NACTO Urban Street Design Guide

OVERVIEW

OCTOBER 2012

New Orleans, LA

National Association of City Transportation Officials
55 Water St., Floor 9
New York, NY 10041

www.nacto.org
nacto@nacto.org
212.839.6421

Contents

Foreword

Designing Streets as Public Spaces

New York, NY

The NACTO Urban Street Design Guide charts the design principles and strategies that cities are adopting to confront 21st Century demands on their streets. It is based on the fundamental idea that streets are spaces for people as well as arteries for traffic. The guide is rooted in on-the-ground, built projects and great streets, and reflects international best practices and research in urban design, planning and engineering.

Many large cities across the United States have already changed the way they build streets. Roadways once conceived singularly as arterials for traffic have been recast and retrofitted as public spaces crucial to the economic success, safety and vitality of the city. Sidewalks are expanding to provide space for children playing, strollers, a growing population of older people and people of all ages just out for a walk. City transportation departments are making space for bicycles and transit in the street, whether through bike paths, light-rail corridors or bus rapid transit.

These innovations are at the center of improvements for urban roadways in the US, but they are still often treated as marginal or exceptional by other national design guides. This guide will fill that gap and give cities the tools they need as they strive to make the most of their streets.

Janette Sadik-Khan
NACTO President
Commissioner, New York City Department of Transportation

What's to Come

The NACTO Urban Street Design Guide has been organized to analyze the street from multiple perspectives, from the bird's eye view to the granular details. This overview is the first product in the development of a design guide for urban streets. The chapters highlighted here illustrate some of the greatest street design practices around the country and synthesize these national efforts.

Street network design principles will be discussed mainly as they relate to the design of individual corridors. Materials, lighting and street furniture are deemphasized here due to their inherently local character and application.

The NACTO Urban Street Design Guide is slated for release in Summer 2013.

Outline for the 2013 NACTO Urban Street Design Guide

Items highlighted in **bold** are discussed in this overview.

Streets and Intersections

- **Very Large Streets**
- Large Streets
- **Medium Streets**
- Small Street
- **Very Small Streets**
- **Alleys and Passageways**
- Pedestrian Streets
- Shared Streets and Home Zones
- **Transit Streets**
- Complex Intersections
- Compact Intersections
- Reorganizing Intersections
- Multi-leg Intersections
- Public Plazas

Critical Issues

- **Speed and Safety**
- **Design vs. Target Speed**
- Corner Design and Turning Radii
- Lane Width
- Transit Lanes
- Crosswalks and Crossings
- Level of Service
- Curbside Management
- Design and Control Vehicle
- Functional Classification
- One-way vs. Two-way
- Traffic Control Devices
- Visibility and Sightlines
- Clear Zones
- Access Management
- Driveways

Treatments & Elements

- **Parklets, Pop-ups & Street Seats**
- **Low Impact Design**
- **Moving the Curb**
- Bus Stops
- Stormwater Management
- Parking
- Sidewalk Configurations

Five Principles of Urban Street Design

Designing world-class streets begins with a restatement of the problem and the means by which to understand that problem. These five principles establish a clear understanding of the primary goals, ideals and tenets of world-class street design.

Streets are Public Spaces

Streets are often the most vital, yet underutilized public spaces in cities. Conventional highway design standards tend to look at streets as thoroughfares for traffic and measure their performance in terms of speed, delay, throughput and congestion. In reality, streets play a much larger role in the public life of cities and communities and should be designed to include public spaces as well as channels for movement.

Washington, DC

Santa Barbara, CA

Great Streets are Great for Business

Cities have realized that streets are an economic asset as much as a functional element. Well-designed streets generate higher revenues for businesses and higher values for homeowners.

Design for Safety

In 2010, 32,885 people were killed in traffic crashes, which are also the leading cause of death among children aged 5 to 14. These deaths and hundreds of thousands of injuries are avoidable. Traffic engineers can and should do better, by designing streets where people walking, parking, shopping, bicycling, working and driving can cross paths safely.

Safety campaign in New York City


New York, NY

Streets can be Changed

Transportation engineers can work flexibly within the building envelope of a street. This includes moving curbs, changing alignments, daylighting corners and redirecting traffic where necessary. Many city streets were created in a different era and need to be reconfigured to meet new needs. Street space can also be reused for different purposes, such as parklets, bicycle parking and pop-up cafes.

Act Now!

Implementing projects quickly using temporary materials helps inform public decision making. Cities across the US have begun using a stepped approach to major redesigns, where temporary materials are used in the short term, to be replaced by permanent materials after the public has tested the design thoroughly.


Brooklyn, NY

STREETS & INTERSECTIONS

Conventional street design has historically favored the function of movement over that of place. The NACTO Urban Street Design Guide considers street design as a balance of these two needs and safety as the driving parameter in design.

The Guide uses street width and dimension as a primary point of departure. Width is a limiting factor in design when considering the re-organization of a given corridor. The guide has been organized accordingly, ranging from Very Large Streets to Very Small Streets.

This organization deviates from conventional practice, which is limited by functional classification or an alternative classification scheme, usually based on context. Many local jurisdictions have established their own classification criteria. Using width as opposed to type or class allows for the street to be analyzed foremost as a container and a public space, with context, land use and traffic as forces that together shape that space. In select cases, the Guide will highlight special streets, such as shared streets and transit streets, which focus on specific street users and contexts.

The Intersections portion of the Guide will highlight both spatial and temporal design strategies, focusing on how cities can make junctions safer for everyone using the street.

Streets

Streets are critical arteries for transporting goods and people, but they are also the places where we live, work, play and interact. The design and management of an urban street must reflect and accommodate these diverse and competing uses. The layout and operation of streets can prioritize and enhance particular uses for the benefit of all.

This chapter presents streets by width, from wide to narrow. It illustrates innovative designs that meet the varying and changing needs of urban streets. This includes:

- Fundamental safety and operational strategies
- The spatial qualities of the street, from building line to building line
- The relationship between land use and traffic
- Management strategies for parking and other curbside uses
- Flexibility of street use during the course of a day, week or year

Los Angeles, CA

Intersections

An intersection is any place where different users mix and compete for time within the same space. Intersections take many forms and shapes, ranging from complex junctions to driveways to the meeting of two paths. They are often defined by their layout and operations: traffic signals, roundabouts, T-junctions. Simplicity, compactness, low speed and eye contact are favored in intersection design.

This chapter presents intersections as extensions of streets. It illustrates possibilities to safely, efficiently and effectively manage urban intersections. These areas include:

- Major nodes and meeting points
- Principles of layout, design and operations
- Opportunities for public space

San Francisco, CA

Very Large Streets

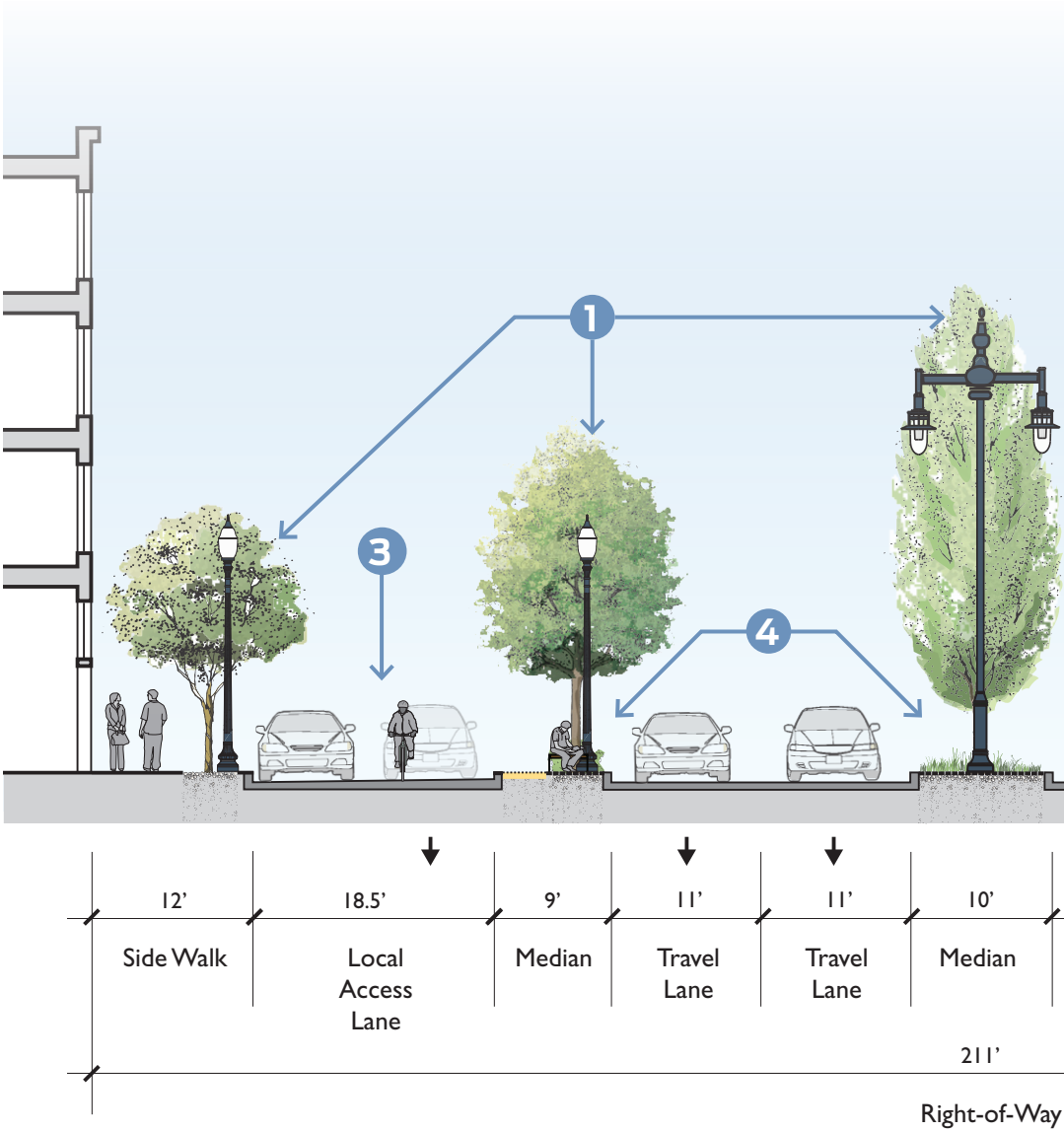
Very large streets support diverse uses, spaces and traffic streams, yet also produce large, complex intersections that present unique operational challenges. For most cities, their very large streets are also some of their most well-known, and are critical to presenting a modern livable city to visitors.

Example: Octavia Boulevard

This section is based on Octavia Boulevard in San Francisco. Octavia Boulevard was redesigned as a multi-way boulevard following the removal of a major highway. Though only a few blocks long, it doubles as an important neighborhood entry point and as a thoroughfare that carries heavy loads of traffic to other parts of the city.

1. Trees are spaced to have touching crowns which forms almost an unbroken canopy parallel to the street. They are planted right up to the intersections to break down the overall scale of the street.

2. There are two scales of light fixtures, signage and other elements– larger in the center and smaller on the sides.



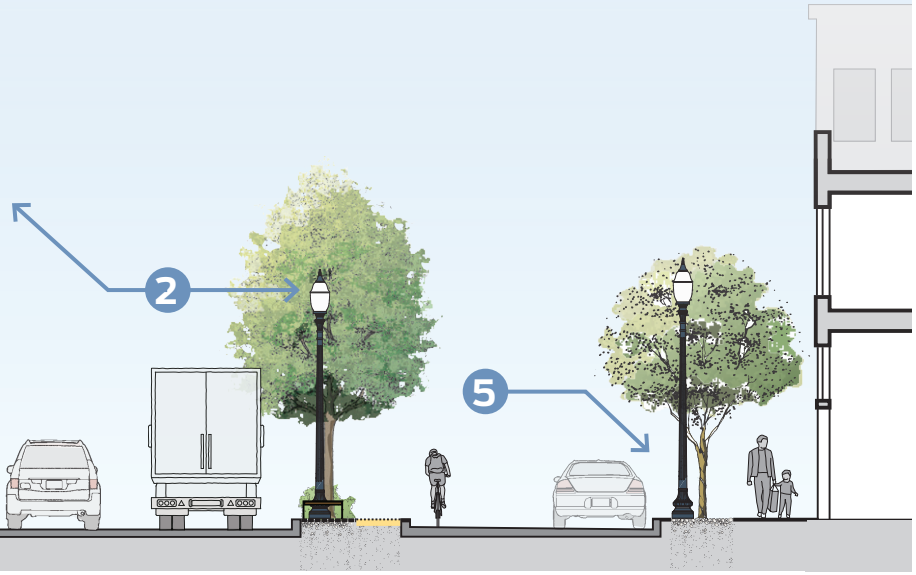
New York, NY

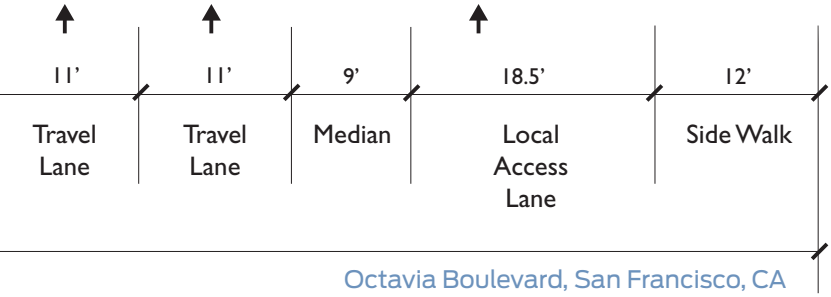
Very Large Streets have the possibility for transit lanes, cycle tracks and jogging paths. Tree-lined medians can separate traffic streams and create spaces for pedestrian activity and recreation.

3 The width of the local access lanes is as narrow as possible. Emergency vehicle access is accommodated through mountable curbs on the side median.

4 All three medians provide refuge for pedestrians crossing the street.

5 Tree-lined sidewalks provide access to outdoor space for active first-floor uses and other pedestrian activities.





Octavia Boulevard, San Francisco, CA

The center roadway is signalized, while the side roadways are stop-controlled. Drivers on local access lanes are allowed to make all movements.

Transit Streets

Transit streets prioritize transit over general traffic, provide safe places for people to walk and access the stops and form the backbone of a larger local public transit network. Transit Streets are designed to make transit work better for everyone. Whether bus rapid transit, light-rail transit, streetcar, or the local bus, for transit to live up to its billing, it should not be stuck in traffic.

Bus Rapid Transit

From a street-management perspective, a Bus Rapid Transit route is a transit street that prioritizes bus travel through dedicated running ways, traffic signal pre-emption ("green wave") and off-board fare collection. The street is organized similarly to a light rail corridor, in that dedicated right-of-way is bounded by safe and accessible stations. However, using buses as the transit vehicle provides greater routing flexibility and allows cities to use technology in coordination with geometry to speed transit riders towards their destinations.

In the US, current practice ranges from fully separated transit lanes, with passing lanes and pre-paid boarding stations, to bus bulbs and signal pre-emption.

Beyond DC

Pittsburgh Busway

Pittsburgh's Martin Luther King, Jr. East Busway was the first BRT-style system in the country, opening in 1983. The city now has four busways, mostly located on former rail rights-of-way and completely separated from other vehicle traffic.

Metro

Los Angeles Orange Line

This 14-mile route opened in 2005 and operates in a former rail alignment. This system closely mimics rail service, with stations located on platforms with off-board fare collection. The project included a significant upgrade to the traffic signal coordination along the route, which is controlled remotely to maximize on-time performance.

Best practices: Bus Rapid Transit

New York, NY

New York City Select Bus Service

In New York City, traffic and transit planners have combined forces to use a range of improvements in vehicles, ticketing, traffic signals and street layout to create Select Bus Service corridors. Each project is tailored to the space available and existing traffic patterns, all in the interest of providing a faster, more pleasant experience for bus riders.

Select Bus Service has now been deployed along four corridors in New York City, with more in final design and planning. The system on each corridor features branded vehicles, red painted bus-only lanes, transit signal priority and pre-payment of fares to speed boarding times. To create a safe place to board, the buses run along the existing curb lane or on an offset lane with bus bulbs. Offset lanes preserve the curb lane for parking and loading in commercial districts. Cameras are used to enforce the bus lanes from encroaching traffic.

New York City's first Select Bus Service corridor, Fordham Road in the Bronx, was launched in 2008. The treatment showed an immediate improvement in travel times of 19% and a 32% increase in weekday ridership over the limited service it replaced. 98% of customers reported being "satisfied" or "very satisfied" with the new service.


Cleveland, OH

Cleveland Health Line

The Health Line runs along a 6.8-mile route on Euclid Avenue, connecting two of the city's major employers with the downtown area. To improve speed and on-time performance, the buses are given fully dedicated right-of-way with central, high-level stations and next bus arrival boards. Since its opening in 2008, an estimated $4.2 billion in new real estate development has occurred along the corridor.

Cleveland, OH

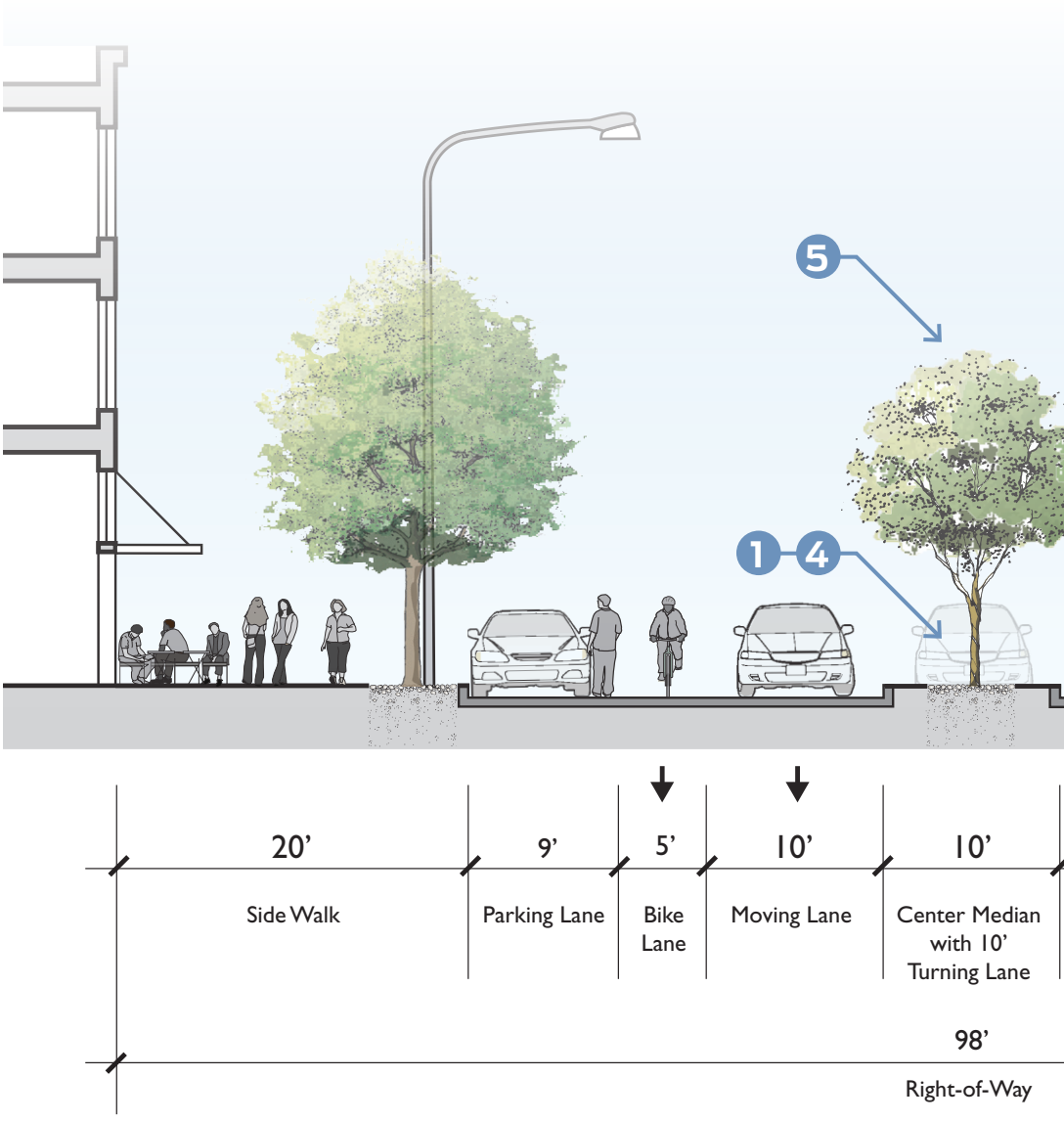
Medium Streets

Neighborhood commercial streets, residential avenues and thoroughfares are magnets for neighborhood life and often medium-sized relative to other streets in the city. Medium-sized streets that traverse the center of a neighborhood should be easy to cross for pedestrians and vehicles alike, promoting the free flow of people between home, stores, offices and schools.

Over the course of the 20th Century, the roadways of many of these medium-sized streets in neighborhoods were widened in an attempt to accommodate more auto traffic. Sidewalks were narrowed, trees removed, on-street parking restricted and signals coordinated to process more cars. Cities are now retrofitting these streets to support new development and to reinforce their neighborhood scale.

1 The previous 4-lane layout was reconfigured as 3 lanes, including a turn lane. This reduces weaving movements and self-moderates auto speeds.

2 Bike lanes were installed and the parking lane widened. This provides enough space for cyclists to ride just outside the door zone.



Example: Vanderbilt Avenue

Vanderbilt Avenue in Brooklyn, NY formerly consisted of four travel lanes, two in each direction, with parking on either side. Between double-parking and left turns, through travelers were running a slalom course that endangered everyone, from drivers and passengers exiting cars to pedestrians to cyclists. Speeding was rampant.

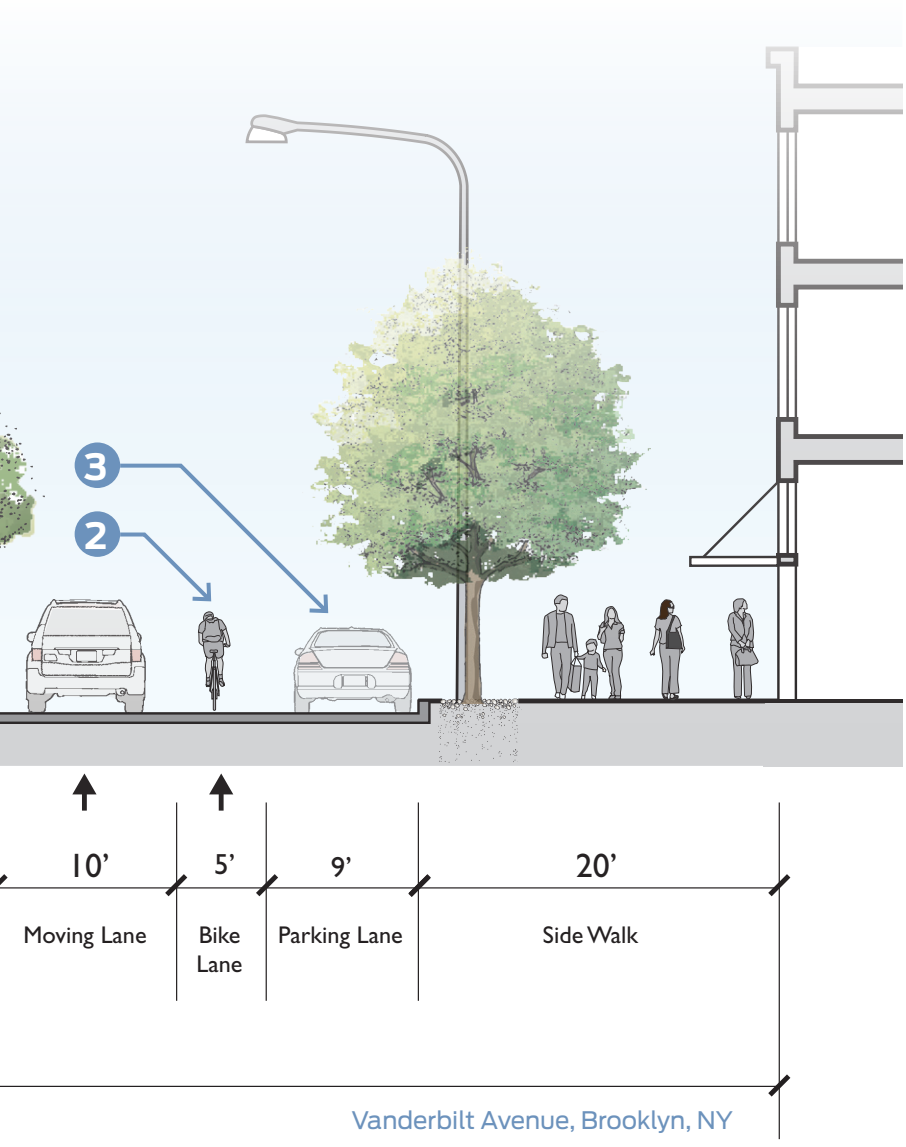
The City and the community worked together to develop a solution. One travel lane was removed and one was converted to a center turn lane. The remaining space won through the road diet was given over to wider parking areas and bicycle lanes on either side. Planted medians were installed to shorten the crossing distance for pedestrians.

Below is an illustration of the road diet on Vanderbilt Avenue, completed in 2009. Since implementation, vehicles have slowed down, cyclists increased by 80% and injuries from traffic crashes have gone down significantly.

3 Rush hour parking restrictions were removed, providing more parking for local businesses.

4 Raised medians with pedestrian refuge islands were installed wherever possible. The one-way side streets facilitate this.

5 Trees were planted on the median to visually narrow the roadway for drivers and beautify the street.



Vanderbilt Avenue, Brooklyn, NY

Act Now!

The use of temporary materials in street design has expanded in recent years as cities work to remake their streets using low-cost and innovative methods. Short-term improvements allow residents and visitors to experience new street configurations without the commitment of major funding for new curbs and other capital improvements. This method has many advantages:

- **Neighborhood Aesthetics** – designs for temporary treatments can be selected together with local merchants and neighborhood organizations, and they can be involved in planting flowers and other ongoing activities.
- **Health & Safety** – a quick turnaround project can immediately address unsafe conditions on streets and at intersections.
- **Low-cost** - materials like paint, glue, or gravel are inexpensive compared to asphalt and cement curbs.
- **Changeable** - if a pilot project has negative impacts on parking or traffic patterns, it is easy to restore the roadway to its original condition.

Philadelphia, PA

University City District

Best Practice: New York City Public Spaces

The New York City DOT uses temporary materials to activate public spaces and create better bikeways throughout the city. Planters, bollards, epoxied gravel, seating and striping provide a low-cost toolkit for delineating these spaces and help to realize public support for full-scale capital implementation.

Before

After

Union Square

Before

After

Gansevoort Plaza

Before

After

Allen Street

Very Small Streets

Very small streets, less than 40 feet in width between buildings, are as much a part of a city's street network as larger streets. While they may not carry heavy loads of through traffic, they provide access to properties and are often integral parts of the non-motorized street network. Many cities have made them pedestrian-only, removed curbs, or created shared spaces for people walking, driving and cycling.

Before

Example: Longfellow Shared Street

The cross-section on page 19 diagrams Longfellow Street, a curbless "shared" residential street in the Borderline neighborhood of Santa Monica, CA.

Longfellow Street was one of the first shared streets in the United States. It codified and set a precedent in the US for what is known as a *woonerf* in the Netherlands, a *Verkehrsberuhigungzone* in Germany and a "home zone" in the United Kingdom.

Previous attempts at establishing shared streets had limited success. Politicians often view low speed zones as speed traps. Without sidewalks, a system must be developed to guide those with limited sight and ensure that drivers yield to other street users.

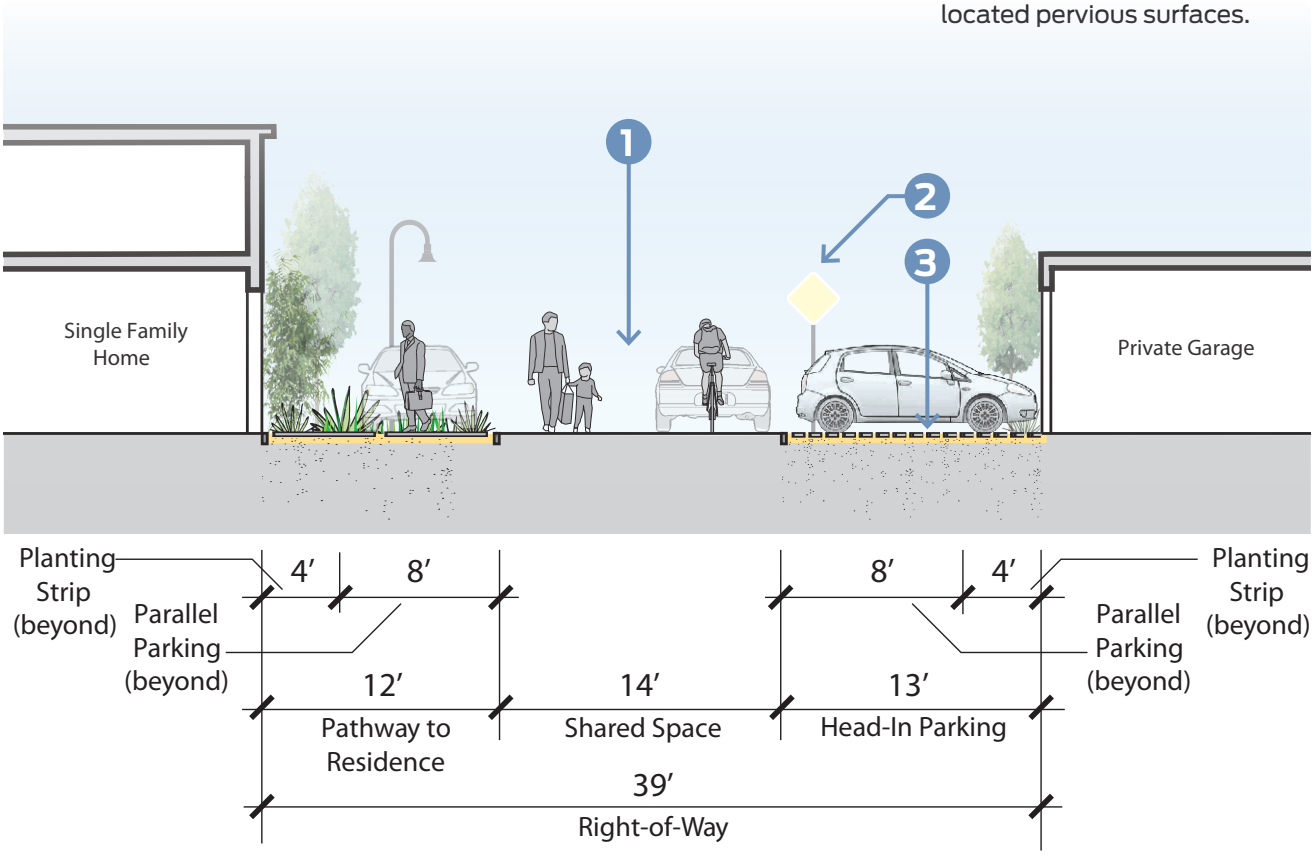
After

The success of Longfellow Street is owed in large part to the residents and the city. The two collaborated to develop a "shared" space design for pedestrians, car parking and two-way traffic. In creating a legally "shared" space, the city paid particular attention to accessibility concerns and signage.

1 14-foot wide shared roadway

2 10 mph "warning" speed limit and "shared street" signs

3 Stormwater is infiltrated through the use of permeable paving systems, landscape planters and other purposely located pervious surfaces.



Longfellow Street, Santa Monica, CA

Solar-powered lights

Speed tables at each of the intersections

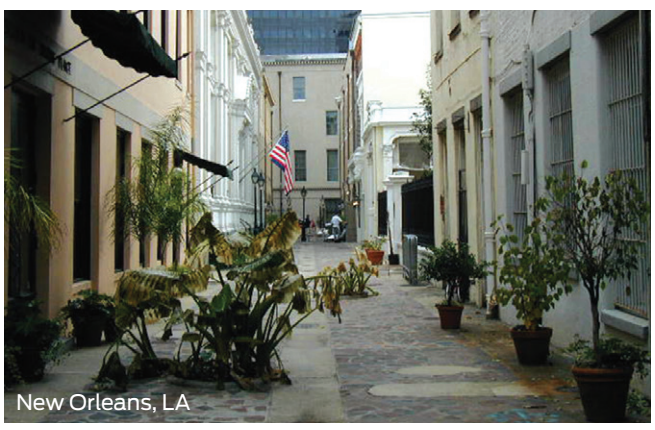
Wheelchair-accessible mini-curbs guide pedestrians with limited sight. The "roadway" is considered the accessible route.

Alleys & Passageways

Alleys present cities with special challenges, but also opportunities. Typically built without standard street drainage, they tend to flood and many have never been significantly improved since the neighborhood was built. Today, cities around the US are realizing that alleys can be turned into community space and improved using green design.


Bardstown, KY


Fort Worth, TX

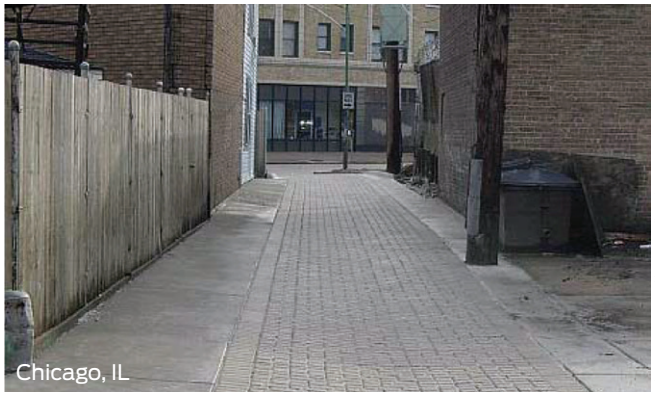

New Orleans, LA


San Francisco, CA

Chicago: Green Alleys

Chicago DOT spearheaded a "green alleys" program in 2006 to improve stormwater management without new storm drains, reduce the heat island effect and increase the use of recycled materials. The program began with materials research, six pilot projects and the creation of the *Green Alley Handbook*. This handbook was a valuable tool used to educate the community. After the pilots were installed, the program expanded to 32 alleys and is now a line item in the city's annual budget. Funding comes from the local alderman's budget for capital improvements and from discretionary funds.

Before



Chicago Green Alley Handbook

After

Detroit: Green Alleys

Green Garage, a community-based business enterprise center in Midtown Detroit, began working with local businesses in 2008 to renovate a trash-strewn alley in the middle of the neighborhood. Together with Wayne State University, the group was able to completely renovate the alleyway, installing gardens, permeable pavers and bollards to keep out through traffic. The renovated alley has become a vibrant greenway between buildings.

Baltimore: Alley Gating and Greening Program

Administered by the non-profit Community Greens, the Baltimore alley program began in the early 2000s when a group of neighbors sought to close their network of alleys, which were overrun with crime and trash. After encountering legal resistance, the group formed a coalition and drafted an ordinance that would allow alleys to be gated, which was passed in 2007.

Gated alleys are subject to the following regulations:

- The community leases the alley from the city, without the need for an easement.
- The city has the right to re-open th alley to the public.
- So as not to constitute a taking, 100% of residents must agree to its closure.
- Residents are responsible for maintenance.

Metropolis

Green Garage

CRITICAL ISSUES

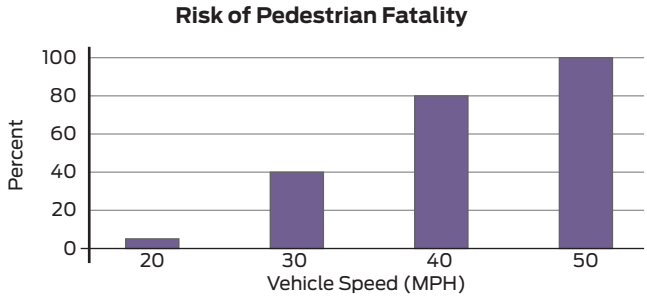
Streets and sidewalks are shaped by many variables—some visible and some not. While a new bike or bus lane tangibly alters the right-of-way, factors like signal timing, functional classification and level-of-service constitute only a small selection of the many invisible parameters that influence a street's design and operation. Left unaddressed, these critical issues can prevent streets from serving the needs of adjacent residents and businesses.

A growing number of cities have overcome these obstacles and are improving their streets. An emerging catalogue of best practices, supported by a new body of research, is setting a better standard for city street design. The Critical Issues section will help practitioners and decision-makers alike comprehend how to best integrate city traffic engineering principles into street designs that balance the needs of residents with the realities of traffic.

New York, NY

Speed and Safety

Vehicle speed plays a critical role in the cause and severity of crashes. Lowering the frequency of injuries and fatalities remains a crucial public health goal for our cities. This section documents the relationship between speed and safety, looking at how appropriate street design can make our cities safer.



Higher speeds = Higher crash risk and severity

There is a direct correlation between vehicle speed, crashes and severity thereof.

Mass

The difference in mass between the two colliding bodies means the lighter of the two will bear the most severe injury.

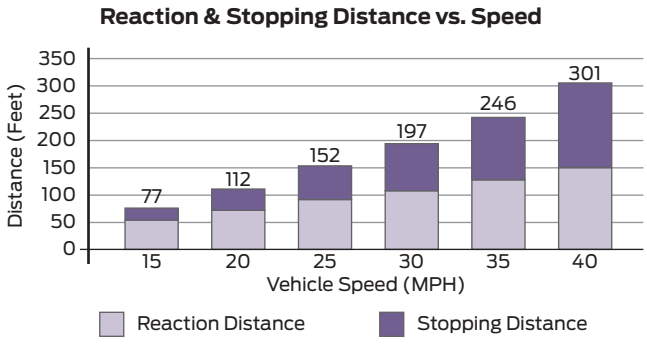
Bus
24,000 lbs

Car
2,000 lbs

Cyclist/Pedestrian
30 - 250 lbs

Reaction and Stopping Distance

The amount of distance a driver takes to react and come to a stop increases with increasing speeds.



Proactive Design

Conventional street design is founded in highway design principles that favor wide, straight, flat and open roads with clear zones that forgive and account for inevitable driver error. This is defined as “passive” design.

In recent years a new paradigm has emerged for urban streets called proactive design. A proactive approach uses design elements to affect behavior and to lower speeds. Embracing proactive design may be the single most consequential intervention in reducing pedestrian injury and fatality. Since human error is inevitable, reducing the consequences of any given error or lapse of attention is critical. Cities around the country that have implemented measures to reduce and stabilize speed have shown a reduction in serious injuries and deaths for everyone on the road, from drivers to passengers to pedestrians.

Vision Cone

A driver's visual focus diminishes as speed increases.

15 mph

20 mph

25 mph

30 mph

Design Speed vs. Target Speed

Design Speed

The concept of **design speed** was originally defined in 1936 as "the maximum approximately uniform speed which [can] probably be adopted by the faster group of drivers, once clear of urban areas." The definition has since evolved, and it is now used to select various geometric features of a roadway.

Except in urban areas with hilly topography, design speed is not a major factor in urban street design, although it may be included in street design guidelines. For example, many highway design manuals stipulate that the design speed be based primarily upon a street's functional classification, irrespective of context. Many manuals also suggest that design speed should be 5 to 10 mph above posted speed. The general premise draws on the principle that roads designed for heavy traffic, such as arterials, should have higher desirable and actual design speeds.

Operating Speed

The **operating speed** is the speed at which the majority of traffic on a given roadway operates. Operating speed is often defined as the 85th percentile vehicle speed.

Posted Speed

The **posted speed** is based upon the operating speed and local laws. In many circumstances, when routine speed checks are conducted, if the 85th percentile speed has increased since the last test, the posted speed will in turn be raised.

Consequences

Current practices accommodate and even encourage speeding by designing streets where drivers may travel faster than the intended speed limit. By applying rural and suburban design practices to urban streets, agencies are actually creating streets that become dangerous to pedestrians and bicyclists. In basing the posted speed limit on the 85th percentile, agencies allow speeds to be normalized based upon how fast drivers are actually driving, rather than establishing the speed at which drivers and other road users will be safest.

Higher design speeds are deleterious to urban environments in mandating larger curb radii, wider traffic lanes, streets without on-street parking, guardrails, and clear zones. Accommodating higher speeds also takes up valuable land. By designing for a faster set of drivers, crashes increase due to the differential in speeds between those traveling at the design speed versus the posted speed.

Recommendation

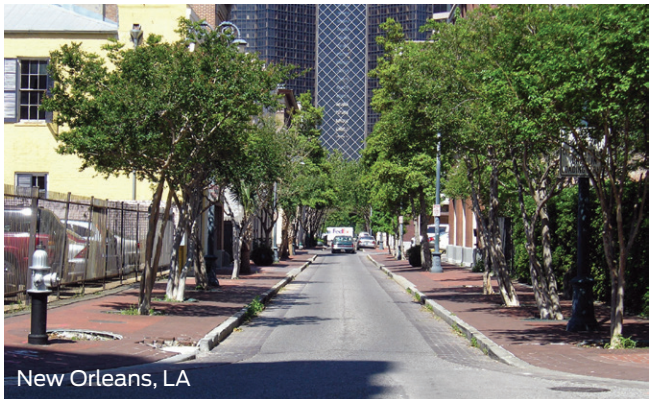
Target Speed = Design Speed = Posted Speed

Design using **target speeds**—the speed you intend for drivers to go—rather than operating speed, the speed at which drivers are going. Target speeds may fall between 15-30 mph on general streets, while alleys, shared spaces and pedestrian priority streets may be assigned target speeds as low as 10 mph. Many of the elements of great urban streets may then be incorporated into these lower speed streets, using benches, narrow lanes, trees, on-street parking, or small curb radii, which create a virtuous cycle that naturally encourages slower speeds.

Speed Control Mechanisms

- **Signals** – signals can be timed to manage vehicle speeds or to prioritize other user groups like cyclists.
- **On-street parking and bike lanes** – make drivers aware of the presence of cyclists and entering/exiting vehicles.
- **Lane width** – research shows that reducing lane widths does not increase the frequency of crashes, even on suburban arterials. On urban streets, the impact of driver error is greater, creating even more of an imperative to manage speed. 10-foot wide lanes are of sufficient width for target speeds of 40 mph or less. On bus and truck routes, one lane may be 11 feet wide.
- **Trees and landscaping** – trees narrow a driver's field of vision and encourage slower driving.
- **Medians and curb extensions** – narrow pedestrian crossing distances help to manage driver behavior and mutually improve drivers' and pedestrians' visibility of one another.
- **Traffic calming devices** – speed tables, speed humps and other tools that physically control speeds make it difficult to drive above the recommended speed.

The cycle track, on-street parking and trees along this street help reduce vehicle speed.



Trees and narrow street width encourage slower vehicle speeds.

A mini traffic circle reduces speeding through this intersection.

Curb extensions force motorists to make slower turns and reduce the pedestrian crossing distance at this intersection.

TREATMENTS & ELEMENTS

Public spaces, streets and sidewalks are often limited by their preexisting geometries and adjacent land uses. Despite these constraints, cities today have access to a growing toolbox of treatments and elements to activate their rights-of-way. From curbside public seating to green infrastructure and pedestrian safety improvements, an array of new design strategies are helping cities carve vibrant public spaces out of underutilized roadbeds. This section investigates these innovations as part of a flexible approach to street design and safety, focusing in particular on the curbside as a malleable space bridging the sidewalk and the street.

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Philadelphia , PA
Credit: University City District

Moving the Curb

Originally designed to capture stormwater and lead it to catch basins, curbs mark the traditional dividing line between motorized and non-motorized space on the street. On-street parking reinforces this division and serves as a physical boundary between the sidewalk and the street. Today, as cities reinvest in their streets as public spaces, curbside uses are beginning to change and evolve.

The Guide looks at the curbside as a flexible space that bridges and negotiates the street and the sidewalk. Cafe seating for adjacent businesses can replace curbside parking spaces. Bioswales and landscaping near the intersection can improve a street's ecological performance, while simultaneously calming traffic. The curb can host temporary uses and activities, such as food trucks and vendors, or low-cost safety improvements that shorten pedestrian crossings at intersections. Cycle tracks and interim sidewalk widening, meanwhile, officially extend the curb line and shift parking into a floating lane.

The images on pages 30-31 present a few of the emerging curbside uses being embraced by US Cities.

Bike Corrals

San Francisco, CA

Public Space

New York, NY

Pop-up Cafes

Long Beach, CA

CNU

Food Trucks

Washington, DC

Bioswales

Portland, OR

Parking Lane Materials

St. Paul, MN

Landscaping & Traffic Calming

Santa Fe, NM

Beth Ferrig

Low Impact Design

Low impact design (LID) refers to efforts to manage stormwater at the source, as opposed to directing it into the sewer system. LIDs are increasingly important as cities deal with climate change, water pollution and outdated infrastructure. In some circumstances, they can reduce long-term construction and maintenance costs, alleviate hazards from flooding and provide opportunities for innovative design. The latter is especially important as cities grapple with wide expanses of impermeable surfaces causing stormwater runoff.

Where a given street falls within its particular watershed dictates LID usage. Almost every street has a running slope: the higher portion deals with falling rain, while the lower portion handles rain and runoff. This begins to suggest design solutions reflective of local topography. Climates with more rainfall can support lush plantings, while more arid climates require systems that can remain dry for long periods.

Benefits

- Delineates no parking zones through enhanced vegetation
- Landscapes and beautifies the street
- Diminishes pedestrian crossing distances when located in medians or bulb-outs
- Reduces "ponding" at pedestrian ramps

More Than Just Rain Gardens

- Calms traffic as drivers move slower past trees and landscaping
- Provides rationale for narrowing street widths
- Acts as a buffer between traffic and the pedestrian realm


San Francisco, CA

Portland, OR


Port Townsend, WA

Seattle, WA

Parklets, Pop-ups & Street Seats

Parklets, pop-ups and street seats transform one to two parking spaces into 200-400 square feet of public space. These treatments may be temporary or permanent. Parklet programs are on the rise all across the country, as cities rethink how to best utilize these public amenities.

The following criteria are used in the design and placement of parklets, pop-up cafes and street seats:

Location

- Lack of public space in the surrounding area
- Surrounding land uses that can attract people
- Identified community or business steward
- Pre-existing community support
- Not immediately adjacent to the corner
- Not blocking a fire hydrant or bus stop

Design

- Materials that can stand up to impacts, resist scratches and not degrade under constant UV and moisture exposure
- Protection from traffic while allowing for visibility via wheel stops, flexible bollards, street markings and railing edges
- Curbside drainage not impeded

A business owner, community benefit district, nonprofit or resident, is typically responsible for the construction costs, maintenance and liability insurance for the parklet. Permits are renewed annually.

New York, NY


Philadelphia, PA

University City District District


San Francisco, CA

National Association of City Transportation Officials
55 Water St., Floor 9
New York, NY 10041

www.nacto.org
nacto@nacto.org
212.839.6421

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Lead Project Staff

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