Chapter 1

PLACEMAKING IN THE PUBLIC RIGHT-OF-WAY

STREETS ARE MORE THAN JUST PLACES TO DRIVE. Streets are spaces in themselves, and a valuable part of the public realm. This simple concept is lost in much of the common understanding of the right-of-way. Mobility is thought of as the only function, but movement is one of several roles that the right-of-way can play. The paradigm becomes quite different if street design is approached from a multi-use, spatial standpoint rather than a single-purpose traffic function. The right-of-way becomes more than just something to move through as efficiently as possible. It can be considered as a network of spaces with a mix of uses and users, with spatial qualities and unique contexts. Streets can be conceived and designed to best support the life of communities in a variety of roles. It is a paradigm that needs exploring.

Figure 1-1

"Placemaking" means making spaces where people want to spend time. What makes a place where people choose to spend their time? A successfully conceived place often has qualities that are memorable—someone could describe it to you and you would know exactly where they meant. Often, there is something unusual about the space, a rich character that makes the space stand out from the places around it. A beautiful and distinctive view, large trees, or historic buildings can give voice to the local community and its culture. A well-designed spot, if it reflects the character and needs of the unique local culture, can provide a sense of place and setting around which that culture can center itself. Placemaking springs from understanding the local conditions and recognizing the opportunities that these conditions and cultures offer (Figure 1-1).

Figure 1-2 A plaza created from right-of-way offers open space for a Brooklyn neighborhood. *Photographer: Paul Iano*

THE FUNCTION OF PLACES

In a healthy city, creating good public space in the right-of-way cannot be an afterthought. "People want to live in places that cultivate connectedness—to the physical city itself as well as the people in it," says urbanist Dan Bertolet. "True cities, small and large alike, have the power to bring people together."[1] It is the interchange of ideas and shared experience that brings vibrancy to urban areas, and it takes shared spaces to accomplish what cities do best.

Great urban areas have a variety of types and sizes of public spaces. Large parks and playgrounds, libraries, community centers, and schools are public spaces outside of the right-of-way. These public spaces are important hearts of civic life. The right-of-way plays a less recognized but equally critical role as both connective tissue and as a place in its own right.

In the densest cities, the right-of-way offers opportunities for much needed open space. The City of New York has the equivalent of 64 square miles of right-of-way, occupying as much space as fully 50 Central Parks.[2] In cities as dense as New York, finding enough open space to serve everyone is very challenging. The City of New York has found that underutilized portions of right-of-way can be

[1] Dan Bertolet in CityTank, "Ideas for the City", http://citytank.org/2011/04/13/c200-coming-home/, accessed July, 2011.

[2] NYC DOT Plaza Program, www.nyc.gov/html/dot/html/sidewalks/publicplaza.shtml.

reclaimed for plaza spaces. These transformed spaces are an important part of the City's effort to offer quality open space within a 10-minute walk for all residents (Figure 1-2).

But it is not only the densest urban areas that need quality public spaces. The sad fact that over 60 percent of Americans are overweight is an indication that we are not getting enough exercise.[3] Placemaking in the streets—creating pleasant places to be outdoors and to move between destinations—improves the odds that more people will choose to walk.

Placemaking offers a wide range of benefits to a wide range of communities. Attractive sidewalks bring shoppers to Main Streets. Landscaping and street trees that beautify the right-of-way also benefit air quality and water quality. Quality places entice people to make optional trips to walk and to enjoy time out-of-doors. Bringing people together helps build social bonds in neighborhoods. Investments in the public realm, thoughtfully sited and designed, bring many tangible and intangible returns (Figures 1-3 and 1-4).

Figure 1-3 Quality public spaces offer numerous direct and indirect benefits for communities.

Figure 1-4 Active uses along the edge and places to sit make streets comfortable and interesting.

[3] "Obese," defined at Gallup-Healthways Well-Being Index, 2009, www.well-beingindex.com/.

WHY INVEST IN A QUALITY PUBLIC REALM?

"The measure of a city's greatness is to be found in the quality of its public spaces."[4]

John Ruskin

Why does a quality public realm matter? It can be easy to take for granted the profound impact our surroundings, and the quality of those surroundings, has on our daily lives. The spaces around us shape our lives, and everyone has a stake in this—from business owners who want to see their retail districts become profitable, to health experts encouraging exercise, to a commuter who uses the sidewalk to reach the bus stop on his daily trip to work—everyone has a stake in the public realm.

The public realm can:

- Create excellent places to live, work, and play

  Good outdoor spaces make the adjacent indoor spaces better. A place to sit and eat lunch in the sunshine during lunch hour, a pleasant jogging path, or a safe way for children to walk to the playground—together spatial details like these create desirable communities.

- Strengthen community interaction

  Neighbors get to know one another when they spend time in the public realm. When people work together to create shared spaces or activities—community gardens, "walking school buses" where children walk to school together, or improved retail districts—the bonds of the community increase. This is a theme that is heard again and again in successful cases of community-building efforts.

- Encourage healthier lifestyles

  People were made to walk. Our sedentary lifestyles have become problematic, in part because walking in spaces that are unpleasant and difficult to navigate has become unpleasant and difficult. Rethinking how the right-of-way is designed and used can help to reverse this trend.

- Develop local economies

  When people live within walking distance of stores and services, then they can spend less time traveling. They can spend money in their own neighborhoods, strengthening their local communities instead of bringing their business elsewhere. Attractive Main Streets provide more human-scaled alternatives to regional malls with chain stores and vast parking lots. When the quality of the public realm is outstanding, people will also come from other neighborhoods, turning local treasures into destinations. Cities that have made active and unique public spaces, such as the Riverwalk in San An-

[4] Commonly attributed to John Ruskin.

tonio, Texas, or Las Ramblas in Barcelona, Spain, attract tourists from all over the world, in addition to local residents.

- Promote urban patterns that are less dependent on fossil fuels

  Besides being healthier for individuals, a good public realm makes for healthier cities. Walking and bicycling should be convenient, attractive choices for many daily destinations.

PLACEMAKING AND DESIGN

Streets, like all spaces, have three-dimensional characteristics. Streets are not just a flat plane on which to travel, but a volume of space, a kind of large "outdoor room," in which the surface of the street serves as a "floor," and the surrounding buildings serve as the "walls." Like any indoor space, streets have edges and enclosure (Figure 1-5).

The edges of a space define its volumetric character. When buildings line the street, serving as its walls, the activities they offer can encourage people to use the street. James Kunstler notes that "whether in the garden at home, or on Main Street, people like to feel sheltered and protected. We're attracted to arbors, pergolas, street arcades, even awnings. . . Buildings, therefore, are used to define and control space, and, by making it comprehensible to the human mind, make that space appear safe and welcoming."[5] We enjoy spaces that are scaled appropriately for use by people, interpreting them as cozy, intimate, or safe. We feel invited to spend time there. When streets have poorly defined edges, large empty spaces, and are sized for cars and trucks instead of people, the space instead becomes isolating, intimidating, and even dangerous, encouraging us to move through it and leave it quickly, just as the vehicles are doing. The poorly defined boundaries make the road appear larger than it actually is, with the space "bleeding" off into parking lots or empty spaces.

Some designers feel that there are ideal proportions for street sections, with building heights proportional to the street width. For instance, a 66-foot-wide street, lined with one-story buildings, 15 feet high at both sides of the street at the property lines, would have a building height to street ratio of under 1:4. If the street had wider streets or lower buildings, the definition of spatial volume begins to be lost. Two-story buildings (about a 1:3 ratio) or three-story buildings (about a 1:2 ratio) feel more comfortable to most people. Very dense cit-

Figure 1-5 The patterned stone makes a high-quality "floor" to the space.

[5] Kunstler, J.H., *Home from Nowhere: Remaking Our Everyday World for the Twenty-first Century,* Simon and Schuster: NY, 1998, p. 137.

Figure 1-6 Trees in the street and the median create a volume of space that deemphasizes the travel lanes. In this case, the trees compensate for the lack of buildings along the street edge.

ies may have very high ratios of building height to street width, which shade the street for much of the day and can create wind tunnels (Figure 1-6).

There are many ways to successfully suggest edge conditions, such as lining the space with mature street trees. It is not only the height of the edge in relationship to the width of the street that matters, but also the continuity of the edge conditions. Interesting streets may have a sequence along their length, perhaps with enclosures along blocks and openings at intersections. Some of the most problematic streets have insufficient definition along their length, or large intersections with multiple streets meeting at odd angles.

The desirable proportion of enclosure varies with climate and the materials used in the space. In hot, dry climates, streets have traditionally been quite narrow in order to shade pedestrians on the streets. The City of Phoenix studied street proportions in desert climates and weighed heat gain with the ability of buildings to release heat at night and found that a ratio of approximately 1:2 balanced heat gain and release. In climates with less sunlight, streets may benefit from increased width.[6]

[6] *Sustainable Development in a Desert Climate*, Chapter 4 of the Downtown Phoenix Plan, July 2008, pp. 4–6.

The edges of the street are typically regulated through land use laws such as zoning codes. Many land use regulations are intended to foster walkable neighborhoods by the use of requirements for street edges—calling for retail uses on the ground level, windows for display, a continuous street wall at the property line, or placing parking away from the front of the building. Regulations calling for active street fronts can help with placemaking, but the market needs to be able to support retail uses where required by code, or the street will have vacant storefronts.

Streets that have been designed with a priority on vehicles often result in disappointing "places." In the streets themselves, the ground plane is typically asphalt or concrete, with painted traffic markings. Even where there are sidewalks, the pedestrian environment offers little more in the way of amenity than the street environment. There may be little distinction between roadway and parking lots, and no sense of human-scaled enclosure.

For contrast, consider the medieval streets of Europe. Narrow and winding, they evolved over centuries, scaled for the people that built and used them. Medieval streets were built when every destination was walkable. Medieval streets and buildings were not built with plans and regulations, but were adapted in the field over time, responding to changing conditions and changing needs. In an era where moving materials was not as easy as it is today, the ground plane and the building walls that define the space were constructed with materials that came from nearby, suggesting a sense of continuity, wholeness, and rootedness.

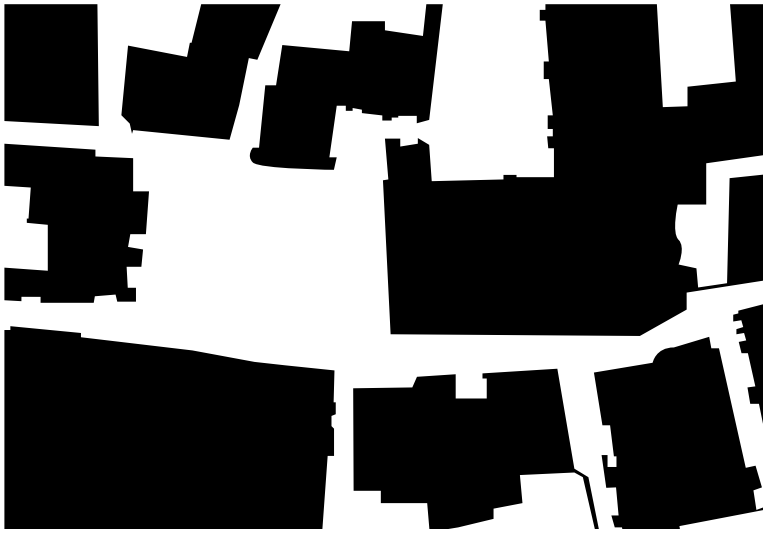
These streets function as narrow public spaces that lead toward and connect to the plazas where the larger-scale activities of the town occur. Unlike the directional aimlessness of our wandering parking lots and malls, these narrow streets actively *guide* the pedestrian toward the plazas, adding an interactive and intimate purposefulness to the experience.

The photographs of Ortygia, the old section of the town of Syracusa, Sicily, show narrow streets with abundant Mediterranean light bouncing off the local white stone. The intimately scaled streets open up to the spacious Pizza del Duomo, creating a dramatic contrast in volumes. It is an example of constrained "people spaces" —streets with little or no vehicle traffic—opening up into the grander "people spaces" of the plaza. The quality of these spaces has drawn visitors for centuries (Figures 1-7 and 1-8).

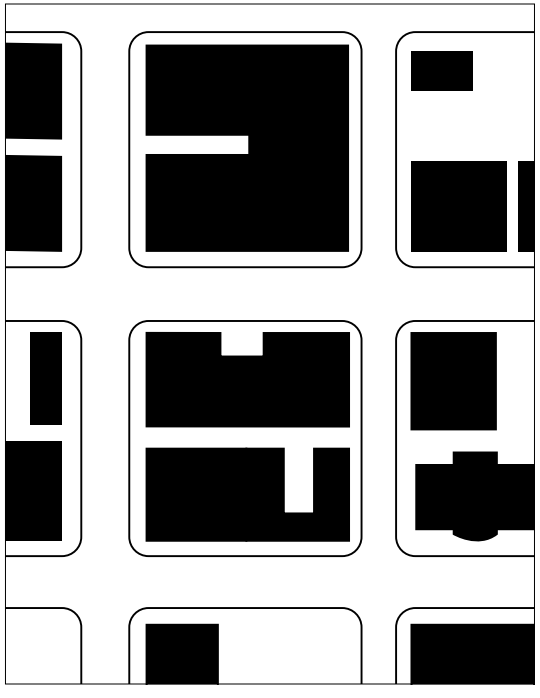
Figure 1-7 The narrow, winding streets of Ortygia are an intimate scale.

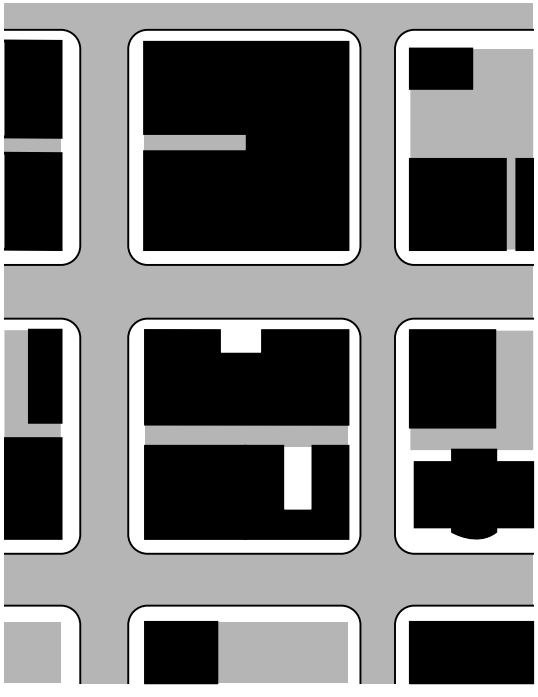
Figure 1-8 The narrow streets connect to and contrast with the grand pedestrian plaza.

1-9a: The figure-ground of a medieval hilltown shows the narrow routes that connect to larger plazas. All of the white space is pedestrian space.



1-9b: The figure-ground of a modern city grid shows a regular pattern of land uses. Much of the white space, however, is for vehicles.





Ancient streets obviously evolved before automobiles dominated cities. But we tend to forget how much has been sacrificed in order to accommodate the car. Consider the generic urban street grid. Designers often show city "fabric" with drawings called "figure-ground" maps. The black indicates buildings, and the white is unbuilt space. In a figure-ground map of Ortygia, the white space, the void, is "people space." However, when automobiles are introduced into the "open" space, especially in high numbers and at high speeds, the space for people is confined in narrow bands up against the property lines. The people spaces—typically sidewalks—may be of higher or lower quality, but they are fundamentally different from the old streets where narrow pedestrian spaces lead to and opened up on plaza space (Figures 1-9a through 1-9c).

These narrow streets are distinct as volumes of space. This is an important concept, because many people involved in the design of streets do not fully consider the three-dimensionality of streetscape. The medieval streets—compressed volumes of space—bring people to the contrasting open space of the plaza. The variety of compressed and open space can make a very powerful and attractive network of open spaces.

1-9c: On the same city grid, vehicle areas are shown in gray, including travel lanes and parking areas. The pedestrians are on sidewalks, and the intersections are unlike the plazas where pedestrian routes historically connected.

Figure 1-10 Trees and buildings together form a volume that comfortably encloses the pedestrian space of the sidewalk.

The most successful sidewalk spaces bear a resemblance to medieval streets in that they have a volumetric character of their own. A traditional Main Street model, for instance, would have store fronts along one side with active uses, an ample space to walk and a canopy of trees with elements that buffer the traffic on the street side (Figure 1-10).

Designing for Comfort

Spaces need to be designed for year-round comfort in the particular climate in which they are located. Weather protection from harsh sun or persistent rain encourages walking in a variety of climates. Cities in colder climates cannot dismiss half the year as unsuitable for the use of public space, and many

of these cities have found ways to celebrate winter with special lighting, winter carnivals, and holiday markets. Thoughtfully sited trees or other vertical elements can block pedestrians from wind. "Warmth features," such as fireplaces or glazed winter garden spaces, entice people to enjoy public spaces during winter. In Copenhagen, overhead heaters and blankets make outdoor seating comfortable even during cold months.

Thoughtful urban design also makes a difference in the attractiveness of public spaces in hot climates. There are many design solutions for providing shade, including trees and arcades. Trees have the added benefit of cooling the air with evapotranspiration. Using lighter-colored materials that retain less heat can significantly change the comfort level of a space. Water features cool spaces, and can become iconic design elements.

Public Space and Transit

Pedestrian areas adjacent to a major transit connection need space designed to accommodate the movement of people to and from the station, and waiting areas where transit is at-grade. Wide sidewalks or plaza space is very important near busy transit links. Ample space at these locations can support retail or market uses that benefit from the presence of transit patrons.

Transit stations and stops offer interesting design opportunities that can make the use of transit more appealing and can result in well-activated spaces and successful businesses. Some cities ask for amenities on the buildings adjacent to transit stops, such as weather protection, seating, or leaning rails. Transit riders then tend to congregate near the building, and property owners may resent the use of their building edge as a waiting area. Other building owners find that transit patrons create business for their retail tenants.

For the transit users, having the building up against their backs feels intuitively safer and more comfortable than waiting in an open, exposed area. When people wait alongside buildings, they must travel across the full width of the sidewalk to the curb in order to get on the bus or train. This pedestrian cross-movement interrupts the flow of people moving along the sidewalk, and can be problematic in congested areas (Figure 1-11).

Another approach to locating transit waiting areas is to place shelters near the curb, which is possible if there is sufficient circulation space between the transit shelter and the building face. Transit amenities need to be designed so that transit patrons are assets to adjacent businesses. Considerations for designing successful transit space include adequate circulation space and visibility of building entries, safety, and lighting (Figure 1-12).

Outside of dense urban areas, transit stops are opportunities for simple amenities that can be enjoyed by anyone. Tasteful landscaping, and a place to sit or perhaps to stay dry, add to the walkability of a neighborhood for everyone in the community as well as making transit use more attractive.

ENCOURAGING THE USE OF PUBLIC SPACE

Quality, safety, convenience, and interesting destinations are among the factors that determine how people choose to move around the city. As a culture and a country, our successful efforts to make driving convenient have favored the car as the most common choice for movement. This, in turn, has led to spread-out destinations that make walking and bicycling impractical. Better pedestrian environments and more compact land uses will encourage walking, and better bicycle facilities will increase the number of people who choose to cycle.

The work of Copenhagen-based Gehl Architects has distinguished between necessary activities, optional activities, and social activities. Optional activities are very dependent on the quality of the space, and in a good physical environment, a wide array of optional activities can occur. People choose to stroll, play, sit, and eat.

The attractiveness of optional trips is key to successful public space. Placemaking nurtures these optional trips, which depend heavily on the quality of the experience. Successful placemaking takes

Figure 1-11 Lean rails offer some comfort to transit patrons, but don't encourage longer stays.

Figure 1-12 Bus shelters can be located near the curb when the sidewalk is sufficiently wide.

Figure 1-13 Streets have always been places for shopping and meeting neighbors, even when cars have been added to streets designed prior to the automobile age.

advantage of the opportunities specific to a particular site and the potential of each site to contribute to the public realm. Depending on the needs of the neighborhood, this may mean creating new spaces for community activities, bringing out the identity of a neighborhood, or making enticing places that encourage people to walk from place to place. Site-specific design begins with an understanding of the natural context, and may include easy-to-overlook factors such as the light conditions and the wind and weather patterns that form the basis for comfort in the space. An understanding of the culture of the people who will use the space, through collaboration with the community, is fundamental to making places that the community wants and needs (Figure 1-13).

Streets have been meeting places throughout history. Even with the addition of vehicles into cities, many streets are still at the heart of civic life. Expanding the physical space available for public life is a critical opportunity in dense urban neighborhoods. Widened sidewalks, promenades, urban trails, small spaces for sitting, larger places for gathering—there are many types of spaces that bring people together and make communities interesting places to walk and to linger. Better public spaces bring more people outside into shared activities, and build stronger communities. By creating destinations—tables and chairs near a favorite street vendor, a fountain that encourages play, or public ball courts—more people choose to spend time in the public realm. Well-designed and cared-for public spaces are a source of community pride and often generate economic benefits.

Good public spaces can make neighborhoods safer as well. An intense mixture of uses can mitigate less-than-civil behavior. The urban park that accommodates a skateboard park, water feature, seating areas, and a grassy lawn that is directly between the library and a major grocery store attracts numerous user groups—a mixture of ages, seasonal uses, and time of day uses that in combination help keep the park feeling safe.

The body of design strategies that help make public space safer is often referred to as "crime prevention through environmental design" (CPTED) or "defensible space." Good visibility, plentiful users, and a sense of local ownership of the space all help make spaces feel safer. Even so, police or security presence is a reality of managing public space, and many communities have found security "ambassadors" a worthwhile investment (Figure 1-14).

Figure 1-14 Security personnel can be part of keeping spaces safe.

RECLAIMING RIGHT-OF-WAY FOR PUBLIC PLACES

One of the most exciting recent trends in urban design is the transformation of underutilized right-of-way into successful public spaces. New York and San Francisco have been on the forefront of this movement. It is no coincidence that the country's densest urban areas have discovered the value of even relatively small parcels of land. The old adage of "location, location, location" is as important for urban planners as it is for real estate investors. Even small spaces in these desirable locations can make huge contributions to the public realm.

The use and design of repurposed spaces must be right for their context. Is the space located in a dense urban location, where people need gathering places, or is it in an industrial area? What can the space add to the context that is appropriate and needed? What problems can it help solve? If right-of-way is not contributing to mobility, then it is ripe with opportunity for placemaking or improving ecological function.

Figure 1-15 A green street, where newly planted landscape replaced a driving lane.

Right-of-way space can be used to add landscape and to improve drainage. Where there is less density, not every space needs to be "inhabited" space. Greening—adding trees, landscaping, and natural drainage—has the effect of "beautification," but goes beyond mere aesthetics by serving environmental functions, and increasing a community's sense of pride of place (Figure 1-15).

Portions of the right-of-way may be suitable for park space, for passive or active recreation. Some parks include basketball or bocce courts or chess tables. Park facilities for dogs and dog owners have proved popular with a group that needs to be outside multiple times each day. Where people are invited to stay in the space, the design needs to support comfort and safety, with clear lighting and lines of sight.

A successful mixed-use park needs plenty of people to keep it activated. Underutilized right-of-way in denser neighborhoods, where people need more open space, is a perfect opportunity for a pedestrian plaza. Places with transit connections are especially good candidates for creating successful open space because of people walking to and from transit. A mix of uses—residences, businesses, places to eat, transit—means that people come and go over most of the day and evening. That mix is critical to the health of businesses that may not be able to survive on a population that is only present during the 8-to-5 work day.

One of the challenges with creating mixed-use spaces is the amount of time needed to initiate and complete the many incremental steps required from conception to construction. The public realm is always evolving, and the best public spaces are created over time. It is often more successful to create a place with character by infilling missing pieces within a district than by launching large-scale new developments. Infill development means that there is a variety of uses and design styles, with buildings and elements from different eras, and often quirky conditions that make for interesting and attractive spaces.

The public realm is complex, and successful transformations involve policy frameworks, a supportive local jurisdiction, options for mobility, and a committed community of residents and business owners. The public-sector investments in streetscape and public places can encourage desired private development. Indeed, the goal of good urban planning is exactly that—to foster public actions that spur the private sector to take actions toward a better community.

Well-conceived, well-designed public actions can be catalysts in the creation of quality places to live and work. For instance, public transit systems can jump-start new development and new activity that, in turn, make the transit system better utilized. But new public spaces by themselves do not necessarily turn troubled places around. Cities evolve with complex interactions of private and public owners, community endeavors, and the different perspectives provided by regulatory, economic, and cultural frameworks. Public spaces need to serve a mix of users and uses. They need to support activities that are desired by a mix of users. The right-of-way is an enormous opportunity for placemaking, but like any good public space, must be in the right place, with the right design, in order to be a true community asset.

Reclaiming Right-of-Way: PARK(ing) Day

Why do it? Because it's your city!

(PARK)ing Day website, frequently asked questions

Civic actions, by individuals or small groups, can add up to the spread of significant ideas. In 2005, a San Francisco art and design studio called Rebar put quarters in a downtown metered parking space and converted it into a temporary public park for the 2-hour duration of the time allotted on the meter. The idea of the project was to challenge assumptions about the way that public space is used in the City, and to empower people to define how space is used. "Renting" a metered parking space is a cost-effective way to briefly control a piece of the City.

Figure 1-16 Park(ing) Day brings out creative ideas on how to use the street. *Eli Brownell/King County Parks*

This small-scale guerrilla action inspired people all over the world to create temporary open spaces of their own. Rebar put their idea out as an "open source" project, with a manual on how to make temporary parks out of parking spaces. The outcome, PARK(ing) Day, has become an annual, worldwide event. Just four years after the original installation, PARK(ing) Day 2009 simultaneously generated 700 parks in 140 cities on 6 continents[7] (Figure 1-16).

In some cities, there appear to be no restrictions on what can be done in a parking space, so long as the space is paid for. Other cities specifically limit what is legal within a parking space. Within a few years of the original PARK(ing) Day precedent, several cities, including Los Angeles, California, and Seattle, Washington, have created permits especially for PARK(ing) Day.

PARK(ing) Day installations have been harder to accomplish in other cities. After Louisville, Kentucky's Urban Design Studio set up their park on South Third Street, the action was shut down and the "park" moved indoors. Metro Louisville Public Works required approval from four different departments, a traffic plan, and a three-foot buffer with reflective cones for safety. "This example," wrote Brandon Klayko in the Broken Sidewalks blog, "really gets at the heart of the discussion that needs to be taking place: who are our public spaces really for?"[8]

Reclaiming Right-of-Way: New York City's Green Light for Midtown

New York City announced its Green Light for Midtown program in February 2009. NYCDOT described the program as an initiative to improve mobility and safety that would also make the area a better place to live, work, and visit. The redesign of several intersections in Midtown was based on a study showing improved traffic flow where Broadway's diagonal cuts across Manhattan's grid.

Temporary measures—paint and orange barrels—were put in place to test channelizing traffic. The channelization resulted in five pedestrian plazas along the route, creating an aggregate 2.5 acres of "found" open space. The Times Square Alliance brought in 376 folding lawn chairs to accommodate summer crowds before the more substantial furniture arrived.

The experiment in Midtown was declared a success on many levels. It may seem counterintuitive that reducing the amount of drivable space would improve traffic flow. But Broadway's angle cuts off the grid and results in a wide intersection where it cuts across the avenues that run north and south. According to the Green Light for Midtown Evaluation Report, reconfiguring these awkward intersections has improved traffic flow and reduced injuries to motorists, passengers, and pedestrians.

The new pedestrian spaces have proved to be very popular. The evaluation team found 84 percent more people are staying in the public spaces of Times and Herald Squares. They found that people were reading, eating, talking, and taking photographs in the spaces. Over a quarter of Times

[7] http://parkingday.org/, website content by Rebar, 2011, accessed July, 2011.

[8] http://brokensidewalk.com/?s=park%28ing%29+day.

Figure 1-17 The reconfiguration of Times Square increased and improved pedestrian space. *Photographer: Paul Iano*

Square employees are now leaving their offices for lunch more often. Residents report that they are shopping more in the neighborhood. Nearly three-quarters of New Yorkers felt that Times Square had improved dramatically[9] (Figure 1-17).

"New York is the world's greatest stage for urban design and streetscapes," says New York Department of Transportation Commissioner Janette Sadik-Khan.[10] These experiments have inspired new projects in all of New York City's boroughs, and become models for other cities. Chapter 7 further discusses the program and its policy foundation.

[9] New York City Department of Transportation, About the Green Light for Midtown Project, City of New York, 2011, accessed July 2011.

[10] "NYCDOT Launches Design Competition for Temporary Plazas in Times Square, Initiates Capital Design Process for Permanent Improvements," Press Release, March 3, 2010.

Reclaiming Right-of-Way: Pavement to Parks

San Francisco's Pavement to Parks program is an excellent model of repurposing urban right-of-way as plazas. Based on New York's conversion of excess right-of-way into pedestrian plazas, San Francisco is experimenting with new ways of using streets. Each project is "intended to be a public laboratory"[11] with the City and community working together to see if temporary changes should be made permanent. Selection criteria for the Pavement to Parks programs include space available in underutilized roadway, a lack of public space in the vicinity, community support, potential to improve bike and pedestrian safety, uses that can attract people to the space, and a steward for the space.

The first of the Mayor's Pavement to Parks initiatives—the 7,800-square-foot pedestrian plaza at 17th and Market—opened in May of 2009. DPW Director Ed Reiskin worked with the Castro Street Community Betterment District, the MTA, the City's Planning Department, the Mayor's Director of Greening, and City Supervisor Bevan Dufty. The temporary nature of the changes allowed a much easier process, and alleviated concerns expressed by some neighbors that the new space could result in crime and trash. If it didn't work, the project could easily be removed. The design work, done by Public Architecture, uses salvaged or recycled materials and is seen as an experiment—hopefully the first of many new repurposed public spaces. The local businesses have played a strong role, including setting up and putting away tables and chairs.

The success of the project shows. A year later, more permanent features were being put in place by volunteers, including Planning Department staff. The park was dedicated as Jane Warner Plaza to honor the memory of a well-loved neighborhood policewoman.

One particularly interesting initiative in San Francisco's program is the creation of "Parklets" by reclaiming two to three parking spaces. The sidewalk grade is extended, and instead of the parking space, there are benches, planters, landscaping, and bike racks. Some have tables and chairs (Figure 1-18).

Columbus Parklet is San Francisco's third Parklet. Most of the funding came from donations. The design, done by Rebar Group (the originators of PARK(ing) Day), was donated, and the adjacent cafe provides daily maintenance. The Parklet is free and open to the public.[12]

Figure 1-18 This parklet is a temporary sidewalk extension with a modular design that fits in the width of a parking lane. *Photo: Rebar Copyright © 2010 by Rebar Group, Inc. Walklet is a registered trademark of Rebar Group, Inc. Used with permission.*

[11] http://sfpavementtoparks.sfplanning.org/, website sponsored by Mayor's Office of Greening and San Francisco Planning Department.

[12] More information is available at http://sfpavementtoparks.sfplanning.org/.

Pedestrian Streets: Didn't We Try This Before?

As the expanding use of automobiles drew the life out of city centers in the 1960s and 1970s, some downtowns tried to compete with suburban shopping centers by offering easy parking and creating pedestrian malls. Most of these experiments failed, and cars were eventually reintroduced on the streets. It has become conventional wisdom that all American streets should have cars, regardless of the context.

While it may seem obvious, successful pedestrian streets require lots of pedestrians. American cities lost the culture of pedestrianism as they began to be shaped by the travel patterns of the car. Cities were carefully zoned into separate uses, with fewer and fewer downtown residents. Job opportunities became less concentrated in the city centers. Given the powerful magnitude of these shifts, removing cars from a shopping street was nowhere near sufficient for creating an urban renaissance.

Figure 1-19 Quality pedestrian spaces attract residents and visitors. *Photographer: Dave Knight*

In contrast, pedestrianized zones began to appear in the 1960s in Europe, with greater success than in North America. The old city centers of Europe were built before cars, and never fully adapted to large numbers of vehicles. Many of the pedestrian zones in Europe are destinations for tourists, who are attracted by the quality of the environment and character of the places. Many are located in cities with excellent transit systems. It is no wonder that places that functioned well before the introduction of the automobile would be better suited as pedestrian zones than the cities built during the height of the automobile era (Figure 1-19).

Even in Europe, these zones with little to no traffic evolved over time. Copenhagen's Strøget is a largely car-free zone that is crossed in places by through-traffic. One of the reasons that this zone works so well is that 37 percent of trips in Copenhagen are made by bicycle.[13] Many people live and work within an easy cycle, and people report that the main reason they cycle is because it is easy and fast. The reduction of

[13] City of Copenhagen, Cycle Statistics, www.kk.dk/sitecore/content/Subsites/CityOfCopenhagen/SubsiteFrontpage/LivingInCopenhagen/CityAndTraffic/CityOfCyclists/CycleStatistics.aspx.

cars in Strøget happened incrementally, beginning with temporary holiday closures, and expanding as people adjusted to each round of changes.

There are some notable successes in American pedestrian streets. Most are in college towns—Boulder, Colorado; Burlington, Vermont; Charlottesville, Virginia. College campuses are some of the best pedestrian environments in North American cities, and their successful examples of pedestrian streets are also often coupled with historic downtowns.

The management and programming of pedestrian streets is an important predictor of success. Many successful pedestrian places enjoy considerable use as locations to hold performances and events. Some places have developed a tradition of grassroots activities. In Boulder, for instance, the Pearl Street Mall is filled with performers of all kinds and audiences glad to be entertained. Seattle's Pike Place Market is known for its street performers, but those activities are managed by the Preservation & Development Authority. Locations for performance are designated, and performers must pay for an annual permit badge.

The lessons to be learned from earlier attempts at pedestrian streets are important, but the failures of that effort should not be overly extrapolated. A renewed interest in urban living has blossomed since the pedestrian malls in American downtowns fell into disfavor in the 1980s and onward. Today, walkable, mixed-use neighborhoods, if not pedestrian malls, are in fashion. Streets, as well as buildings, can be mixed-use—with a diversity of activities, ways of getting around, and different kinds of places. There will be new opportunities for pedestrian-friendly streets that respond to shifts in demographics and culture. Successful streets will evolve and support the needs of the people that use them.

CONSIDERING ALL THE ELEMENTS IN THE RIGHT-OF-WAY

The right-of-way moves more than people and goods. Water, sewer, telecommunication, and power move above, on, and below the street surface. Utilities and services may not seem glamorous, but they are important components of the public realm and need careful consideration in the design and maintenance of public space.

The pipes and conduits that carry water, sewers, and natural gas run underground, usually below travel lanes in the street, but sometimes under the planting strip or sidewalk. The location of the utilities can limit the location of street trees, so the desired locations for trees should be considered when laying out new utility locations.

Electricity and cables may be underground, or on overhead poles. Electric transit also functions through overhead power transmission. In addition to the physical space this utility infrastructure occupies, it also requires safety clearances from other objects—both vertically and horizontally.

Figure 1-20 Utility boxes should be placed with pedestrian access and public spaces in mind to avoid unfortunate consequences for streetscape designs.

The presence of above-ground utilities impacts the type and location of street trees. Smaller trees may be the best solution below overhead wires, rather than larger species that require substantial pruning.

Power line corridors that carry high-voltage lines have restrictions on what can be placed on the surface within the corridor. Some cities have used this restriction on buildings in the corridor as an opportunity to build long stretches of bicycle or pedestrian trails, such as Seattle's Interurban Trail and Chief Sealth Trail. High-voltage lines along city streets may require setbacks from the adjacent buildings, offering additional space for pedestrians at the building frontage.

Telecommunication lines have had a large visual impact on city streets. Telephone and power poles carry a variety of lines belonging to public agencies and private companies. Some telecommunication networks are installed in underground corridors below travel lanes or parking zones. By keeping the underground utilities away from planting zones, trees stay healthier, but the pavement needs to be ripped up and replaced when changes or repairs to the utilities below are required. The new generation of wireless connections manifests itself in cabinets on the surface, competing for the often-scare resource of sidewalk space.

Utility boxes are too often an afterthought, and if they are located without thought to the pedestrian space, they can become obstacles to mobility and major detractions from the quality of a space. In many cases, traffic signal controller boxes must be placed near the street corner, proximate to the signal loop detectors and hardware. In these cases, every attempt should be made to minimize the impact of the boxes on sight lines and aesthetics. They need to be far enough away from the curb ramps so that access to the crosswalk is not impeded. The best solution is usually for the street designer to work with the traffic engineers so that the solution works both functionally and aesthetically. (Figure 1-20).

All utilities need to be accessed from time to time for maintenance and repair. Part of the art of good street design is arranging all the necessary elements of the street in ways that function well for the utilities but create a thoughtfully arranged streetscape that prioritizes public activities.

Waste removal is another consideration in designing the street. Garbage trucks are often oversized vehicles with large required clearances. Garbage trucks may also need access via alleys or other service drives. Some urban areas are reconsidering how waste is handled. The details of how waste is sorted, stored, and collected can encourage recycling and waste reduction. Methods of waste collection can also free up use of streets and alleys for uses other than storing garbage. See the Case Study on Nord Alley in Chapter 7 for the changes brought about in Seattle's Clear Alley Program.