

Street Design Manual

**New York City
Department of Transportation**

**2015
Updated Second Edition**



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Foreword from the Commissioner

I am pleased to present this updated Second Edition of the New York City Street Design Manual, which has become an essential reference for agencies, designers, engineers, and consultants working on our City streets and public spaces. Since its original release in 2009 and its republishing in 2013, the way we think about and design streets has progressed. DOT is working hard to make New York more sustainable, through major efforts like the citywide transition to LED lighting and the expansion of planted areas on medians in our roadways. Superstorm Sandy reinforced the importance of a resilient transportation network, and DOT has been working with its partner agencies to implement best practices. And through both his Vision Zero initiative and emphasis on equity, Mayor de Blasio has focused on the need to make the City's streets safer and more accessible for all New Yorkers, regardless of neighborhood or ability. This update to the Second Edition reflects many of these changes in street design.

As the population grows, it has become increasingly evident that the way we design our streets determines how people interact in our City. When we build spaces that make people of all ability levels feel comfortable and encourage people not only to move through, but to stay, we create a more vibrant public realm, with safety, health and economic benefits for all. Since 2013, DOT has refined some of the treatments featured in the Second Edition of the Street Design Manual. For example, the design of the award-winning CityBench was changed to make it easier to use for older New Yorkers, and public space designs now take into consideration navigation by people with impaired vision.

The lessons from Superstorm Sandy are clear: our street network will impact how the City withstands the next major storm surge—and how quickly it bounces back once it passes. Consideration of resiliency must be integral to our planning process. We must plan for water levels twenty years from now, and build green infrastructure that can absorb and store storm runoff to ease the stress on our sewer systems. As resiliency design measures develop, the Street Design Manual will be a critical resource in bringing them together.

This update continues the Manual's record as a living document. By the time you read this, DOT, our partner agencies, and industry professionals will be working toward publishing a Third Edition of the Manual in 2017—building on the strengths of previous versions and bringing together the latest successes and standards into a playbook ready for a rapidly changing future.

Like our City, the Manual is continuously evolving to serve the needs of our many communities in smarter, stronger and more effective ways.



Polly Trottenberg
Commissioner

Preface

This Updated Second Edition of the *Street Design Manual* infuses the document with a new emphasis on two critical principles, universal design and resiliency, and transmits the latest findings and standards on a broad range of street design elements and processes. It is a digital re-release; pages with new information are noted on the DOT webpage for the *Manual* (www.nyc.gov/html/dot/html/pedestrians/streetsdesignmanual.shtml), and can be substituted directly into existing copies. Where feasible, DOT recommends saving the paper and referring directly to the digital document.

The update includes new content, based on feedback from users and comprehensive inter- and intra-agency review. Highlights include:

- Expanded focus on considerations and design practices related to universal design principles in chapter introductions and design treatments
- Additional content on resiliency measures in capital project origination section, chapter introductions and design treatments
- Revised Lighting Chapter representing citywide shift to LED streetlights and the adoption of the BUG rating system
- Updated Landscape Chapter reflecting evolution in the city's stormwater management practices since 2013

The following agencies participated in the creation of the *Manual's* Updated Second Edition: the Departments of Design and Construction (DDC), City Planning (DCP), Environmental Protection (DEP), Parks and Recreation (DPR), and Buildings (DOB), as well as the Economic Development Corporation (EDC), the Landmarks Preservation Commission (LPC), the Public Design Commission (PDC), and the Mayor's Office.

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DCAS

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DCP

New York City Department of City Planning

DDC

New York City Department of Design and Construction

DEC

New York State Department of Environmental Conservation

DEP

New York City Department of Environmental Protection

DOB

New York City Department of Buildings

DOHMH

New York City Department of Health and Mental Hygiene

DoITT

New York City Department of Information Technology and Telecommunications

DOT / NYC DOT

New York City Department of Transportation

DPR

New York City Department of Parks and Recreation

DSNY

New York City Department of Sanitation

EDC

New York City Economic Development Corporation

FDNY

New York City Fire Department

FEMA

Federal Emergency Management Agency

FHWA

Federal Highway Administration

LPC

New York City Landmarks Preservation Commission

MOPD

Mayor's Office for People with Disabilities

MOS

Mayor's Office of Sustainability

MTA

Metropolitan Transportation Authority

NYCT

New York City Transit, an MTA agency

NYPD

New York City Police Department

NYS DOT

New York State Department of Transportation

OCPD

Mayor's Office of Capital Project Development

OMB

Mayor's Office of Management and Budget

ORR

Mayor's Office of Recovery and Resiliency

PDC

New York City Public Design Commission

SAPO

The Street Activity Permit Office within the New York City Office of Citywide Event Coordination and Management

SBS

New York City Department of Small Business Services

US ACE

US Army Corps of Engineers

US DOT

US Department of Transportation