

Project Accelerator Report



CITY OF NEW ORLEANS

Assessing Green Streets for New Orleans

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Introduction

The City of New Orleans applied to the WaterNow Alliance Project Accelerator in June 2019 for support in creating a road map to develop a green streets ordinance. As part of the City's efforts to address flooding challenges, their goal was to establish a systematic approach for incorporating green infrastructure into all street construction and redevelopment projects and to prioritize nature-based, distributed systems in the City's efforts to address flooding challenges.

Background

New Orleans faces many prominent environmental shocks, typically in the form of severe storms or

hurricanes and flooding events. Impacts from these events are exacerbated by the presence of cumulative physical stresses, including land subsidence and coastal wetland loss, and social stresses, like poor economic, educational, and health outcomes among vulnerable populations. The City has adopted several ordinances and policies which work in tandem to reduce flooding by encouraging the use of green stormwater infrastructure, increasing storage and filtration of stormwater runoff prior to discharge to the City's Municipal Separate Storm Sewer System (MS4), and maximizing the benefit of roadways and public spaces through dynamic projects that address multiple issues. The City engaged with WaterNow in order to better understand which of their codes, ordinances, and policies pertain to green infrastructure, convene stakeholders to identify existing gaps and challenges, and craft proposals to improve performance and increase the implementation of green infrastructure in public right-of-ways.

Project Approach

To kick off the project, WaterNow conducted a comprehensive review of New Orleans' existing

Code of Ordinances to identify potential gaps that could be addressed with a green streets ordinance – a review that produced a list of 70 City ordinances that are relevant to, or likely to intersect with, a green streets ordinance. We provided recommendations for updates and revisions that would help incorporate green streets requirements into the City's code, beyond stormwater requirements, to either remove potential barriers or create incentives for green infrastructure deployment. For example, we recommended updating the stormwater code to require, rather than simply authorize, the use of permeable pavement in connection with new or rehabilitated roadwork. Similarly, we found that the current code contained an express prohibition against “impeding” the flow of stormwater into a storm drain or gutter (originally to limit potential flood risks). However, that provision could be a barrier to GSI, and so we recommended a revision this to authorize purposeful slowing of stormwater for GSI implementation purposes.

WaterNow also reviewed green streets ordinances and programs nationwide to identify common targets and terminology, design-storm standards

and best management practices, and methodical approaches to implementation. We focused particularly on examples offering metrics and performance indicators to help New Orleans City staff evaluate the design and benefits of a green streets ordinance. We found 14 U.S. cities with comprehensive green streets programs. Through interviews and other research, two key takeaways emerged:

1. Establishing a plan and funding source for ongoing operations and maintenance is critical to green streets success, and
2. Strong local political leadership to champion the program is key to overcoming roadblocks and maintaining momentum.

We worked with several nationally prominent green stormwater infrastructure practitioners to pinpoint the key elements of a “gold standard” green streets program based on the 14 programs currently underway. These experts confirmed that the programs in our review represent some of the best work being done in this space, and that, while a universal standard would be difficult to promulgate given the specific local needs and



Rendering from Waggoner & Ball Architects

and goals each program must address, collectively these programs suggest a number of key elements for a “gold standard” program:

1. Deep community engagement upfront
2. Commitment to surface practices that create local co-benefits, and
3. Mechanism to support ongoing maintenance and associated workforce development

WaterNow also convened two stakeholder meetings in New Orleans to solicit feedback that will inform the City's ordinance including City political leadership and department staff cutting across various silos, local nonprofits, designers, landscape architects, and engineers. The three primary takeaways from the stakeholder meetings include:

1. A successful green streets program in New Orleans will require a high level of interagency coordination due to overlapping jurisdictions and responsibilities where green stormwater

infrastructure projects would be installed in the public right-of-way.

2. Community engagement should begin early and should be proactive to clearly convey the benefits of green stormwater infrastructure to the residents and businesses in the neighborhoods where projects will be built.
3. The green streets ordinance should be designed to provide certainty around project design and performance while also allowing for innovation and adaptive management so that the City can learn and adjust as the program is implemented.

As a result of the stakeholder meetings, City staff plans to form a Green Streets Task Force to lead the charge on next steps. This Task Force will help the City break down interagency siloes while also engaging community stakeholders in program development.

Project Outcome

This project has put New Orleans on the path to creating a cutting edge green streets program to install green infrastructure in the City's public right-of-ways. This will help address urban flooding, not only in a performance-based manner, but also in a way that will ensure those projects are properly operated and maintained, bring multiple benefits to the community, and are part of the City's commitment to build complete, livable streets.

WaterNow's final report recommending achievable action items aimed at moving New Orleans' ordinance development process forward will serve as the foundation and road map for Green Streets Task Force. This collaborative project has helped the City create momentum needed to turn the community's desire to prioritize green infrastructure solutions to urban flooding into codified city policy and ultimately on-the-ground projects citywide.

