. This pamphlet describes five lessons from the first two rounds of projects that can help all communities incorporate green design strategies into their planning and development. As these capital city projects demonstrate, green, sustainable design can create and enhance interesting, distinctive neighborhoods that have multiple social, economic, and environmental benefits. These solutions can also help communities improve streets to accommodate bicyclists and pedestrians as well as drivers, encourage new economic development, prepare for climate change, build on local history, and create a sense of place.

Full reports of individual projects are available at:

[www.epa.gov/smartgrowth/greencapitals.htm](http://www.epa.gov/smartgrowth/greencapitals.htm)

## 1. Make a Vision and Make It Visual

The city leaders who applied for design assistance knew that their project areas suffered from poor public perceptions: people thought of City Hall Plaza in Boston as barren and wind-swept, Slack Plaza in Charleston as dangerous, and Main Street in Little Rock as empty. By illustrating a new vision of the site, the design teams enabled each community to develop new perceptions of the place, see the potential, react to it, and energize implementation efforts. In public workshops, the design team altered the concepts and images in response to lively discussions. The input from the workshops helped the design team create a vision that could give the city and its residents an opportunity to redefine and reclaim a central place in their community. Developing a clear vision that the community can build on required having the right mix of people at the table. The mix included decision-makers, neighborhood and business associations, planning and development professionals, city maintenance staff, funders (often from city departments and federal and state agencies), and most importantly, the residents of these neighborhoods.



Courtesy of BNIM

*The design concept for Jefferson City creates a vision for the Millbottom area that includes a greenway along Wears Creek, retrofitted surface parking lots retrofitted with green infrastructure elements, and parking garages with shops and restaurants on the first floor to create a more vibrant neighborhood.*



Courtesy of Origin4Design

*The design concept for Slack Plaza in Charleston with defined paths for better pedestrian access, landscaped areas to collect runoff and increase shade, and public art creates a vision for an otherwise under-used public space.*

## 2. Achieve Multiple Goals with “Greening”

Design options for all the capital cities provided environmental benefits by adding things commonly thought of as “green” such as trees and rain gardens, community benefits by creating new transportation options and gathering places for residents and visitors, and economic benefits by encouraging private investment in the local economy. Stormwater management was one environmental concern shared by all the capital cities. In several cities, the design options included curbside rain gardens and permeable paving to collect and filter runoff from streets and roofs. The gardens would have the added benefit of making the street more attractive and safer for pedestrians by buffering them from moving cars, which could bring new life to the street and attract private investment. Reducing paved surfaces and adding trees could reduce the heat island effect—the increase in ambient air temperature caused by radiant heat from dark, paved surfaces—which would make walking more comfortable and could decrease nearby buildings’ air-conditioning needs.



Courtesy of Vireo

*The design concept for Klein’s Corner in Lincoln’s South Capitol neighborhood includes narrowing driving lanes to widen the sidewalk and adding rain gardens to collect runoff. The concept is a good example of how a community can address two goals for greening at once—making walking more enjoyable and cleaning stormwater.*

## 3. Connect People and Places

All the capital cities had issues with barriers in their cities that were both physical and psychological. The design options created helped overcome these barriers and reconnect the area being studied with the large community. For example, business owners in several of the cities wanted better pedestrian and bike access to attract more customers. In Hartford, restaurants are just a few blocks from thousands of office workers, but people perceived the sidewalks as barren and crosswalks as unsafe, which kept potential customers away. The design team developed options to make the streets more attractive and walkable. In Little Rock, an interstate highway divides an emerging, vibrant arts neighborhood from the rest of downtown. One design option incorporated shade structures into the bridge over the highway to make pedestrians more comfortable. In Jefferson City, a design option showed how a degraded creek could become a bike and pedestrian greenway between neighborhoods and a planned park along the Missouri River. Creating a greenway would not only connect people to the river, but also connect people to the creek itself that has otherwise been thought of as an overgrown, unattractive hazard. Connecting people with transit was a goal in Boston, Charleston, and Washington, D.C. Design options offered these cities ideas for improving the plazas in front of the transit facilities and nearby street intersections, making the walk to the stations more appealing.



Courtesy of BNIM

*The design concept in Jefferson City widens a creek channel and includes a trail that connects residents and visitors with the Missouri River and other bike and walking paths. The option also includes an amphitheater that adds green space to accommodate periodic flooding.*



Courtesy of 2D Studio

*A segment of the Selma to Montgomery Trail passes beneath a freeway interchange. The design concept adds lighting, signs, and greenery to make the trail more attractive and safer for pedestrians and bicyclists.*

## 4. Invest in the Spaces You Already Have

All the cities wanted to make the most of existing public spaces such as streets, alleys, plazas, and parking lots. Design options for Hartford, Little Rock, Lincoln, and Jackson emphasized how streets and alleys could become more appealing public gathering spaces by adding more plants, trees, and seating. Design options for Boston and Charleston explored major redesigns for plazas that many residents saw as unattractive and uninviting. Both of these plazas are almost entirely paved and have few trees, increasing both stormwater runoff and the heat island effect. In Hartford, the design options included reusing part of a parking lot by consolidating some parking stalls to free up space for a park that would enhance the street. In Phoenix, some on-street parking spaces could be replaced with outdoor seating for restaurants or rain gardens. In Jefferson City, the design option would remove parking stalls that flood almost every year to widen the Wears Creek corridor and provide more space for recreation. The design concept for the surrounding neighborhood includes building more parking garages for workers and converting historic buildings into shops, restaurants, and lofts.



Courtesy of Origin4Design

*The design concept for revitalizing an existing walkway in Charleston includes outdoor seating for nearby restaurants and public art and greenery to make it more attractive.*



Courtesy of PLAN\*et

*The design concept for Grand Avenue in Phoenix includes restaurant seating that replaces two on-street parking spaces.*

## 5. Seek a Variety of Funding Sources

All the design options had to meet multiple objectives and surmount an array of challenges. But because the design options addressed multiple issues, such as stormwater management, pedestrian improvements, economic revitalization, public health, and urban forestry, the communities could seek different funding sources for the same design options by framing them differently. For example, the city of Little Rock received a stormwater management grant from the Arkansas Resources Commission and an Our Town grant from the National Endowment of the Arts by tying its streetscape improvement to an overall commercial revitalization strategy. Charleston received a grant from the U. S. Department of Transportation to improve Slack Plaza and connecting walkways. Enhancing public spaces in lower-income neighborhoods, such as Frog Hollow in Hartford or Anacostia in Washington, D.C., could be the right fit for private foundation funding while also being eligible for stormwater management funding. Finally, the private sector can be an important player in implementation. If a city makes a commitment to improve a sidewalk, the abutting property or business owners might be willing to contribute money to further enhance their “front door.” The result can be a “virtuous cycle” where the street attracts more visitors, which attracts more businesses, which culminate in an environmentally sustainable and enjoyable place to be.



Courtesy of Nelson Byrd Woltz

*Since the design team’s visit to Little Rock, the city has been very successful at attracting more businesses to Main Street by promoting the design vision that includes rain gardens.*



Courtesy of Parker Rodriguez

*The design concept for Howard Road in Washington, D.C. illustrates improved sidewalks and permeable paving to absorb runoff, both of which have a variety of funding sources.*

