

2020 Town Hall Series: SITES

The second convening of GBCI's Inaugural Town Hall Series, focused on the Sustainable SITES Initiative, brought together members of the landscape architect community and outdoor industries to learn about the most innovative SITES projects and those who are raising the bar throughout the world.

Danielle Pieranunzi, SITES Program Manager, provided an overview of the initiative and reflected on some of the incredible milestones the program has achieved thus far. Mahesh Ramanujam, GBCI President & CEO, stressed the contribution that sustainable and resilient landscapes have on human health and the environment.

Program Highlights

The [Sustainable SITES Initiative](#) (SITES®) is the most comprehensive program for designing, developing and maintaining sustainable landscapes and outdoor spaces. Land is a crucial component of the built environment and, when properly utilized, can protect and enhance the benefits we derive from healthy functioning landscapes. SITES helps to create ecologically resilient communities and benefits the environment, property owners, and local and regional communities and economies.



Administered by GBCI, SITES is a complement to the [LEED](#) green building rating system. SITES addresses the market's need for a way to quantify and rate the sustainable use and performance of landscapes and other outdoor spaces. SITES sets guidelines for creating healthy functioning landscapes, such as cleaning air, controlling flooding, providing habitat, improving water quality, fostering community resilience and improving human health and well-being. SITES is used by landscape architects, engineers, architects, developers and policy makers to align land development and management with innovative sustainable design.

The SITES framework was initially developed through a collaborative, interdisciplinary effort of the American Society of Landscape Architects (ASLA), the Lady Bird Johnson Wildflower Center at The University of Texas at Austin and the U.S. Botanic Garden. The SITES program was acquired by GBCI in 2015, and now has been adopted worldwide, with registered and certified projects from New York to Los Angeles to Vancouver to Hong Kong.

SITES allows projects to benchmark against performance criteria that protect and restore

ecosystem services and support green business practices. The four overarching goals of the rating system are to create regenerative systems and foster resiliency; ensure future resource supply and mitigate climate change; transform the market through design, development and maintenance practices; and enhance human wellbeing and strengthen the community. Thank you to those of you who have helped to grow SITES into the program it is today. We still have a lot of room for expansion, and we encourage you to continue to help us ensure high performance landscapes.

Precertification: Recognizing Planned Projects

Acquiring a SITES certification is one of the best ways for project teams across the world to ensure that they are creating ecologically resilient communities that seamlessly integrate buildings with the natural environment. Earlier this year we announced that SITES now offers Precertification as an optional review pathway for all registered projects.

Precertification helps project teams and clients determine which credits and prerequisites their project is likely to achieve during the full review much earlier in the process. The formal precertification recognition helps to demonstrate commitment to site sustainability and resilience and allows projects to market the unique and valuable features of a project to attract community support, funders and even influence permitting in some localities.

To date, seven impressive projects have successfully precertified with SITES. These projects stretch across the world, including projects in the United States, China, Japan, and most recently, our first SITES project in South America.

The first precertified project in the United States is [Silver Bow Creek Conservation Area](#) in Butte, Montana.

As one of the country's largest Superfund sites, Silver Bow Creek is embarking on an enormous and exciting transformation. This project, approximately 200 acres in size, exemplifies what SITES is about – restoring function and vitality, regenerating life not only ecologically but within the local community by reconnecting people to nature through trails, interpretive and educational features, places for respite and social connection, and other outdoor opportunities.



Thanks to precertification, projects like Silver Bow Creek can ensure sustainability is embedded in the early phases of a project and have been given the opportunity to better pursue their SITES certifications. This has opened the door to more diverse and exciting projects that promise to expand the possibilities of what it means to be a sustainable site.

Cities Join the Cause

Using the SITES rating system, projects are planned, designed and developed in a way that protects and enhances the benefits people derive from healthy, functioning landscapes through practices such as, carbon storage, pollination and flood mitigation. Project teams across the world have used this system as a set of guiding principles to ensure that projects incorporate and optimize sustainability, health and resilience from the outset. SITES certification has been achieved by commercial, educational, residential and mixed-use projects, among others. Recently a new stakeholder begun to take up the helm of sustainable sites: cities.



As the first municipality to formally adopt SITES, the City of Atlanta has been a leader at large-scale SITES implementation. This includes formal SITES adoption for all newly designed parks that are part of the Atlanta BeltLine Inc., one of the most comprehensive urban design efforts to date.

The Atlanta BeltLine will ultimately connect 45 in town neighborhoods through 11 nodes within a 22-mile loop of multi-use trails, light rail transit, and parks—all based on abandoned railroad corridors that encircle Atlanta. SITES registered and certified projects in Atlanta include, Boulevard Crossing Park, Enota park, Grant Park Gateway and Westside Park Phases 1 and 2.

Serving as an effective SITES advocate; landscape architect Kevin Burke was the key individual who promoted SITES to ensure greater sustainability in the multi-year Atlanta BeltLine Inc (ABI). As the Beltline's Director of Design and principal landscape architect, Kevin has over thirty-five years of professional experience on a range of institutional, roadway, college and university, residential, and park projects.

The City of Atlanta stands as a shining example of how municipal adoption of SITES can foster positive sustainable change. We encourage other municipalities across the United States and the world to follow Atlanta's example, helping to bring sustainable sites to their communities.

A Market Leader

Sometimes, a project is so groundbreaking that it surpasses the existing standards of what it means to build green. The Center for Sustainable Landscapes (CSL) at the Phipps' Conservatory and Botanical Gardens in Pittsburgh, Pennsylvania was one such project. CSL clearly demonstrates leadership in not only its sector, but also sustainable design at large. Considered one of the greenest projects in the world, it is the first and only projects to have successfully achieved LEED Platinum, SITS v2 Platinum, WELL Platinum, Living Building Challenge and BREEAM Outstanding In-Use Building.



The CSL site is nothing short of an ecological rebirth. Built over a previously documented brownfield, this site essentially had no existing natural land covers or ecosystems to preserve or protect. The site can now manage a 95th percentile storm event using soil and vegetation-based systems and features 1.5 acres of new green space with over 100

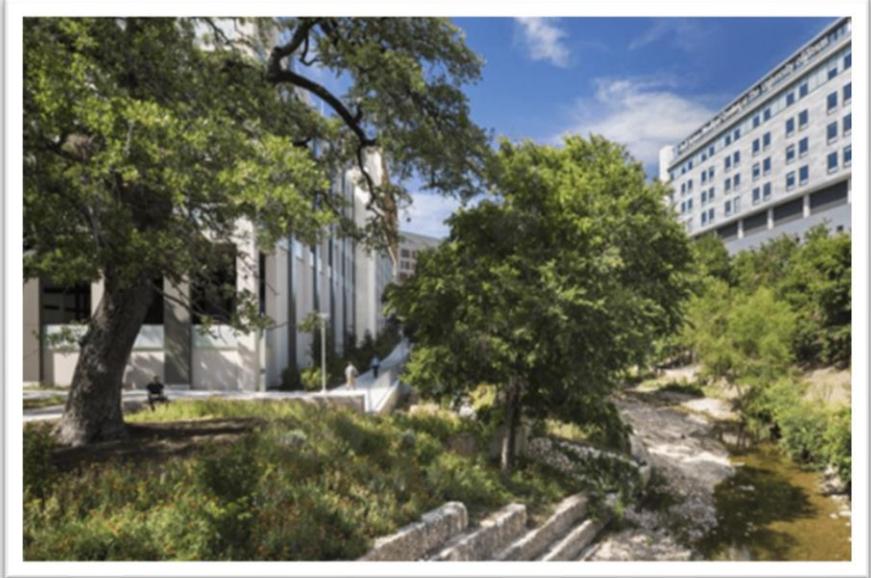
native plant species. The biodiverse plantings provide food, shelter and nesting opportunities to endemic wildlife and help link the site's landscape to neighboring 450-acre Schenley Park.

Central to the CSL landscape is a 4,000 square foot lagoon that is fed by conservatory roof runoff and populated with native fish and turtles. The CSL is also net-zero water treating all storm and sanitary water captured on-site, and net-zero energy generating its own energy through photovoltaic solar panels and a wind turbine. These features of the CSL landscape are open to the public, providing opportunities to promote sustainability awareness through educational programming and interpretive elements as part of a garden experience visited by more than half a million people annually.

Creating A Resilient Landscape

A site determines what can be built where, and directly informs the decision-making of the project team. A well-designed site improves the overall sustainability efforts of a building project and can even increase its value by reducing urban heat island effects, creating cleaner water, controlling erosion, reducing flooding, and much more. A good site can allow a building to be more sustainable, but a good building can also help to make the site itself more sustainable. At the University of Texas in Austin, landscape architects, ecologists, architects, engineers and site managers have done just this, using the power of construction to make their sites work for the community and the planet.

The Dell Medical School and its teaching hospital, Dell Seton Medical Center, are part of a 16.2-acre development located in central Austin on the University of Texas campus. The completion of this project in November 2017, provided green spaces around the building and along Waller creek that have become an urban oasis, providing environmental and human health benefits to students, educators, patients, and the greater community.



Running directly through the middle of The Dell Medical School is Waller creek, a previously neglected urban stream that played an integral role in influencing design efforts. One of the key elements of the project's design focused on improving the ecological function of the creek corridor. Prior to construction, approximately 70 percent of the vegetative canopy along the creek was comprised of invasive species. The process for restoring the creek was an 18-month process that included the removal of invasive species, stream bank stabilization and the re-vegetation of diverse native plant communities. Formal planting areas around the buildings prioritized the usage of native vegetation which helped reduce irrigation by over 75 percent.

Through careful design and planning, The Dell Medical District accomplished a sustainable and resilient environment that reduced outdoor water use, restored 100 percent of the native plant communities along the riparian corridor, conserved and utilized native plants, reused salvaged plants, leveraged recycled content for 28 percent of the materials cost and restored 3,318 cubic yards of soil.

Stormwater management features were designed as site amenities to provide visitors with a connection to the local climate and hydrology. Using a combination of rain gardens, pervious pavers, rainwater harvesting, and a green roof, the project manages the 80th percentile rainfall event or approximately 46,939 cubic feet of water. Thanks to Dell Medical School's efforts, their site is now more ecologically beneficial, resilient, and is an accessible amenity for the community. The Dell Medical District now stands as a model for high performance projects that integrate buildings and the landscape in a meaningful, functional and beautiful way.

Speakers



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