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# Glossary

## Common Terms

# A

### **AASHTO (American Association of State Highway Transportation Officials)**

A nonprofit, nonpartisan association representing highway and transportation departments in the fifty states, the District of Columbia, and Puerto Rico, representing all five transportation modes—air, highways, public transportation, rail, and water. AASHTO publishes numerous design guidance publications, including *A Policy on Geometric Design of Highways and Streets* (“Green Book”). [www.transportation.org/?siteid=37&pageid=310](http://www.transportation.org/?siteid=37&pageid=310)

### **Accessibility**

The design of facilities and public Rights-of-Way that is easy, safe, and intuitive to use for people with disabilities. Accessible environments provide for a person's ability to independently navigate the space.

### **ADA (Americans with Disabilities Act)**

The Americans with Disabilities Act gives civil rights protections to individuals with disabilities, similar to those rights provided to individuals on the basis of race, color, sex, national origin, age, and religion. It guarantees equal opportunity for individuals with disabilities in public accommodations, employment, transportation, state and local government services, and telecommunications. [www.ada.gov](http://www.ada.gov)

### **ADT (Average Daily Traffic)**

The average number of vehicles to pass a certain point or use a certain roadway per day. Sometimes referred to as VPD (Vehicles Per Day), this is the calculation of the total traffic volume during a given time (in whole days) divided by the number of days in that period. (AASHTO: *A Policy on Geometric Design of Highways and Streets*)

### **Albedo (Pavement Albedo)**

Albedo is the ability of a surface material to reflect incident solar (short wave) radiation. It is expressed on a scale of 0 to 1, where a value of 0.0 indicates that a surface absorbs all solar radiation and an albedo value of 1.0 represents total reflectivity. Light-colored surfaces generally have higher albedos than dark-colored surfaces. Pavements with lower albedo absorb more sunlight and get hotter. Pavements with higher albedo absorb less sunlight and are therefore cooler, mitigating the urban heat island effect [www.epa.gov/heatisland/resources/faq.html#7](http://www.epa.gov/heatisland/resources/faq.html#7). Conventional asphalt has an albedo in the range 0.04 to 0.12, while concrete has an albedo of around 0.5. (*High Performance Infrastructure Guidelines*) Reflectance is also measured using Solar Reflectance Index (SRI) values.

### **Arterial Street**

The part of the roadway system serving as the principal network of through-traffic flow. The routes connect areas of principal traffic generation and important rural highways entering the cities. (*Institute of Traffic Engineers Traffic Engineering Handbook*)

# B

## Bicycle

Every two- or three-wheeled device upon which a person or persons may ride, propelled by human power through a belt, a chain, or gears, with such wheels in a tandem or tricycle, except that it shall not include such a device having solid tires and intended for use only on a sidewalk by pre-teenage children. (New York State Vehicle and Traffic Law, Title 1, Article 1, Section 102 and Rules of the City of New York, Title 34, Chapter 4, Section 4-01(b))

## Bicycle Facilities

A general term denoting improvements and provisions made by public agencies to accommodate or encourage bicycling, including parking and storage facilities, and shared roadways not specifically designated for bicycle use. (AASHTO: *A Policy on Geometric Design of Highways and Streets*)

## Bicycle Lane/Bike Lane

A portion of the roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicycles. (New York State Vehicle and Traffic Law, Title 1, Article 1, Section 102-a)

## Bicycle Path/Bike Path

A path physically separated from motorized vehicle traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way and which is intended for the use of bicycles. (New York State Vehicle and Traffic Law, Title 1, Article 1, Section 102-b)

## Bicycle Route/Bike Route

A bikeway designated by the jurisdiction having authority with appropriate directional and informational route markers, with or without specific bicycle route numbers. Bike routes should establish a continuous routing, but may be a combination of any and all types of bikeways. (AASHTO: *Guide for the Development of Bicycle Facilities*) In New York City, bike routes are set forth in the New York City Cycling Map and come in three main categories: Bicycle Path, Class 1 (bridge, park, or separated on-street path); Bicycle Lane, Class 2 (on-street striped route); and Bicycle Route, Class 3 (on-street signed route).

## BID

### (Business Improvement District)

A not-for-profit corporation made up of property owners and commercial tenants who are dedicated to promoting business development and improving an area's quality of life. BIDs deliver supplemental services such as sanitation and maintenance, public safety and visitor services, marketing and promotional programs, capital improvements, and beautification for the area—all funded by a special assessment paid by property owners within the district. [www.ci.nyc.ny.us/html/sbs/html/neighborhood/bid.shtml](http://www.ci.nyc.ny.us/html/sbs/html/neighborhood/bid.shtml)

## Bikeway

A generic term for any road, street, path, or way which in some manner is specifically designated for bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes. (AASHTO: *Guide for the Development of Bicycle Facilities*)

## Bioswale

A depressed, planted area designed to convey, capture, and filter stormwater runoff and increase rainwater infiltration. These systems are linear. The term “street swale” is used throughout this Manual. (*Florida Field Guide to Low Impact Development: buildgreen.ufl.edu/Fact\_sheet\_Bioswales\_Vegetated\_Swales.pdf*)

## BMP (Best Management Practices)

Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage, or leaks, sludge or waste disposal, or drainage from raw material storage. [www.epa.gov/npdes/pubs/cgp\\_appendixa.pdf](http://www.epa.gov/npdes/pubs/cgp_appendixa.pdf)

## BRT (Bus Rapid Transit)

A flexible, high-performance rapid transit mode that combines a variety of physical, operating, and system elements into a permanently integrated system with a quality image and unique identity. (Levinson et al., *Bus Rapid Transit: Implementation Guidelines, TCRP Report 90-Volume II*)

## BRT (Bus Rapid Transit) Route

A road designed to improve the speed, reliability, and overall attractiveness of bus service, and that carries bus lines designated as “Select Bus Service” by MTA NYCT/MTA Bus and/or other services identified as BRT. This also includes roads that are designated for BRT service in the future, through the BRT Master Plan or other planning documents.

# C

## BUG (Backlight, Uplight, Glare) Rating

The BUG rating system, describes the types of stray light escaping from an outdoor lighting luminaire. The BUG system was developed by the Illuminating Engineering Society (IES) to make comparing and evaluating outdoor luminaires fast, easy and more complete than older systems [www.aal.net/content/resources/files/BUG\\_rating.pdf](http://www.aal.net/content/resources/files/BUG_rating.pdf)

## Bus

Every motor vehicle having a seating capacity of more than fifteen adults, in addition to the operator, and used for the transportation of persons, and every charter bus, interstate bus, intrastate bus, school bus, and sight-seeing bus, regardless of seating capacity. (Rules of the City of New York, Title 34, Chapter 4, Section 4-01(b))

## Bus Route

A street that carries one or more regularly scheduled local, commuter, or intercity bus lines running on a published schedule.

## Busway

A physically separated lane reserved for bus traffic.

## Capital Project

**A.** A project that provides for the construction, reconstruction, acquisition, or installation of a physical public betterment or improvement that would be classified as a capital asset under generally accepted accounting principles for municipalities, or any preliminary studies and surveys relative thereto, or any underwriting or other costs incurred in connection with the financing thereof;

**B.** The acquisition of property of a permanent nature, including wharf property;

**C.** The acquisition of any furnishings, machinery, apparatus, or equipment for any public betterment or improvement when such betterment or improvement is first constructed or acquired;

**D.** Any public betterment involving either a physical improvement or the acquisition of real property for a physical improvement consisting in, including, or affecting (1) streets and parks, (2) bridges and tunnels, (3) receiving basins, inlets, and sewers, including intercepting sewers, plants or structures for the treatment, disposal or filtration of sewage, including grit chambers, sewer tunnels, and all necessary accessories thereof, or (4) the fencing of vacant lots and the filling of sunken lots;

**E.** Any other project allowed to be financed by the local finance law, with the approval of the mayor and the comptroller;

**F.** Any combination of the above. (New York City Charter Section 210.1)

## Cast-in-Place

Term describing a paving material, such as concrete, that is poured into place on-site and set to harden

## CEQR (City Environmental Quality Review)

A process by which agencies of the City of New York review proposed discretionary actions to identify the effects those actions may have on the environment. CEQR is New York City's process for implementing SEQRA (New York State Environmental Quality Review Act), which requires that state and local governmental agencies assess environmental effects of discretionary actions before undertaking, funding, or approving such actions, unless they fall within certain statutory or regulatory exemptions from the requirements for review. [www.nyc.gov/html/oec/html/ceqr/ceqrfaq.shtml](http://www.nyc.gov/html/oec/html/ceqr/ceqrfaq.shtml)

## Channelization

The separation or regulation of conflicting traffic movements into definite paths of travel by traffic islands or pavement marking to facilitate the orderly movements of both vehicles and pedestrians. (AASHTO: *A Policy on Geometric Design of Highways and Streets*)

## Clear Path

A straight unobstructed path for pedestrian circulation on the sidewalk. (Rules of the City of New York, Title 34, Chapter 7, Section 7-06(c)(3)). (See also definition of clear path in DCA's rules and in the ADA.)

## Coefficient of Friction

A value between 0 and 1 representing the ratio of the force of resistance between the horizontal motion of a body or object and a surface to the force pushing the body or object down on that surface. Surfaces with lower values, such as ice, are more slippery, while surfaces with higher values, such as concrete, are less slippery.

**Collector Street**

The collector street system provides both land access and traffic circulation within residential, commercial, and industrial areas. It differs from the arterial system in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from the arterials through the area to the ultimate destination. Conversely, the collector street also collects traffic from local streets in residential neighborhoods and channels it into the arterial system. In the central business district, and in other areas of like development and traffic density, the collector system may include the street grid, which forms a logical entity for traffic circulation. (FHWA: *Functional Classification Guidelines*)

**Commercial District**

A commercial district, designated by the letter C (C1-2, C3, C4-7, for example), is a zoning district in which commercial uses are allowed and residential uses may also be permitted, as described in the Zoning Resolution of the City of New York. [www.nyc.gov/html/dcp/html/subcats/zoning.shtml](http://www.nyc.gov/html/dcp/html/subcats/zoning.shtml)

**Community Facilities**

As used in this manual, community facilities are elements of the streetscape that serve useful functions to street users beyond infrastructure and vehicular operations. Examples include street furniture (e.g., bike racks and newsstands), public and café seating, public art, and plantings. Their use is generally authorized through permits, revocable consents, and/or maintenance agreements.

**Concession**

A grant made by an agency for the private use of city-owned property for which the city receives compensation other than in the form of a fee to cover administrative costs, except that concessions shall not include franchises, revocable consents, and leases. (NYC Charter, Section 362(a); Rules of the City of New York, Title 12)

**Controlled-Access Highway**

Every highway, street, or roadway in respect to which owners or occupants of abutting lands and other persons have no legal right of access to or from the same except at such points only and in such manner as may be determined by the public authority having jurisdiction over such highway, street, or roadway.

(New York State Vehicle and Traffic Law, Title 1, Article 1, Section 109)

**Crosswalk**

**A.** That part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the highway between the curbs or, in the absence of curbs, between the edges of the traversable roadway;

**B.** Any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by lines or other markings on the surface. (New York State Vehicle and Traffic Law, Title 1, Article 1, Section 110)

**CSO (Combined Sewer Overflow)**

A discharge of excess wastewater from a combined sewer system (sewers that are designed to collect rainwater runoff, domestic sewage, and industrial wastewater in the same pipe) directly into nearby streams, rivers, or other water bodies during periods of heavy rainfall or snowmelt when the wastewater volume exceeds the capacity of the sewer system or treatment plant.

[cfpub.epa.gov/npdes/home.cfm?program\\_id=5](http://cfpub.epa.gov/npdes/home.cfm?program_id=5)

**Cut-Through Traffic**

Traffic using minor roadways, usually residential streets, as shortcuts to avoid congestion on major streets. (*U.S. Traffic Calming Manual*, American Planning Association, 2009)

**Curb**

A vertical or sloping member along the edge of a roadway clearly defining the pavement edge. (New York State Vehicle and Traffic Law, Title 1, Article 1, Section 111)

## D

### Design Speed

A selected speed used to determine the various geometric design features of the roadway. The assumed design speed should be a logical one with respect to the topography, anticipated operating speed, the adjacent land use, and the functional classification of highway. (AASHTO: *A Policy on Geometric Design of Highways and Streets*)

### Design Vehicle

Selected vehicles, with representative weight, dimensions, and operating characteristics, which are used to establish highway design controls for accommodating vehicles of designated classes. (AASHTO: *A Policy on Geometric Design of Highways and Streets*)

### Driver

Every person who operates or drives or is in actual physical control of a vehicle. (New York State Vehicle and Traffic Law, Title 1, Article 1, Section 113)

### Driveway

Every entrance or exit authorized pursuant to applicable law and used by vehicular traffic to or from lands or buildings abutting a highway. (Rules of the City of New York, Title 34, Chapter 4, Section 4-01(b))

## E

### Engineered Soil

A soil designed to achieve specific infiltration standards in a stormwater-capture installation.

## F

### Flag (sidewalk)

A flat slab of stone used as a paving material. (*American Heritage Dictionary of the English Language*, Fourth Edition)

### Franchise

A grant by an agency of a right to occupy or use the inalienable property of the city (usually, streets or sidewalks) to provide a public service. (NYC Charter, Section 362(b))

### Friction Coefficient

See "Coefficient of Friction"

### Furnishing Zone

A multi-purpose area of the roadside. It serves as a buffer between the pedestrian travel way and the vehicular area of the thoroughfare within the curbs, and it provides space for roadside appurtenances such as street trees, planting strips, street furniture, utility poles, sidewalk cafés, sign poles, signal and electrical cabinets, phone booths, fire hydrants, bicycle racks, and bus stop shelters. (Institute of Transportation Engineers, *Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities: An ITE Proposed Recommended Practice*)

# G

## Gateway

A combination of traffic-calming and visual measures used at the entrance to a low speed street to slow entering vehicles and discourage through-traffic.

## Green Book

See *A Policy on Geometric Design of Highways and Streets*.

## Green Infrastructure

An adaptable term used to describe an array of products, technologies, and practices that use natural systems—or engineered systems that mimic natural processes—to enhance overall environmental quality and provide utility services.

As a general principal, green infrastructure techniques use soils and vegetation to infiltrate, evapotranspire, and/or detain stormwater runoff. When used as components of a stormwater management system, green infrastructure practices such as green roofs, porous pavement, rain gardens, and vegetated swales can produce a variety of environmental benefits. In addition, to effectively retain and infiltrate rainfall, these technologies can simultaneously help filter air pollutants, reduce energy demands, mitigate urban heat islands, and sequester carbon while also providing communities with aesthetic and natural resource benefits. [water.epa.gov/infrastructure/greeninfrastructure/gi\\_what.cfm](http://water.epa.gov/infrastructure/greeninfrastructure/gi_what.cfm)

## Greenstreet

Paved traffic islands and medians converted into green spaces filled with shade trees, flowering trees, shrubs, and/or groundcover, pursuant to a program established in 1996 and as further referred to in a Master Agreement between DOT and DPR. Many of these installations are designed to capture street and sidewalk runoff to allow for stormwater infiltration, and are referred to as Stormwater Greenstreets. Both DPR and DEP currently construct Stormwater Greenstreets.

# H

## Highway

The entire width between the boundary lines of every way publicly maintained when any part thereof is open to the use of the public for purposes of vehicular travel. (New York State Vehicle and Traffic Law, Title 1, Article 1, Section 118)

## High Water Table

The highest level of the groundwater in a given area, taking into account seasonal and periodic storm event fluctuations. This level can vary throughout the boroughs, and needs to be taken into consideration when designing stormwater management practices/green infrastructure.

## Historic District

Any area which (1) contains improvements that have a special character or special historical or aesthetic interest or value; and represent one or more periods or styles of architecture typical of one or more eras in the history of the city; and cause such area, by reason of such factors, to constitute a distinct section of the city; and (2) has been designated as a historic district pursuant to Title 25 of the Administration Code of the City of New York. (Administrative Code of the City of New York, Title 25, Chapter 3, Section 25-302(h))

## Horizontal Deflection

The horizontal (sideways) movement of moving vehicles compelled through physical and/or visual changes to the roadway alignment, for example a bend in the road.

## HPS

A type of lamp which uses sodium gas to produce light. HPS lamps are being replaced by more-efficient LED lamps throughout the city. It is one of the most efficient sources of light.

**I****IESNA**

The Illuminating Engineering Society of North America is a professional organization of lighting engineers with a commitment to sharing their knowledge and expertise. IESNA has established recommended guidelines regarding levels of illumination for street and pedestrian lighting.

**Inclusive Design**

See Universal Design.

**Intersection**

The area contained within the grid created by extending the curblines of two or more streets at the point at which they cross each other. (Rules of the City of New York, Title 34, Chapter 2, Section 2-01)

**L****LED**

A light-emitting diode converts electricity to light through the movement of electrons. It does not have a filament and is more efficient than incandescent bulbs. It consumes less energy, is more compact, and lasts longer than traditional light sources.

**Limited Use Street**

A legally mapped street to be temporarily closed to motor vehicles by the Department of Transportation, in accordance with lawfully authorized signs or other traffic control devices. (Rules of the City of New York, Title 34, Chapter 4, Section 4-12(r)(4))

**Local Street**

The local street system comprises all facilities not on one of the higher systems. It serves primarily to provide direct access to abutting land and access to the higher order systems. It offers the lowest level of mobility and usually contains no bus routes. Service to through-traffic movement usually is deliberately discouraged. (FHWA: *Functional Classification Guidelines*)

**Local Traffic**

Vehicular traffic whose trip origin and/or destination are in the immediate area of a given street.

**LOS (Level of Service)**

A methodology for measuring traffic flow based on traveler delay and congestion, defined in the *Highway Capacity Manual (HCM)*. Grades from A to F are used, from free flow to traffic jam conditions. Historically used primarily for motor vehicle traffic, LOS methodologies have also been devised for pedestrian, bicyclist, and transit operations.

**M****Motor Vehicle**

Every vehicle operated or driven upon a public highway which is propelled by any power other than muscular power, except as otherwise provided in Section 125 of the Vehicle and Traffic Law. (Rules of the City of New York, Title 34, Chapter 4, Section 4-01(b))

**MUTCD (Manual on Uniform Traffic Control Devices)**

Defines the standards used by road managers nationwide to install and maintain traffic control devices on all streets and highways. The MUTCD is published by the Federal Highway Administration (FHWA) under 23 Code of Federal Regulations (CFR), Part 655, Subpart F. [mutcd.fhwa.dot.gov](http://mutcd.fhwa.dot.gov)

# N

## **NACTO (National Association of City Transportation Officials)**

NACTO is a 501(c)(3) non-profit association that represents large cities on transportation issues of local, regional and national significance, and facilitates the exchange of ideas, data, and best practices. NACTO publishes numerous design guidance publications, including *Urban Street Design Guide*. [www.nacto.org/about/](http://www.nacto.org/about/)

# O

## **Operating Speed**

The speed at which drivers are observed operating their vehicles during free-flow conditions. The 85th percentile of the distribution of observed speeds is the most frequently used measure of the operating speed associated with a particular location or geometric feature. (AASHTO: *A Policy on Geometric Design of Highways and Streets*)

# P

## **Park Parking**

The standing of a vehicle, whether occupied or not, otherwise than temporarily for the purpose of and while actually engaged in loading or unloading property or passengers. (Rules of the City of New York, Title 34, Chapter 4, Section 4-01(b))

## **Peak Hour(s)**

The hour or hours of greatest vehicular traffic volumes on a given street or intersection, usually defined for weekday AM, MD (mid-day) and PM, and Saturday MD peak periods. The peak hours, rather than entire day, are typically analyzed in a traffic analysis.

## **Pedestrian**

Any person afoot or in a wheelchair. (New York State Vehicle and Traffic Law, Title 1, Article 1, Section 130)

## **Plaza**

An area designated for use by pedestrians, which may vary in size and shape; which may abut a sidewalk and is located fully within the bed of a roadway; may be at the same level as the roadway or raised above the level of the roadway; may be physically separated from the roadway by curbing, bollards, or other separators; may be treated with special markings and materials; and may contain benches, tables, or other facilities for pedestrian use.

## **A Policy on Geometric Design of Highways and Streets**

Often referred to as the "Green Book," this document is published by AASHTO and contains "design practices in universal use as the standard for highway geometric design." [bookstore.transportation.org/item\\_details.aspx?ID=109](http://bookstore.transportation.org/item_details.aspx?ID=109)

## **Private Road**

Every way or place in private ownership and used for vehicular travel by the owner and those having express or implied permission from the owner, but not by other persons. (New York State Vehicle and Traffic Law, Title 1, Article 1, Section 133)

## **Public Highway**

Any highway, road, street, avenue, alley, public place, public driveway, or any other public way. (New York State Vehicle and Traffic Law, Title 1, Article 1, Section 134)

# R

## Rain Garden

A planted depression that captures and absorbs rainwater that would otherwise flow into a storm drain. Infiltration and evapotranspiration are the primary means for water management in these systems.

(*Florida Field Guide to Low Impact Development*: [buildgreen.ufl.edu/Fact\\_sheet\\_Bioretention\\_Basins\\_Rain\\_Gardens.pdf](http://buildgreen.ufl.edu/Fact_sheet_Bioretention_Basins_Rain_Gardens.pdf))

## Resiliency

The ability of people, the places where they live, and our infrastructure systems—such as transportation and energy—to withstand a stress or shock event, to recover, and emerge even stronger. (One New York)

## Restricted Use Street

A legally mapped street to be permanently closed to motor vehicles by the Department of Transportation, and open to use by pedestrians. (Rules of the City of New York, Title 34, Chapter 4, Section 4-12(r)(4))

## Revocable Consent

A grant by the city of a right, revocable at will...to an owner of real property or, with the consent of the owner, to a tenant of real property to use adjacent inalienable property (usually, streets or sidewalks) for such purposes as may be permitted by rules of DOT or DoITT. (For full definition see NYC Charter, Section 362(c)(2); Rules of the City of New York, Title 34, Chapter 7, Section 7-01)

## Right of Way

The right of one vehicle or pedestrian to proceed in a lawful manner in preference to another vehicle or pedestrian approaching under such circumstances of direction, speed, and proximity as to give rise to danger of collision unless one grants precedence to the other. (New York State Vehicle and Traffic Law, Title 1, Article 1, Section 139)

## Right-of-Way

A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes. (AASHTO: *Guide for the Development of Bicycle Facilities*)

## Road

An open way for the passage of vehicles, persons, or animals on land. (FHWA)

## Roadbed

The graded portion of a highway within top and side slopes, prepared as a foundation for the pavement structure and shoulder. (FHWA)

## Roadway

That portion of a street designed, improved, or ordinarily used for vehicular travel, exclusive of the shoulder and slope. (Rules of the City of New York, Title 34, Chapter 2, Section 2-01)

# S

## Scoring (concrete)

Marking the surface of concrete for visual or textural effect. “Tooled joint” scoring refers to concrete sidewalk flag joints finished with a hand-trowelled border. “Simulated saw-cut joint” scoring refers to concrete sidewalk flag joints finished using a spacer to simulate the appearance of joints cut with a masonry saw.

## Shared Use Path

A bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way. Shared use paths may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. (AASHTO: *Guide for the Development of Bicycle Facilities*)

## Sidewalk

That portion of a street, whether paved or unpaved, between the curb lines or the lateral lines of a roadway and the adjacent property lines intended for the use of pedestrians. Where it is not clear which section is intended for the use of pedestrians, the sidewalk will be deemed to be that portion of the street between the building line and the curb. (Rules of the City of New York, Title 34, Chapter 4, Section 4-01(b))

**Simulated Saw-Cut Joint**

See scoring (concrete)

**Solar Reflectance Index (SRI)**

SRI is a value that incorporates both solar reflectance and emittance in a single value to represent a material's temperature in the sun. SRI quantifies how hot a surface would get relative to standard black and standard white surfaces. It is calculated using equations based on previously measured values of solar reflectance and emittance as laid out in the American Society for Testing and Materials Standard E 1980. It is expressed as a fraction (0.0 to 1.0) or percentage (0% to 100%). (United States Environmental Protection Agency: [www.epa.gov/heatisld/resources/glossary.htm](http://www.epa.gov/heatisld/resources/glossary.htm))

**Source Control**

Action to prevent pollution where it originates. [www.stormwaterauthority.org/glossary.aspx](http://www.stormwaterauthority.org/glossary.aspx)

**Source Reduction**

The technique of stopping and/or reducing pollutants at their point of generation so that they do not come into contact with stormwater. [www.cabmphandbooks.com/Documents/Development/Section\\_7.pdf](http://www.cabmphandbooks.com/Documents/Development/Section_7.pdf)

**Stand****Standing**

The stopping of a vehicle, whether occupied or not, otherwise than temporarily for the purpose of and while actually engaged in receiving or discharging passengers. (New York State Vehicle and Traffic Law, Title 1, Article 1, Section 145 and Rules of the City of New York, Title 34, Chapter 4, Section 4-01(b))

**Stop****Stopping**

Any halting even momentarily of a vehicle, whether occupied or not. (Rules of the City of New York, Title 34, Chapter 4, Section 4-01(b))

**Street**

A street, avenue, road, alley, lane, highway, boulevard, concourse, parkway, driveway, culvert, sidewalk, crosswalk, boardwalk, and viaduct, and every class of public road, square and place, except marginal streets. (New York City Charter Section 210.7)

**Street Tree**

A tree growing in the public right-of-way. These trees provide a range of benefits, from increased property values to stormwater capture and urban heat island mitigation. [www.nycgovparks.org/sub\\_your\\_park/trees\\_greenstreets/faq.html](http://www.nycgovparks.org/sub_your_park/trees_greenstreets/faq.html)

**Supplementary Cementitious Materials (SCM)**

Industrial by-products such as coal fly ash, granulated blast furnace slag, and silica fume that are used as a partial replacement for portland cement in concrete. (Green In Practice 107 — Supplementary Cementitious Materials, Portland Cement Association). SCM's are pre-consumer recycled materials that would otherwise have been disposed of in landfills, providing cost savings to concrete manufacturers and reducing environmental impact caused by averting disposal. (*High Performance Infrastructure Guidelines*).

**Swale**

See Bioswale

**T****Target Speed**

The speed at which vehicles should operate on a thoroughfare in a specific context, consistent with the level of multimodal activity generated by adjacent land uses, to provide both mobility for motor vehicles and a safe environment for pedestrians and bicyclists. The target speed is usually the posted speed limit. (ITE *Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities*)

**Through Traffic**

Vehicular traffic whose trip origin and destination are not in the immediate area of a given street.

**Traffic**

Pedestrians, ridden or herded animals, vehicles, bicycles, and other conveyances either singly or together while using any highway for purposes of travel. (New York State Vehicle and Traffic Law, Title 1, Article 1, Section 152)

**Tooled Joint**

See Scoring (concrete)

**Traffic Calming**

The combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users. As opposed to traffic control devices that are regulatory and require enforcement, traffic calming measures are intended to be self-enforcing. (ITE: *Traffic Calming: State of the Practice*, 1999)

## U

### Traffic Control Device

All signs, signals, markings, and devices placed or erected by authority of a public body or official having jurisdiction for the purpose of regulating, warning or guiding traffic. (New York State Vehicle and Traffic Law, Title 1, Article 1, Section 153)

### Transitway

Any roadway or series of roadways designated for the exclusive use of buses or taxis or such other designated high occupancy vehicles as may be permitted, during certain hours of the day, with access to such roadway(s) limited to one block thereof to other vehicles for the purpose of delivery of goods or services or the picking up or dropping off of passengers. (Rules of the City of New York, Title 34, Chapter 4, Section 4-01(b))

### Truck

Except as otherwise specified in the Rules of the City of New York, Title 34, Chapter 4, Section 4-01(b), a truck is defined as any vehicle or combination of vehicles designed for the transportation of property, which has either of the following characteristics two axles, and six tires; or three or more axles. (Rules of the City of New York, Title 34, Chapter 4, Section 4-13(a))

### Unit Paver

Paving materials that are precast, such as hexagonal asphalt pavers, or individually hewn, such as granite blocks, such that each paver is a single unit that can be removed or replaced.

### Universal Design

The process of creating convenient, safe, and accessible spaces for everyone. Accessibility is a critical component of universal design. Also referred to as "Inclusive Design."

### Urban Heat Island

Many urban and suburban areas experience elevated temperatures compared to their outlying rural surroundings; this difference in temperature is what constitutes an urban heat island. The annual mean air temperature of a city with one million or more people can be 1.8 to 5.4 degrees F (1 to 3 degrees C) warmer than its surroundings, and on a clear, calm night, this temperature difference can be as much as 22 degrees F (12 degrees C). Even smaller cities and towns will produce heat islands, though the effect often decreases as city size decreases. (US EPA: *Reducing Urban Heat Islands: Compendium of Strategies*)

## V

### Vehicle

Every device in, upon, or by which any person or property is or may be transported or drawn upon a highway, except devices moved by human power or used exclusively upon stationary rails or tracks. (New York State Vehicle and Traffic Law, Title 1, Article 1, Section 159 and Rules of the City of New York, Title 34, Chapter 4, Section 4-01(b))

### Vertical Deflection

The vertical (upward) displacement of moving vehicles by way of a raising of the roadbed surface, for example with a hump, table, or other raised element.

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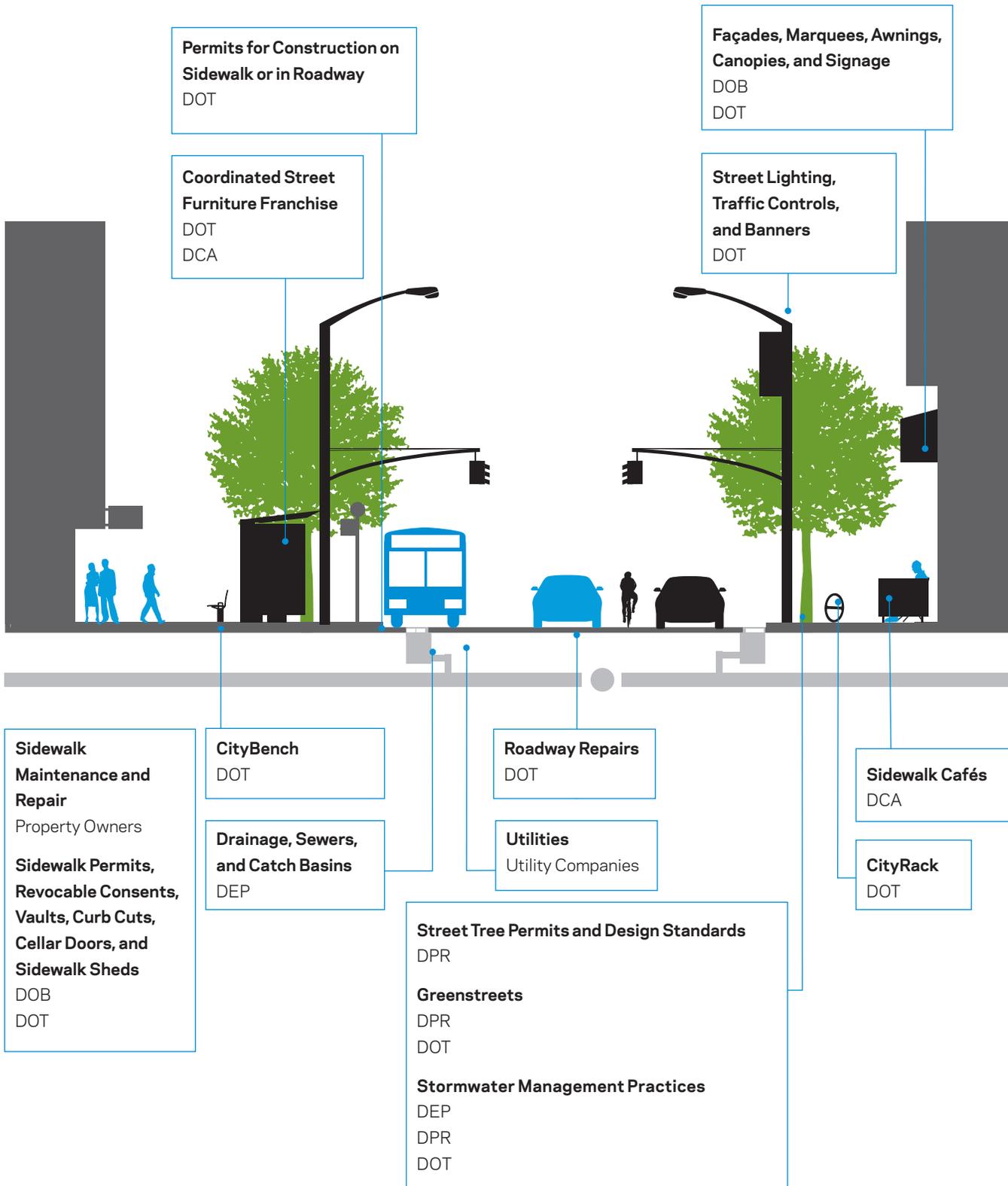
# Appendices

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# Agency Roles on the City's Streets

This diagram summarizes the roles and responsibilities of city agencies and other entities related to the most visible aspects of the city's streets. It does not include all agencies with street-related roles and is not intended to be a literal representation of appropriate street furniture locations.

An expanded listing follows.



The following are agencies, authorities, and other organizations that are frequently involved in the design of streets in New York City. This list is provided as a reference tool, for informational purposes only, and is not an exhaustive list.

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### Street Planning, Design & Construction

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#### Street Capital Projects

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DOT  
(initiation, scoping, conceptual design) WDEP  
(initiation, scoping) [www.nyc.gov/dep](http://www.nyc.gov/dep)

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EDC  
(initiation, scoping, conceptual design, final design, agency alignment & construction)  
[www.nycedc.com](http://www.nycedc.com)

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DDC  
(conceptual design, final design, agency alignment & construction)  
[www.nyc.gov/ddc](http://www.nyc.gov/ddc)

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DPR  
(parks, greenstreets)  
[www.nyc.gov/parks](http://www.nyc.gov/parks)

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NYS DOT  
(state highways within New York City)  
[www.nysdot.gov](http://www.nysdot.gov)

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Other city, state, and federal agencies and authorities for individual, typically site-specific projects

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#### Comprehensive Street Planning

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DOT  
(for most public streets)  
[www.nyc.gov/dot](http://www.nyc.gov/dot)

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DCP  
(zoning, private streets, transportation studies)  
[www.nyc.gov/dcp](http://www.nyc.gov/dcp)

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NYS DOT  
(for state and federal routes)  
[www.nysdot.gov](http://www.nysdot.gov)

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#### Design of Stormwater Best Management Practices/ Source Controls

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DDC [www.nyc.gov/ddc](http://www.nyc.gov/ddc)

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DEP [www.nyc.gov/dep](http://www.nyc.gov/dep)

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DPR [www.nyc.gov/parks](http://www.nyc.gov/parks)

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DOT [www.nyc.gov/dot](http://www.nyc.gov/dot)

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#### Greenstreets

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DPR [www.nyc.gov/parks](http://www.nyc.gov/parks)

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DOT [www.nyc.gov/dot](http://www.nyc.gov/dot)

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#### Land Acquisition

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DCAS [www.nyc.gov/dcas](http://www.nyc.gov/dcas)

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DDC [www.nyc.gov/ddc](http://www.nyc.gov/ddc)

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SBS [www.nyc.gov/sbs](http://www.nyc.gov/sbs)

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Law Department  
[www.nyc.gov/law](http://www.nyc.gov/law)

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DCP (ULURP) [www.nyc.gov/dcp](http://www.nyc.gov/dcp)

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#### Non-Capital Street Projects

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DOT (design and implementation)  
[www.nyc.gov/dot](http://www.nyc.gov/dot)

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#### Universal Design

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MOPD (Mayor's Office for People with Disabilities) [www.nyc.gov/html/mopd/](http://www.nyc.gov/html/mopd/)

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#### Street Tree & Tree- Bed Design Standards

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DPR [www.nyc.gov/parks](http://www.nyc.gov/parks)

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**Reviews, Approvals & Permits****Coastal Erosion Permits**

NYS DEC [www.dec.ny.gov](http://www.dec.ny.gov)

**Construction on Sidewalk or in Roadway, Permits**

DOT [www.nyc.gov/dot](http://www.nyc.gov/dot)

**Curb Cut, Existing Cellar Door, Marquee & Awning Permits**

DOB [www.nyc.gov/html/dob](http://www.nyc.gov/html/dob)

**Environmental Review (CEQR/SEQRA/NEPA)**

Lead agency and involved agencies vary by project

**Emergency Vehicle Access Review**

FDNY [www.nyc.gov/fdny](http://www.nyc.gov/fdny)

**Historic District Review**

LPC [www.nyc.gov/landmarks](http://www.nyc.gov/landmarks)

**Light Pole Banner Permits**

DOT [www.nyc.gov/dot](http://www.nyc.gov/dot)

**Newsracks**

DOT [www.nyc.gov/dot](http://www.nyc.gov/dot)

**Review of Works of Art and Structures (as defined in Chapter 37, Section 854 of the NYC Charter)**

PDC [www.nyc.gov/html/artcom](http://www.nyc.gov/html/artcom)

**Revocable Consents**

DOT [www.nyc.gov/dot](http://www.nyc.gov/dot)

DCA

(sidewalk cafés)

[www.nyc.gov/consumers](http://www.nyc.gov/consumers)

DoITT

(telecommunications)

[www.nyc.gov/doitt](http://www.nyc.gov/doitt)

**Sewers, Catch Basins & Drainage Approval**

DEP

[www.nyc.gov/dep](http://www.nyc.gov/dep)

**Sidewalk Shed Permits**

DOB

[www.nyc.gov/html/dob](http://www.nyc.gov/html/dob)

**Sidewalk Work Permits**

DOB

(Builder's Pavement Plan)

[www.nyc.gov/html/dob](http://www.nyc.gov/html/dob)

DOT

[www.nyc.gov/dot](http://www.nyc.gov/dot)

**Special Event/Street Fair Permits**

CECM [www.nyc.gov/html/cecm/](http://www.nyc.gov/html/cecm/)

NYPD [www.nyc.gov/nypd](http://www.nyc.gov/nypd)

**Street Tree Permits (including Tree Guards)**

DPR

[www.nyc.gov/parks](http://www.nyc.gov/parks)

**Street Vendor Permits**

DCA

[www.nyc.gov/consumers](http://www.nyc.gov/consumers)

DOHMH

[www.nyc.gov/health](http://www.nyc.gov/health)

**Vaults & Canopies: Permits**

DOT

[www.nyc.gov/dot](http://www.nyc.gov/dot)

**Water Quality Permits/Approvals**

NYS DEC

[www.dec.ny.gov](http://www.dec.ny.gov)

DEP

[www.nyc.gov/dep](http://www.nyc.gov/dep)

**Wetlands Permits**

United States Army Corps of Engineers [www.usace.army.mil](http://www.usace.army.mil)

NYS DEC

[www.dec.ny.gov](http://www.dec.ny.gov)

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**Operation & Maintenance**


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**Coordinated Street Furniture Franchise (bus stop shelters, newsstands, automatic public toilets, bike shelters)**


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DOT  
[www.nyc.gov/dot](http://www.nyc.gov/dot)

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DCA  
[www.nyc.gov/consumers](http://www.nyc.gov/consumers)

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**Greenstreets Maintenance**


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DPR  
[www.nyc.gov/parks](http://www.nyc.gov/parks)

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**Roadway Maintenance and Repair**


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DOT  
[www.nyc.gov/dot](http://www.nyc.gov/dot)

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**Roadway & Retaining Wall Inspection**


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DOT  
[www.nyc.gov/dot](http://www.nyc.gov/dot)

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DDC  
[www.nyc.gov/ddc](http://www.nyc.gov/ddc)

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**Sidewalk Maintenance and Repair**


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Property Owners

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DOT  
 (in certain zoning districts or through prior notice) [www.nyc.gov/dot](http://www.nyc.gov/dot)

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**Street Cleaning, Snow Removal & Litter Removal**


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DSNY  
[www.nyc.gov/sanitation](http://www.nyc.gov/sanitation)

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DOT  
[www.nyc.gov/dot](http://www.nyc.gov/dot)

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DPR  
[www.nyc.gov/parks](http://www.nyc.gov/parks)

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BIDs  
 (Business Improvement Districts)  
[www.nyc.gov/html/sbs/html/neighborhood/bid.shtml](http://www.nyc.gov/html/sbs/html/neighborhood/bid.shtml)

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**Street Operations (Street Lighting, Traffic Controls, etc.)**


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DOT  
[www.nyc.gov/dot](http://www.nyc.gov/dot)

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**Supplementary Maintenance & Services, Street Furniture**


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SBS  
[www.nyc.gov/html/sbs](http://www.nyc.gov/html/sbs)

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BIDs  
 (Business Improvement Districts)  
[www.nyc.gov/html/sbs/html/neighborhood/bid.shtml](http://www.nyc.gov/html/sbs/html/neighborhood/bid.shtml)

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**Tree-Bed Maintenance**


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DPR  
 (first two years from planting)  
[www.nyc.gov/parks](http://www.nyc.gov/parks)

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Property owners  
 (after two years from planting)

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**Transit (Bus) Operations**


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MTA NYCT  
[www.mta.info/nyct](http://www.mta.info/nyct)

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**Utilities**


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DEP  
[www.nyc.gov/dep](http://www.nyc.gov/dep)

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Private Utilities

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Empire City Subway  
[www.empirecitysubway.com](http://www.empirecitysubway.com)

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**Enforcement**


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Enforcement of Construction Permits

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DOT  
[www.nyc.gov/dot](http://www.nyc.gov/dot)

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**Enforcement of Traffic Rules (including parking regulations)**


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NYPD  
[www.nyc.gov/nypd](http://www.nyc.gov/nypd)

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**Stoop Line Enforcement**


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DCA  
[www.nyc.gov/consumers](http://www.nyc.gov/consumers)

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## Legal & Design Guidance References

The following are laws, rules, regulations, and design guidance documents that may be relevant to the design of streets. This list is provided as a reference tool, for informational purposes only, and is not an exhaustive list. All public and private actions must comply with all applicable laws, rules, and regulations, not solely those listed below.

### Federal Laws and Regulations

**Code of Federal Regulations (CFR)**  
[www.gpoaccess.gov/cfr/](http://www.gpoaccess.gov/cfr/)

Manual on Uniform Traffic Control Devices (MUTCD)  
[www.mutcd.fhwa.dot.gov/](http://www.mutcd.fhwa.dot.gov/)

**United States Code (USC)**  
[uscode.house.gov](http://uscode.house.gov)

Americans with Disabilities Act (ADA)  
[www.ada.gov/regs2010/2010ADAStandards/2010ADStandards prt.pdf](http://www.ada.gov/regs2010/2010ADAStandards/2010ADStandards prt.pdf)

Clean Air Act (CAA)  
[www.epa.gov/air/caa/](http://www.epa.gov/air/caa/)

Clean Water Act (CWA)  
[www.epa.gov/oecaagct/lcwa.html](http://www.epa.gov/oecaagct/lcwa.html)

National Environmental Policy Act (NEPA)  
[www.epa.gov/Compliance/nepa/](http://www.epa.gov/Compliance/nepa/)

### State Laws and Regulations

**New York State Code of Rules and Regulations**  
[www.dos.state.ny.us/info/nycrr.htm](http://www.dos.state.ny.us/info/nycrr.htm)

New York State Department of Environmental Conservation (Title 6)  
[www.dos.state.ny.us/info/nycrr.htm](http://www.dos.state.ny.us/info/nycrr.htm)  
 New York State Environmental Quality Review Act (SEQRA)  
[www.dec.ny.gov/public/357.html](http://www.dec.ny.gov/public/357.html)

New York State Department of Transportation (Title 17)  
[www.dos.state.ny.us/info/nycrr.htm](http://www.dos.state.ny.us/info/nycrr.htm)

**New York State Environmental Conservation Law (ECL)**  
[public.leginfo.state.ny.us/](http://public.leginfo.state.ny.us/)

**New York State Highway Law**  
[public.leginfo.state.ny.us/](http://public.leginfo.state.ny.us/)

**New York State Transportation Law**  
[public.leginfo.state.ny.us/](http://public.leginfo.state.ny.us/)

**New York State Vehicle and Traffic Law (VTL)**  
[public.leginfo.state.ny.us/](http://public.leginfo.state.ny.us/)

### Local Laws and Regulations

**New York City Charter (2004)**  
[\(www.nyc.gov/html/charter/\)](http://www.nyc.gov/html/charter/)

City Planning (Chapter 8)

Department of Buildings (Chapter 26)

Department of Citywide Administrative Services (Chapter 35)

Department of Consumer Affairs (Chapter 64)

Department of Design and Construction (Chapter 55)

Department of Environmental Protection (Chapter 57)

Department of Health (Chapter 22)

Department of Parks and Recreation (Chapter 21)

Department of Sanitation (Chapter 31)

Department of Small Business Services (Chapter 56)

Department of Transportation (Chapter 71)

Fire Department (Chapter 19)

Franchises, Revocable Consents, and Concessions (Chapter 14)

Landmarks Preservation Commission (Chapter 74)

Police Department (Chapter 18)

Public Design Commission/Art Commission (Chapter 37)

**Administrative Code of the City of New York**  
[24.97.137.100/nyc/AdCode/entered.htm](http://24.97.137.100/nyc/AdCode/entered.htm)

Budget; Capital Projects (Title 5)  
 NYC Traffic Rules

Construction and Maintenance (Title 27)

Consumer Affairs (Title 20)

Contracts, Purchases and Franchises (Title 6)	Fire Department (Title 3)	<i>Guide for the Development of Bicycle Facilities</i> , 4th edition (AASHTO: 2012; <a href="http://bookstore.transportation.org/">bookstore.transportation.org/</a> )
Environmental Protection and Utilities (Title 24)	Franchise and Concession Review Committee (Title 12)	<b>American Planning Association (APA)</b>
<b>Local Laws and Regulations (cont.)</b>	Landmarks Preservation Commission (Title 63)	<i>U.S. Traffic Calming Manual</i> (American Planning Association & American Society of Civil Engineers: 2009)
Fire Prevention and Control (Title 15)	Police Department (Title 38)	<b>Federal Highway Administration (FHWA)</b> <a href="http://www.fhwa.dot.gov/">www.fhwa.dot.gov/</a>
Health (Title 17)	Public Design Commission/Art Commission (Title 57)	<i>BIKESAFE: Bicycle Countermeasure Selection System</i> (FHWA: 2006; <a href="http://www.bicyclinginfo.org/bikesafe/">www.bicyclinginfo.org/bikesafe/</a> )
Housing and Buildings (Title 26)	<b>Zoning Resolution of the City of New York</b> <a href="http://www.nyc.gov/html/dcp/html/subcats/zoning.shtml">www.nyc.gov/html/dcp/html/subcats/zoning.shtml</a>	<i>PEDSAFE: Pedestrian Safety Guide and Countermeasure Selection System</i> (FHWA: 2004; <a href="http://www.walkinginfo.org/pedsafe/">www.walkinginfo.org/pedsafe/</a> )
Land Use (Title 25)	<b>City Environmental Quality Review</b> <a href="http://www.nyc.gov/html/oec/html/ceqr/ceqr.shtml">www.nyc.gov/html/oec/html/ceqr/ceqr.shtml</a>	<i>Pedestrian Facilities Users Guide</i> (FHWA: 2002; <a href="http://www.trb.org/news/blurb_detail.asp?id=1545">www.trb.org/news/blurb_detail.asp?id=1545</a> )
Parks (Title 18)	CEQR Technical Manual <a href="http://www.nyc.gov/html/oec/html/ceqr/ceqrpub.shtml">www.nyc.gov/html/oec/html/ceqr/ceqrpub.shtml</a>	<i>Designing Sidewalks and Trails for Access</i> (FHWA: 2001; <a href="http://www.fhwa.dot.gov/environment/sidewalks/">www.fhwa.dot.gov/environment/sidewalks/</a> )
Police (Title 14)	New York City Charter (Chapter 8)	<i>Flexibility in Highway Design</i> (FHWA: 1997; <a href="http://www.fhwa.dot.gov/environment/flex/">www.fhwa.dot.gov/environment/flex/</a> )
Sanitation (Title 16)	Rules of the City of New York (Title 43 and 62)	<i>Public Involvement Techniques for Transportation Decision-Making</i> (FHWA/FTA: 1996; <a href="http://www.fhwa.dot.gov/reports/pittd/contents.htm">www.fhwa.dot.gov/reports/pittd/contents.htm</a> )
Transportation (Title 19)	<b>National Design Guidance Sources</b>	MUTCD (Manual on Uniform Traffic Control Devices) <a href="http://mutcd.fhwa.dot.gov/">mutcd.fhwa.dot.gov/</a>
<b>Rules of the City of New York</b> <a href="http://24.97.137.100/nyc/rcny/entered.htm">24.97.137.100/nyc/rcny/entered.htm</a>	<b>American Association of State Highway and Transportation officials (AASHTO)</b> <a href="http://www.transportation.org/">www.transportation.org/</a>	<b>Institute of Transportation Engineers (ITE)</b> <a href="http://www.ite.org/">www.ite.org/</a>
City Planning (Title 62)	<i>A Policy on Geometric Design of Highways and Streets</i> , 6th edition (AASHTO: 2011; <a href="http://www.bookstore.transportation.org/">www.bookstore.transportation.org/</a> )	<i>Urban Street Geometric Design Handbook</i> (ITE: 2008; <a href="http://www.ite.org/emodules/scriptcontent/Orders/ProductDetail.cfm?pc=TB-018">www.ite.org/emodules/scriptcontent/Orders/ProductDetail.cfm?pc=TB-018</a> )
Community Assistance Unit (Title 50)	<i>A Guide for Achieving Flexibility in Highway Design</i> (AASHTO: 2004; <a href="http://bookstore.transportation.org/">bookstore.transportation.org/</a> )	
Department of Buildings (Title 1)	<i>Guide for the Planning, Design, and Operation of Pedestrian Facilities</i> (AASHTO: 2004; <a href="http://bookstore.transportation.org/">bookstore.transportation.org/</a> )	
Department of Citywide Administrative Services (Title 55)		
Department of Environmental Protection (Title 15)		
Rules Governing the Construction of Private Sewers		
Rules Governing the Use of the Water Supply		
Department of Consumer Affairs (Title 6)		
Department of Health (Title 24)		
Department of Parks and Recreation (Title 56)		
Department of Sanitation (Title 16)		
Department of Small Business Services (Title 66)		
Department of Transportation (Title 34)		
NYC Traffic Rules (Chapter 4)		
NYC Highway Rules (Chapter 2)		
Revocable Consents (Chapter 7)		

### National Design Guidance Sources (cont.)

*Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities: An ITE Proposed Recommended Practice* (ITE: 2006; [www.ite.org/css/](http://www.ite.org/css/))

*Traffic Calming: State of the Practice* (ITE & FHWA: 1999; [www.ite.org/traffic/tcstate.asp#tcsop](http://www.ite.org/traffic/tcstate.asp#tcsop))

*The Design and Safety of Pedestrian Facilities* (ITE: 1998; [www.ite.org/emodules/scriptcontent/Orders/ProductDetail.cfm?pc=RP-026A](http://www.ite.org/emodules/scriptcontent/Orders/ProductDetail.cfm?pc=RP-026A))

**National Association of City Transportation Officials (NACTO)**  
[www.nacto.org](http://www.nacto.org)

*Urban Street Design Guide* (NACTO: 2013; [www.nacto.org/publication/urban-street-design-guide/](http://www.nacto.org/publication/urban-street-design-guide/))

**United States Access Board**  
[www.access-board.gov/](http://www.access-board.gov/)

*Accessible Public Rights-of-Way: Planning and Designing for Alterations* (US Access Board: 2007; [www.access-board.gov/prowac/alterations/guide.htm](http://www.access-board.gov/prowac/alterations/guide.htm))

*ADA and ABA Accessibility Guidelines* (US Access Board: 2004; [www.access-board.gov/ada-aba/](http://www.access-board.gov/ada-aba/))

*The Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities* (US Access Board: 2002; [www.access-board.gov/adaag/html/adaag.htm](http://www.access-board.gov/adaag/html/adaag.htm))

*Accessible Rights-of-Way: A Design Guide* (US Access Board: 1999; [www.access-board.gov/prowac/guide/PROWGuide.htm](http://www.access-board.gov/prowac/guide/PROWGuide.htm))

### Local Design Guidance Sources

#### DCP

[www.nyc.gov/planning](http://www.nyc.gov/planning)

*New York City Bicycle Master Plan* (DCP & NYC DOT: 1997; [www.nyc.gov/html/dcp/html/bike/mp.shtml](http://www.nyc.gov/html/dcp/html/bike/mp.shtml))

#### DDC

[www.nyc.gov/ddc](http://www.nyc.gov/ddc)

*Active Design Guidelines: Promoting Physical Activity and Health in Design* (DDC, DOHMH, DOT, DCP & OMB: 2010)

*High Performance Infrastructure Guidelines: Best Practices for the Public Right-of-Way* (DDC & Design Trust for Public Space: 2005)

*Sustainable Urban Sites Design Manual* (DDC: 2009; [www.nyc.gov/html/ddc/html/desogm/reports.shtml](http://www.nyc.gov/html/ddc/html/desogm/reports.shtml))

#### DOT

[www.nyc.gov/dot](http://www.nyc.gov/dot)

*Standard Highway Specifications Volume 1* (DOT: 2009; [www.nyc.gov/html/dot/downloads/pdf/standard%20highway\\_specs\\_vol%201.pdf](http://www.nyc.gov/html/dot/downloads/pdf/standard%20highway_specs_vol%201.pdf))

*Standard Highway Specifications Volume 2* (DOT: 2010; [www.nyc.gov/html/ddc/downloads/pdf/pub\\_intra\\_std\\_DOT/hwy\\_std\\_specs\\_101101\\_vol\\_2.pdf](http://www.nyc.gov/html/ddc/downloads/pdf/pub_intra_std_DOT/hwy_std_specs_101101_vol_2.pdf))

*Standard Details of Construction* (DOT: 2010; [http://www.nyc.gov/html/ddc/downloads/pdf/pub\\_intra\\_std\\_DOT/hwy\\_std\\_constr\\_details\\_100701.pdf](http://www.nyc.gov/html/ddc/downloads/pdf/pub_intra_std_DOT/hwy_std_constr_details_100701.pdf))

*Street Lighting Specifications and Standard Drawings* (DOT: 1992; [www.nyc.gov/html/dot/html/about/dotlibrary.shtml#spec](http://www.nyc.gov/html/dot/html/about/dotlibrary.shtml#spec))

*Instructions for Filing Plans and Guidelines for the Design of Sidewalks, Curbs, Roadways and Other Infrastructure Components*  
[www.nyc.gov/html/dot/html/permits/stpermit.shtml#instructions](http://www.nyc.gov/html/dot/html/permits/stpermit.shtml#instructions)

*Specifications for Furnishing All Labor and Material Necessary and Required for the Installation, Removal or Relocation of Street Lighting Equipment in the City of New York* (DOT: 1992; [www.nyc.gov/html/dot/html/about/dotlibrary.shtml#spec](http://www.nyc.gov/html/dot/html/about/dotlibrary.shtml#spec))

*Specifications for Furnishing All Labor and Material Necessary and Required for the Installation or Removal of Electrical Traffic Signal Equipment to Control Traffic in the City of New York* (DOT: 1995; [www.nyc.gov/html/dot/html/about/dotlibrary.shtml#spec](http://www.nyc.gov/html/dot/html/about/dotlibrary.shtml#spec))

*School Safety Engineering Project: General Mitigation Measures Final Report* (DOT: 2004; [www.nyc.gov/html/dot/downloads/pdf/schoolsafetymitigation.pdf](http://www.nyc.gov/html/dot/downloads/pdf/schoolsafetymitigation.pdf))

#### DPR

[www.nyc.gov/parks](http://www.nyc.gov/parks)

*Tree Planting Standards* (DPR: 2014; [www.nycgovparks.org/pagefiles/53/Tree-Planting-Standards.pdf](http://www.nycgovparks.org/pagefiles/53/Tree-Planting-Standards.pdf))

*Tree Guards* (DPR; [www.nycgovparks.org/trees/tree-care/tree-guards](http://www.nycgovparks.org/trees/tree-care/tree-guards))

*Park Design for the 21st Century: High Performance Landscape Guidelines* (DPR & the Design Trust for Public Space: 2011)

#### MOPD

[www.nyc.gov/mopd](http://www.nyc.gov/mopd)

*Inclusive Design Guidelines: New York City* (MOPD, International Code Council: 2010)

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### Landscape Design Guidance Resources

*Parks, Plants, and People: Beautifying the Urban Landscape* (Lynden B. Miller: 2009)

*Trees in the Urban Landscape: Site Assessment, Design, and Installation* (Nina L. Bassuk and Peter J. Trowbridge: 2004)

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### Stormwater Source Control / Best Management Practices (BMP) Design Guidance Sources

*PlaNYC Sustainable Stormwater Management Plan* (NYC: 2008; [www.nyc.gov/html/planyc2030/html/stormwater/stormwater.shtml](http://www.nyc.gov/html/planyc2030/html/stormwater/stormwater.shtml))

*State of New York Stormwater Management Design Manual* (New York State Department of Environmental Conservation: 2008; [www.dec.ny.gov/chemical/29072.html](http://www.dec.ny.gov/chemical/29072.html))

*City of Chicago Stormwater Management Ordinance Manual* (Chicago Department of Water Management: 2008)

*City of Portland Stormwater Management Manual* (Portland Bureau of Environmental Services: 2008; [www.portlandonline.com/bes/index.cfm?c=47952](http://www.portlandonline.com/bes/index.cfm?c=47952))

*City of Philadelphia Stormwater Management Guidance Manual* (Philadelphia Water Department Office of Watersheds: 2008; [www.phillyriverinfo.org/Programs/SubprogramMain.aspx?Id=StormwaterManual](http://www.phillyriverinfo.org/Programs/SubprogramMain.aspx?Id=StormwaterManual))

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### Street Planning Resources

*Downtown Brooklyn Traffic Calming Study* (NYC DOT: 2004; [www.nyc.gov/html/dot/html/motorist/dntnbklyntraf.shtml](http://www.nyc.gov/html/dot/html/motorist/dntnbklyntraf.shtml))

*Project Development & Design Guide* (Massachusetts Highway Department: 2006; [www.mhd.state.ma.us/default.asp?pgid=content/designGuide&sid=about](http://www.mhd.state.ma.us/default.asp?pgid=content/designGuide&sid=about))

*San Francisco Better Streets Plan—Draft for Public Review* (City and County of San Francisco: June 2008; [www.sfbetterstreets.org](http://www.sfbetterstreets.org))

*Smart Transportation Guidebook: Planning and Designing Highways and Streets that Support Sustainable and Livable Communities* (New Jersey DOT/Pennsylvania DOT: 2008; [www.smart-transportation.com/guidebook.html](http://www.smart-transportation.com/guidebook.html))