
Micro, Mega and Macro: Designing Landscapes of Urban Change

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Introduction

Cities across the United States, in an effort to maintain competitiveness and address broader economic, ecological or social issues, are investing in innovative planning and design. This paper provides an overview of three recent U.S.-based projects representing a range of scales where landscape is leading this charge as a powerful urban catalyst – from the two-acre temporary landscape dubbed the Lawn on D in Downtown Boston, to the newly opened Chicago Riverwalk expansion, to a regional strategy to address land loss on the Gulf Coast. In each case, the urban context, the planning and design strategy and the project’s projected or actual impacts are described.

Whether at the scale of an urban infill site (MICRO), a district (MEGA), or of a region (MACRO), these projects demonstrate the potential of open space and infrastructural improvements to increase urban liveability, connectivity, and environmental and economic health.

MICRO: The Lawn on D

At the outset of this project, the Massachusetts Convention Center Authority’s (MCCA) strategic plan anticipated a major expansion of the Boston Convention & Exhibition Center (BCEC). Planning for the expansion – which aimed to allow Boston to compete for top tier conventions – included enlarging the facility itself in addition to creating a new urban district with lodgings, parking garages, and supporting retail along the adjacent D Street corridor. D Street was until recently a bleak and under-used landscape composed mostly of vacant lots, aged industrial buildings, and surface parking.

An urban design team, including this author, helped the MCCA shape a vision for D Street and its future development. The MCCA and design team collaborated with the surrounding community to conceive of the Lawn on D as a flexible, vibrant, and temporary open space that would be an “early arrival” on D Street, setting the tone for civic impact and expressing the ambitions of the new district. The design team was re-commissioned later as landscape architect of the Lawn on D.

This new district sits between a number of diverse Boston neighborhoods – including South Boston, the Innovation District, the Fort Point and Channel Center neighborhoods. This new district aspires to be interactive, flexible, technologically-advanced, inspired by art and events, and inclusive of many constituents: residents, workers, conventioners, tourists. The Lawn on D demonstrates and pilots these ambitions. The lessons learned in the design, spatial configuration, and programming tested at the Lawn on D will eventually be deployed to a future event space that will anchor the new district along D Street.

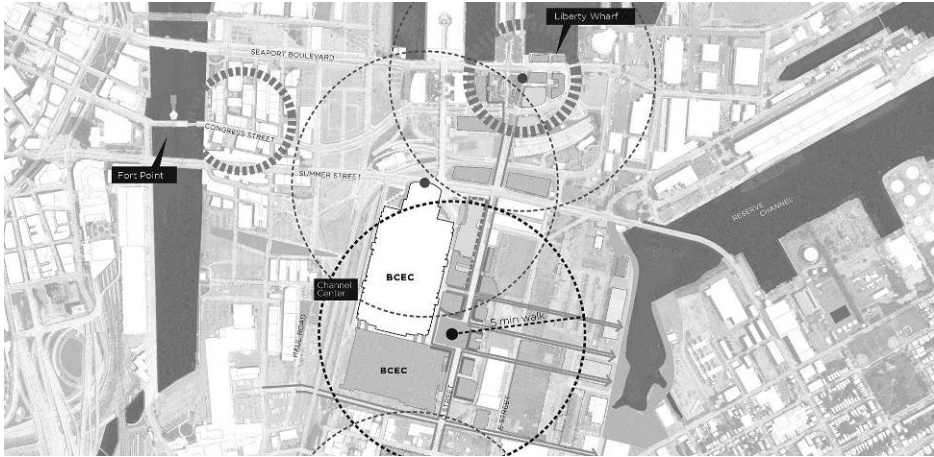


Figure 1. The urban context of the sites the Massachusetts Convention Center Authority (MCCA) oversee in South Boston

The 2.7-acre Lawn on D is conceived as a platform for innovation; an armature for infinite programming. It was designed for flexibility and ease of transformation. Knowing that the Lawn on D would operate for a quick 18 months, client and design team developed a low-cost, high-impact scheme. A construction budget under \$1.5 million was achieved by concentrating investment in a small and intimate area within the landscape (the plaza); making playful use of low-cost materials like painted asphalt; using unique furnishings and fixtures to set a playful, flexible tone; and focusing on elements which might ultimately be reused and thereby continue to exist beyond the 18-month landscape.

The Lawn on D is composed of two parts: the Plaza and the Lawn. The Plaza is a hub of activity for events. Its paths blaze trails from D Street to the side entrance of the Bcec. Its signature lights describe a right-sized space for gatherings; its bright, playful, movable furniture invites visitors to make the space their own.

The Lawn on D – sited where 4’ of urban fill used to block views and preclude access – plays host to art, temporary installations, music, furniture, and events. This space is a comfortable background to and incubator of strong design, hosting a range of shorter-term installations and projects.



Figure 2. The 2.7 acre Lawn on D is an experimental open space comprised of low-cost and temporary improvements and programming

In the brief time since its opening in August of 2014, the Lawn on D has set social media ablaze, won praise in the press, gained critical acclaim both locally and nationally, hit tops of “to do in Boston” lists, been embraced by its neighbors, enlivened the BCEC, and set a new standard of design excellence and civic performance for D Street. From the first selfie taken on its signature swing installation, Lawn on D has captivated young and old, tourists, and residents, and regulars and passing-through conventioners to its ongoing programming. Its successful programs have kept D Street alive and vibrant through the summer, fall, and even Boston’s snowiest winter on record.

With relatively modest investment, the micro-scaled Lawn on D has become a truly unique open space that sets a strong precedent and high bar for other projects that aspire to do a lot with a little. As an experimental space, it supports uses not usually considered in park programming and makes it a portal for public engagement and delight within Boston.

MEGA: The Chicago Riverwalk

The Main Branch of the Chicago River has a long and storied history that in many ways mirrors the development of Chicago itself. Once a meandering marshy stream, the river first became an engineered channel to support the

industrial transformation of the city. Following the famed reversal of the river, architect and urban planner Daniel Burnham introduced a new civic vision of riverside promenades with the addition of the Wacker Drive viaduct. Over the last decade, the role of the river has been evolving with the Chicago Riverwalk project—an initiative to reclaim the Chicago River for the ecological, recreational and economic benefit of the city.

To many, the goal of embracing the river as a recreational amenity seemed impossible years ago given the river's high levels of pollution. But slowly, that vision is becoming a reality. Recent improvements in river water quality have inspired increased public recreational and social use along the river, demanding new connections to the water's edge.

The Chicago Department of Transportation (CDOT) led the construction of the Chicago Riverwalk. In 2012, CDOT tasked its design team of Sasaki, Ross Barney Architects, Alfred Benesch & Co., and Jacobs Ryan Associates with creating a vision for the six blocks between State and Lake Streets. Building upon previous studies of the river, the team's plans provide a pedestrian connection along the river between the lake and the river's confluence.

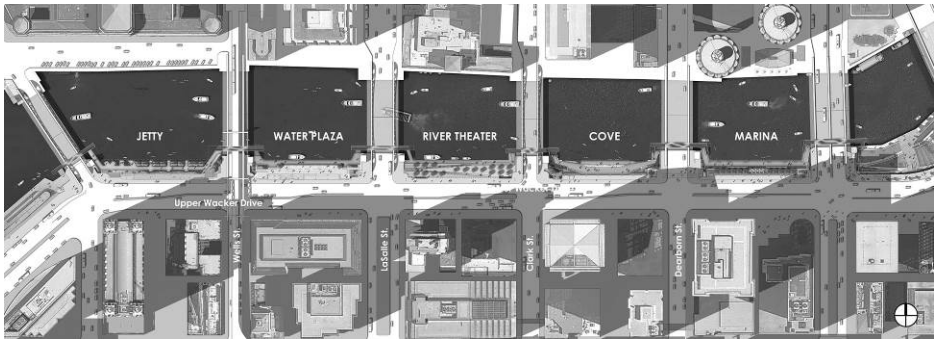


Figure 3. The recent phase of the Chicago Riverwalk stretches from State Street to Lake Street along the south side of the Chicago River

The task at hand was technically challenging. The design team, for instance, needed to work within a tight permit-mandated 25-foot-wide build-out area to expand the pedestrian program spaces and negotiate a series of under-bridge connections between blocks. Further, the design had to account for the river's annual flood of nearly seven vertical feet.

Turning these challenges into opportunities, the team imagined new ways of thinking about this linear park. Rather than a simple linear walkway along the six project blocks, the team conceived of the path as a connective system that,

through changes in its shape and form, would drive a series of new programmatic connections to the river. Each block takes on the form and program of a different river-based typology: The Marina Plaza, The Cove, The River Theater, The Water Plaza and The Jetty.



Figure 4. Opened in Summer of 2015, recently completely blocks provide continuous access along the river and distinct places for people

As a new connected path system, the Chicago Riverwalk design provides both continuity and variety for a park visitor. The distinct programs and forms of each typological space allow for diverse experiences on the river ranging from dining opportunities to expansive public event programming to new amenities for human-powered craft. At the same time, design materials, details, and repeated forms provide visual cohesion along the entire length of the project. All design elements were also designed to welcome flood events, allowing water to come up onto steps and walkways and to recede without damage.

At the mega scale, the Chicago Riverwalk provides access to the ecological and recreational resource of the river and creates connectivity, social spaces, and new economic development opportunities.

MACRO: Changing Course

For most of the Mississippi River Delta's history, its residents adapted to life within the natural ebbs and flows of the dynamic Delta. The channelization of the Mississippi River over the past century through dams, levees, and river structures has forced sediment to bypass the wetland landscapes it once

replenished, and valuable and protective wetlands are disappearing at the rate of one football field per day. With much of the land of the Delta less than three feet above sea level, the combination of continued sea level rise and land sinking threaten to submerge a large part of the delta in the next 50 to 150 years, putting its economy, ecology, and cultures at risk.

Changing Course, an initiative directed by leaders in Louisiana's civic, industrial, and academic communities along with national experts in coastal resiliency, engineering, and design, aimed to address these issues through an international design competition. Changing Course invited teams of the world's leading engineers, scientists, planners and designers to envision solutions that could achieve a self-sustaining Mississippi Delta ecosystem. Baird & Associates led an international, interdisciplinary team including Sasaki Associates, and created a master plan that outlines a strategic set of actions to protect and expand the incredibly rich heritage, ecologies, and economies of the Delta (Nairn et al., 2016).



Figure 5. The Changing Course competition aimed at finding innovative solutions to land loss in the Mississippi River Delta

For many people of the Delta, life is largely defined by the broader ecological context and deep social networks (Allen Dixon et al., 2015). This ecological context includes the waterways and wetlands that support the local economy, often through generations-long occupations including fishing, oystering, and rigging. The erosion of the lower Mississippi River Delta will increasingly

challenge this way of life. Most Delta ecologists agree, for example, that while the estuarine environments of the Delta continue to flourish today, a tipping point is coming where wetland loss will lead to a rapid decline in fish abundance. Rising sea levels could impact existing fisheries by changing the salinity levels in the Delta forcing the relocation of oyster operations. Strong social networks within this community make relocation a significant challenge, even in the face of increasing flooding, land loss, and ecological uncertainty. The plan considers many interconnected and complex challenges to preserve the community's way of life as it confronts environmental, technological, and social change.

To harnesses the full land-building potential of the Mississippi River, the team proposed the opening and management of new river mouths over time to receive and distribute the river's sediment, building land and wetlands where they have the best chance of success. The result will be a smaller yet more sustainable Deltaic landscape from Vermilion Bay to Mississippi Sound retaining the Delta region for generations and centuries to come.

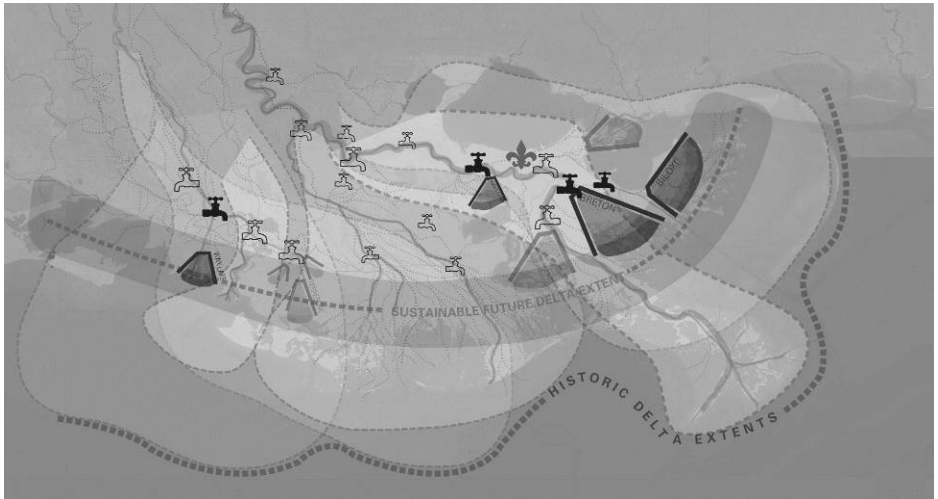


Figure 6. New river mouths, depicted here as faucet taps, enable the wetlands to harness the full land-building potential of the River

The proposed approach delivers immediate gains by reducing flood risk and related uncertainty for the Delta's people; opening significant opportunities for navigation and marine commerce; and helping maintain and expand its economies. To find an equitable balance between land building with the river and preservation of estuarine areas, the plan proposes to cycle delta building between separate basins across the Delta to mimic natural deltaic processes.

A key tenet of the plan is equity and transparency to empower the Delta's people with options and provide support. The successful deployment of the proposed approach requires incorporation of public knowledge and feedback into Delta decision-making, as well as collaboration with existing social organizations by providing policies, tools, and information.

At the macro scale, this Changing Course proposal demonstrates the capacity of large-scale landscape interventions to address significant environmental change, to provide greater resiliency to communities currently at risk, and generate new economic potential. Though not implemented yet, the Changing Course project is one of the most innovative and inclusive processes for large-scale landscape change – attempting to achieve the triple bottom line of environmental, economical, and sociological resiliency at the macro scale.

Conclusion

Many civic leaders and communities around the United States and the world understand that urban centers are key to long-term sustainability and improved urban liveability. To this end, this paper offers an overview of three projects that address broader environmental, economic and social challenges through highly contextual and ambitious design in three cities across the United States – Boston, Chicago, and New Orleans. Despite significant differences in geography and scale of intervention – a site, district, and a region – the projects share the common denominator of the landscape as a powerful tool for addressing change and improving urban living.

References

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