SECOND EDITION

URBAN DESIGN
for an URBAN CENTURY

SHAPING MORE LIVABLE, EQUITABLE, AND RESILIENT CITIES

LANCE JAY BROWN, FAIA • **DAVID DIXON**, FAIA • **OLIVER GILLHAM**, AIA

WILEY

Contents

List of Illustrations

early days of Modernism." —Robert Venturi, FAIA, accepting the 1991 Pritzker Prize (from www.pritzkerprize.com)

I.2 Merneptah's Mortuary Temple (ca. 1200 BCE) served as a religious, bureaucratic, and economic center. It also suggests the political significance of early planned urban development. A stele proclaimed: "The kings are overthrown, saying: 'Salaam!' / Not one holds up his head among the nine / nations of the bow. / Wasted is Tehenu / The Hittite Land is pacified / Plundered is the Canaan, with every evil / Carried off is Askalon / Seized upon is Gezer / Yenoam is made as a thing not existing. / Israel is desolated, her seed is not. / Palestine has become a [defenseless] widow for Egypt. / All lands are united, they are pacified; / Every one that is turbulent is bound by King Merneptah."

I.3 A reconstruction of Babylon's Ishtar Gate from the seventh century BCE, at the Pergamon Museum, Berlin, suggests the feeling the gate might have evoked in its creators: awe of the protective power of the gods that dwelt inside the city.

I.4 Designers working under authoritarian regimes often had the freedom to create monumental spaces and long vistas, as in Paris.

I.5 As factories multiplied in cities, many residents found the resulting noise, smoke, and soot intolerable.

I.6 For the well-to-do, suburban housing offered an escape from crowded industrializing cities.

I.7 Highways of the urban renewal era often cut large swaths through dense older neighborhoods.

I.8 These same highways cut very different swaths across formerly rural areas—dispersing the economy of

America's cities from older neighborhoods to miles of strip development.

I.9 a,b Philadelphia created Independence Mall in the early 1950s—a three-block swath whose stated rationale of commemorating historic events served as an excuse for an urban renewal project that buffered downtown from deteriorating neighborhoods to the east and cleared "slum neighborhoods" to create sites for new office buildings.

I.10 Robert Moses viewed his Battery Bridge project (1939) as a high-profile opportunity to modernize the image of New York City. The Battery Tunnel was constructed instead.

I.11 Skidmore, Owings & Merrill's design plan for Moynihan Station in Manhattan recaptures much of the grandeur of McKim, Mead & White's Pennsylvania Station, demolished in 1963. The current, underground station would relocate across the street to the dignified Farley Post Office Building, also a McKim design. The plan responds to a widespread yearning for the urban qualities lost to urban renewal and subsequent years of disinvestment.

I.12 The SOM plan grafts a glass superstructure onto the neoclassical Farley Building to define a striking arrival area that serves as a memorable new transit-oriented entry to New York.

I.13 A 1910 Hughson Hawley rendering of Penn Station and the Farley Post Office complex.

I.14 In 2000, the Boston Society of Architects (BSA) sponsored the first regional smart growth initiative in New England. In the wake of a yearlong grassroots effort that culminated in a weekend conference that drew hundreds of participants, five major environmental

organizations joined the BSA to form the Massachusetts Smart Growth Alliance. The Alliance has evolved into an effective advocate for smart growth legislation and public policies.

I.15 In 2003, the Boston Society of Architects (BSA) joined with the Massachusetts Smart Growth Alliance and the American Institute of Architects to organize Density: Myth and Reality, the first national conference on population density. Concerned that smart growth would remain unattainable without support for greater density in urban centers, the BSA saw the conference as a way to confront widespread fears about density. Policy makers considered density so controversial that just the word's presence in the conference title prompted more than one public agency to threaten to withdraw its sponsorship. Today, planners and public officials view denser urban development as a key economic and environmental strength of cities and, increasingly, suburban centers.

I.16 Four hundred attendees at the 2003 density conference called for heeding architect and urban designer Josep Lluís Sert's call for recentralization, almost fifty years after Sert delivered his initial speech on the topic at Harvard University in 1956.

1.1 Plan of Miletus (fifth century BCE). Reconstruction of the Greek colony in Asia Minor—carried out after being sacked by the Persians—followed a gridiron plan, with square blocks radiating from a central agora. As they established subsequent colonies around the Mediterranean, the Greeks replicated the Miletian plan.

1.2 Dubrovnik, Croatia. The Byzantine empire inherited the Miletian plan from Rome and prescribed the grid that still distinguishes Dubrovnik's historic center from

development outside its walls, which were begun in the ninth century and completed during the Renaissance.

1.3 Piazza del Campo (fourteenth century), Siena, Italy. The Piazza del Campo broke with an important medieval city-building tradition. Instead of serving as the setting for a cathedral, the piazza's focus is a secular building, the Palazzo Pubblico, seat of the Sienese republic. The square prefigured the modern idea of secular civic space.

1.4 Palmanova, Italy (1593). The strict geometry of the plan for Palmanova—a defensive fort east of Venice—grew out of military necessity, but it influenced town planning for centuries. Its straight, wide boulevards and idealized plan surfaced in baroque-era plans across Europe. Purely geometric inside a broad band of earthen bulwarks, it also inspired designs as varied as English garden cities and twentieth-century visionary projects like Arcosanti in Arizona.

1.5 Piazza San Pietro (1656–67), Vatican City. Bernini's quintessential baroque plan for a plaza and colonnade masterfully blends Renaissance knowledge of perspective with the baroque penchant for grandeur and illusion to orchestrate the experience of approaching St. Peter's Basilica.

1.6 The Plan of the Three Canals (1607), Amsterdam. The Three Canals Plan, adopted by the municipality, introduced a baroque sense of geometry and order into expansions of the medieval city. Amsterdam's novel approach to the plan's execution proved influential in the United States: the municipal government identified the plan area and set guidelines for construction, but it left realization of the plan to private developers.

1.7 Plan of New Amsterdam (1660). In nearly twenty years as governor, Peter Stuyvesant turned New Amsterdam's jumbled lanes into a gridded pattern that suggested the influence of both the Three Canals plan and baroque planning sensibilities.

1.8 View of Savannah, Georgia (1734). Although not every English settlement in the American colonies adopted the grid, Philadelphia, Charleston, and Savannah embraced it. The visionary plan for Savannah arrayed eight blocks around a central square to form a physical and political unit, with appointed sites for public functions like markets and churches; the rest of the land was reserved for houses. These units (or wards) remained the building blocks of the town's growth for more than a century.

1.9 Commissioners' Plan for New York City. The gridiron that signified order and authority to baroque-era rulers in Europe took on a more practical meaning in the United States—it made development easier. The unrelenting grid laid over Manhattan's topography in this 1811 plan provided the framework for the city's nineteenth-century growth.

1.10 L'Enfant Plan for Washington, D.C. Pierre-Charles L'Enfant scoffed at the simple grid as too humble for a national capital, yet he relied on it as the background pattern for his baroque plan of squares threaded onto a web of avenues radiating from public monuments. Most U.S. cities stuck with a basic grid for ease of design, development, and management.

1.11 a,b In the last half of the nineteenth century, the Industrial Revolution transformed the shape of U.S. cities. These of views of Chicago, one of America's most heavily industrialized cities by the start of the twentieth century, suggest how much the scale and intensity of

urban life had changed. In 1850, a few years before the first photo was taken, the city had 29,000 residents. By 1900, when the second photo was taken, it had 1.7 million. New forms of mechanized travel—railroads, then electrified streetcars, then subways—radically altered street design while dramatically extending the distances people could travel to work and shop. This fueled a rapid expansion of the grid pattern in cities and the annexation of adjoining communities to accommodate surging populations and expanding industries. Railroads encouraged the development of distant suburbs, sowing the seeds for later decentralization. Industrialization itself fed the trend, as people sought housing and green space away from the smoke and noise of factories.

1.12 In the late nineteenth and early twentieth centuries, New York and Chicago competed to build ever-taller skyscrapers. In 1903, Daniel Burnham's Flatiron Building reached twenty-one stories, making it the world's tallest.

1.13 The Singer Building (1908). Provoked by the Flatiron Building's unvarying massing from pavement to cornice, architect Ernest Flagg argued for setting towers back from the property line at the tenth or fifteenth story. Buildings like the Flatiron, he argued, blocked sunlight and failed to capture the drama of skyscrapers, so he used his own design for the forty-one-story Singer Building as a real-world demonstration. The idea of upper-level setbacks appeared in big-city building codes across the United States in the 1920s and directly inspired New York's "wedding cake" skyscrapers from the 1920s through the mid-1960s.

1.14 Upon its completion in 1913, the Woolworth Building in Manhattan became the tallest building in the

world, a title it held until the completion of the Chrysler Building in 1930.

1.15 West Newton Hill, near Boston. The first American suburbs—leafy enclaves built for the rich and connected to nearby commercial centers by railroads—adopted a romantic design vocabulary of winding streets, cottage-style architecture, lush landscaping, and picturesque views. In a sense, they represented the "anti-grid" and introduced a new approach to urban design in the United States.

1.16 The growth of Boston's "streetcar suburbs." The advent of electrified streetcars and new methods for framing and erecting buildings supported dramatic expansion of U.S. cities in the last half of the nineteenth century. Development followed the inauguration of new transit lines in an early expression of transit-oriented development.

1.17 a,b Diagram details for a prototypical garden city. British reformer Ebenezer Howard advocated an alternative to relentless expansion of industrial cities: small, self-contained cities surrounded by permanent greenbelts. His vision, which drew on the plan for Palmanova (among other sources), influenced twentieth-century city planning in the United States, from the first car-oriented suburbs to the thinking behind the New Urbanist movement in the 1980s and '90s.

1.18 By 1890, community leaders had begun to argue for regulations to control the proliferation of telegraph, telephone, and electrical wires in Manhattan's streets. The city eventually required their burial, a precursor to broader controls that ultimately produced the country's first zoning ordinance.

1.19 Georges Eugène Haussmann's "modern" boulevards cut through Paris, redefining a medieval city that had grown organically for more than two thousand years into the baroque city we know today.

1.20 World's Columbian Exposition (1893). The temporary pavilions at the Chicago World's Fair influenced American city-building for a century—most directly through a revival of interest in classical architectural vocabulary for civic buildings, but more broadly through the City Beautiful movement, which promoted large-scale gestures to improve the appearance of American cities.

1.21 A grand city hall and plaza stood at the "center of a system of arteries of circulation" around which architect Daniel H. Burnham organized his plan of Chicago in 1909. A nationally influential leader of the City Beautiful movement, Burnham made only passing reference to the emerging concept of zoning, instead proposing a baroque framework of grand boulevards and public spaces intended to give Chicago a new sense of grandeur. This same aesthetic informed plans Burnham drew up for Cleveland, San Francisco, and other cities. Only Washington, however, with its grand L'Enfant layout, fully embraced his recommendations, contained in the MacMillan Commission report of 1901.

2.1 Plan Voisin (1925). Swiss architect Charles-Édouard Jeanneret, better known as Le Corbusier, scandalized the French architectural establishment with his plan for razing a large swath of central Paris in order to build massive office towers and apartment buildings set in vast parks and connected by superhighways. His plan reflected an approach that dominated modernist architectural thinking in Europe during the 1920s and

ultimately shaped American thinking about urban renewal in the 1940s and '50s.

2.2 Cité industrielle (published 1917). Tony Garnier's plan for an idealized socialist city in France influenced many early-twentieth-century urban plans. It blended emerging modernist ideas (zoning and industrial production of housing) with more traditional influences—and even historic preservation.

2.3 Communal House by Barsch and Vladimirov (1930). Revolutionary thinking upended traditional approaches to urban planning in Europe after World War I. In the Soviet Union, one school of thinking argued for communal housing that allotted each occupant roughly 55 square feet of personal space, with everything else used and held in common.

2.4 Rockefeller Center, New York (1929–39). Perhaps the crowning achievement of American urban design in the skyscraper era, Rockefeller Center's design celebrated industrial modernity. Among its pioneering features, a web of subterranean walkways connects the complex's fourteen towers and suggest the separated levels of circulation that distinguish many plans in the urban renewal era.

2.5 Rendering from *The Metropolis of Tomorrow*. Hugh Ferriss's distinctive style of architectural rendering helped idealize the massing of New York skyscrapers (itself a product of the city's 1920s zoning code) and transform the skyscrapers into models that influenced the shape of urban buildings across the United States for decades.

2.6 Advertisement for the General Motors (GM) pavilion at the New York World's Fair (1939–40). Among the marvels that GM's popular Futurama exhibit predicted

included a vast, automobile-oriented suburbia served by a network of superhighways. Within twenty years, the United States was busily concretizing a very similar vision.

2.7 Plan for Radburn, New Jersey. Automobile registration surged in the 1920s, Radburn became one of the first communities whose design presumed car ownership. Many of its features—including a hierarchy of streets geared to handling auto traffic, cul-de-sacs, and houses facing away from the street and toward private backyards—became staples of suburban planning in the years after World War II.

2.8 Perspective of Broadacre City. Frank Lloyd Wright's 1939 vision for low-rise, decentralized development matched GM's Futurama ideal. Both predicted America's devotion to suburban development in the post–World War II era.

2.9 Detroit's Lafayette Park, planned and designed by Mies Van der Rohe, replaced a slum with a mix of towers and town-houses set in a landscaped park. Today Lafayette Park is a neighborhood of choice for professionals who want to live close to downtown.

2.10 In 1956, Lúcio Costa won an international competition to design Brasília, Brazil's built-from-scratch capital city, with a proposal inspired by Le Corbusier's towers-in-a-park model. Intended to contain 400,000 people by the year 2000, the city had actually surpassed 2 million residents by that date. Costa embraced a modernist rejection of "archaic" city qualities, and his plan illustrates some of the most cherished goals of CIAM, including "rational" separation of uses (districts for residential, office, government, hotel, and others) and the use of arterial roadways to separate them. Although Costa's plan guided only the

development of the city center, Brasília stands as the most prominent citywide application of modernist principles. Architect Oscar Niemeyer designed most of the government buildings, including those for the supreme court, presidential offices, and the congress (pictured). Landscape architect Roberto Burle Marx designed the landscapes.

2.11 Slablike office towers along New York's Sixth Avenue set behind plazas devoid of active programming or dedicated use beyond ornamental landscaping exemplify the influence of Le Corbusier and CIAM on American cities.

2.12 Renaissance Center, designed by architect John Portman and described as "a city within a city," represents the high-water mark of urban renewal's commitment to replacing traditional downtowns with "modern" auto-oriented urban centers. The Center's location within downtown Detroit made it far more accessible by workers driving from affluent suburbs than it was from downtown, which sat isolated (or fenced off) from the complex by an arterial highway.

2.13 Plan for Southdale Shopping Center (1953). The first enclosed mall in the United States, Southdale opened in 1956. It served as a prototype—albeit on a smaller scale—for many downtown-revival plans into the 1980s.

2.14 Plan for Fort Worth, Texas (1956). Architect Victor Gruen's plan for downtown Fort Worth—a pedestrian core surrounded by garages for cars that arrived on an encircling freeway—recapitulated his earlier plans for suburban shopping centers and established a highly influential paradigm for rebuilding city centers in an auto-oriented age.

2.15 Empire State Plaza, Albany, New York. Separation of pedestrians and cars—in this case with a civic pedestrian plaza above a highway and parking—became the standard during the period of urban renewal.

2.16 (a) Boston before and during urban renewal. (b) Taken in the early 1960s, several key urban renewal initiatives are complete or well underway. The elevated Central Artery, not yet ten years old, cuts across the bottom of the photo. Above the highway at right, the low-rise, nineteenth-century buildings of the West End have disappeared; only the Massachusetts General Hospital campus remains, clustered near the river. The first buildings of Charles River Park—built on a model harking back to Le Corbusier's Plan Voisin—rise to the right of the hospital. The left edge of the cleared swath of land forms the site for the future Government Center and plaza. At top center, the framework of the Prudential building rises over former rail yards.

2.17 Prudential Center, Boston, Massachusetts (1960–65). This redevelopment project incorporated several of the era's common characteristics: it followed Victor Gruen's model of capturing traffic in a parking structure (in this case, underneath the development); it formed a superblock far larger than the basic unit of the adjacent grid; and it segregated pedestrian and automobile traffic.

2.18 Government Center, Boston, Massachusetts (1962–69). The complex of government buildings, planned by the architect I. M. Pei, replaced an energetic red-light district demolished in the early 1960s. Despite architectural praise for the city hall building, the vast pedestrian plaza often remains desolate, in contrast to lively mixed-use streets nearby.

2.19 Writer, activist, and urban theorist Jane Jacobs. In her 1961 book *The Death and Life of Great American Cities,* Jacobs set out the intellectual underpinnings of the reaction to urban renewal and its modernist precepts. She argued that the very qualities that car-focused urban renewal destroyed—varied buildings, intricate social networks, and pedestrian street life—were precisely what make cities successful. Her thinking continues to influence urban design today.

2.20 Habitat 67, Montreal, Quebec. Although it looks like a haphazard pile of boxes, Moshe Safdie's Habitat 67 was actually a carefully planned housing development. Built for the 1967 world's fair in Montreal, it stands as one of only a handful of 1960s megastructure plans that were built.

2.21 Walking City. One of many unbuilt megastructures from the 1960s: Archigram's 1964 plan for a city that moves on massive hydraulic legs.

2.22 Newburyport, Massachusetts. Making a midcourse correction, the city abandoned an urban renewal project, listed its downtown on the National Register of Historic Places, and redirected unused urban renewal funds to restoration. The historic preservation movement emerged in the 1970s as an alternative to urban renewal, offering an approach to downtown revitalization that focused on restoring rather than replacing urban fabric.

2.23 Faneuil Hall Marketplace, Boston, Massachusetts. The first "festival marketplace" became a national model for urban retail development and adaptive reuse.

2.24 Robert Krier's plan for part of Stuttgart, Germany (1979). In the 1980s, urban designers in the United States began imagining public space as harmonious

forms carved out of a dense background of buildings and stressed the importance of the street wall—the alignment of adjacent buildings—in shaping public spaces.

2.25 Rowes Wharf, Boston, Massachusetts. Diminishing federal funds for urban renewal and highway construction in the 1980s increased the role of private developers in shaping urban space. This change accelerated a move from the sweeping urban design plans of the 1960s and '70s toward infill and small-block development.

2.26 a,b Plan for Battery Park City, New York (1979). This context-sensitive master plan extended the nearby street grid onto landfill and took its architectural vocabulary from familiar New York City building styles. It concretized many of the principles writer Jane Jacobs had advocated for decades, beginning with her groundbreaking *Death and Life of Great American Cities* (1961).

2.27 Mizner Park, Boca Raton, Florida (1991). This pioneering 29-acre development introduced a full mix of uses—in essence, a small downtown built from scratch—on the site of a failed shopping mall. Although more sophisticated in execution, it reproduces the basic Victor Gruen paradigm of a highway bringing cars to garages from which pedestrians walk to shopping—and, in this case, to work, home, and other activities. The model has been repeated across the United States.

2.28 Windsor Town Center, planned and designed by Merrill & Pastor Architects, introduced a walkable and mixed-use New Urbanist center into what had been a single-use Florida subdivision.

2.29 Celebration, Florida (1994). In the late 1980s and '90s, plans for new "traditional" towns—with denser development that promoted walking, protected open space, and developed a vocabulary of architectural features from older suburbs—helped crystallize the New Urbanist movement.

3.1 a,b The transformation of Cherry Creek from a flood-control channel into an urban amenity in the mid-1990s helped turn Lower Downtown (or "LoDo") from an area of abandoned warehouses into Denver's first urban loft neighborhood. In less than two decades, it became one of the city's liveliest—and most expensive—districts.

3.2 Rendering © Michael McCann, courtesy of Rogers Marvel Architects

3.3 © Rogers Marvel Architects

3.4 © Rogers Marvel Architects

3.5 © Rogers Marvel Architects

3.6 Courtesy Goody Clancy

3.7 Courtesy Goody Clancy

3.8 Courtesy Goody Clancy

3.9 Courtesy Goody Clancy

3.10 © Adrian Smith + Gordon Gill Architecture (design architects)

3.11 © Adrian Smith + Gordon Gill Architecture

3.12 © Adrian Smith + Gordon Gill Architecture

3.13 © Adrian Smith + Gordon Gill Architecture

3.14 Courtesy University of Arkansas Community Design Center

3.37 Today people give priority to urban qualities when deciding where they want to live and work more than they did in the 1990s.

3.38 (a) As demand for multifamily housing surpasses demand for single-family housing over the next few decades, (b) urban neighborhoods—particularly those served by mass transit—face the possibility of housing shortages that will drive up prices.

3.39 a,b Once a manufacturing center, much of Kendall Square in Cambridge, Massachusetts, was cleared in the early 1960s to house the headquarters of the U.S. space program. When Lyndon Johnson became president, he sent the center to Houston instead, and the cleared land lay vacant for a decade until MIT-based research began to spur private-sector demand for research facilities located near the school—an appetite that has since increased steadily. Today, Kendall Square is a pillar of the Boston region's economy, and projections suggest it will add 6 million square feet of research and housing over the next decade—a nearly 50 percent increase in capacity. Commercial and residential space command some of the highest rents in the Northeast.

3.40

3.41

3.42

3.43

3.44

3.45

3.46 Courtesy of Mithun Architects + Designers + Planners

3.47 Courtesy of Mithun Architects + Designers + Planners

3.48 Courtesy of Mithun Architects + Designers + Planners

3.49 Courtesy of Mithun Architects + Designers + Planners

3.50 Courtesy of Mithun Architects + Designers + Planners

3.51 Courtesy of Mithun Architects + Designers + Planners

3.52 These maps, prepared in 2013 by the U.S. Global Change Research Program, show changes in North America's precipitation levels as projected by fifteen different climate models. The simulations for the end of this century predict northern regions will get wetter while southern regions will become drier in the spring—with consequences for food production, drinking-water supplies, and flooding threats. (Hatching indicates areas where the models predict similar results, and, therefore, a high level of confidence about those particular projections.)

3.53 © Urban Design Associates

3.54 © Urban Design Associates

3.55 © Urban Design Associates

3.56 Courtesy Daniel Schwartz/U-TT Chair, ETH Zurich

3.57 Courtesy Daniel Schwartz/U-TT Chair, ETH Zurich

3.58 Courtesy Daniel Schwartz/U-TT Chair, ETH Zurich

3.59 Courtesy Daniel Schwartz/U-TT Chair, ETH Zurich

3.60 Via Verde/the Green Way is a 222-unit mixed-income development in the Bronx. Developed by Phipps

Houses and the Jonathan Rose Companies and designed by Dattner Architects and Grimshaw Architects, the project emerged from a competition sponsored by New York City's Department of Housing Preservation and Development and the American Institute of Architects' New York chapter. The development represents a joint effort to create a replicable model for sustainable, mixed-income urban housing that demonstrates how design and sustainability can cut across economic, social, racial, and other differences.

4.1 Borrowing a concept from ecology, the New Urbanists developed the idea of the transect, a diagrammatic cross-section that runs from a metropolitan area's outer fringes to its very heart. Starting at the edge—undeveloped rural zones—the transect moves toward the region's center, gradually increasing building heights and massing to reflect growing development intensity as it passes from rural and then low-density suburban neighborhoods to urban neighborhoods and finally arrives at the downtown core. The emerging demographic, economic, and related forces discussed in chapter 3 suggest that going forward, the transect's shape will morph, with new spikes in the suburbs describing transit-served, higher-density corridors and increasing concentrations of height and massing in urban neighborhoods and downtowns.

4.2 Portland, Oregon, established the first major city growth boundary in the United States in 1973. Its original goal was environmental protection, but over the past four decades Portland has continued to lead in creating public policy for smart growth.

4.3 Urban designer Peter Calthorpe's concept of the "pedestrian pocket" represented a novel alternative to

the dominant model of suburban development in the late 1980s, a period during which suburbs continued to grow —and drain cities of people and investment.

4.4 Illustration by John G. Ellis, 2004.

4.5 Illustration by John G. Ellis, 2004.

4.6 Rendering by Chris Johnson.

4.7 Rendering by Chris Johnson.

4.8 Rendering by Chris Johnson.

4.9 American cities grew rapidly in the late nineteenth century, fueled by booming factories and ports and by immigration from Europe. Streetcar lines created arteries that shaped the growth of these cities (like Washington, shown here) until widespread automobile ownership arrived in the 1920s.

4.10 Planning study for Assembly Square, a mixed-use transit-oriented development 3 miles from downtown Boston. In the late 1990s, the City of Somerville had envisioned big-box stores on the site, which once held a Ford factory. A grassroots initiative and a new mayor joined forces to advocate for a mixed-use, transit-oriented district of more than 5 million square feet (now in development by Federal Realty Investment Trust). Economist Arthur C. Nelson projects a shortage of roughly 16 million housing units in transit-oriented developments by 2040.

4.11 Arlington Country began one of America's most ambitious transit-oriented development planning initiatives in the 1960s. County leaders persuaded planners for the new Metro transit system to locate the line passing through Arlington underneath Wilson Boulevard, the county's Main Street. Over four decades, changing leadership and professional planning staff

have maintained remarkable continuity in focusing growth within a five- to ten-minute walk of Metro stations, creating a series of walkable, mixed-use urban districts (Ballston is pictured here) while preserving the character of traditional suburban neighborhoods on either side of the corridor. The result has served as a national model for higher-density, transit-oriented growth. Arlington residents take pride in "the Arlington Way," a tradition of community-based planning that has brought more than 120,000 jobs, 40,000 high-density multifamily housing units, and a new generation of walkable mixed-use Main Streets to within walking distance of traditional suburban subdivisions.

4.12 Vladislav Yeliseyev/Torti Gallas and Partners, Inc.

4.13 Vladislav Yeliseyev/Torti Gallas and Partners, Inc.

4.14 Vladislav Yeliseyev/Torti Gallas and Partners, Inc.

4.15 Courtesy Goody Clancy

4.16 Courtesy Goody Clancy

4.17 Courtesy Goody Clancy

4.18 Courtesy Goody Clancy

4.19 a,b Rosslyn, a dense cluster of office buildings mixed with limited housing, retail, and other uses, was the first of Arlington County's transit-oriented districts. The opening of Metro spurred roughly 10 million square feet of development in the 1970s and '80s, but it was primarily auto-oriented and relied on wide arterial streets and bountiful parking.

4.20 Many older cities that lost industry after World War II, like Boston, did not recover from the Depression until the 1960s or after. The Prudential Center opened in 1964. With one exception, the city saw no other major

commercial development in its core for more than twenty years.

4.21 Many cities with strong economies, like Boston, have lost middle-income residents and experienced a growing gap between residents in low-paying service jobs and those in high-paying "creative class" jobs. Adapted from Richard Florida, "Class-Divided Cities: Boston Edition" at theatlanticcities.com

4.22 Vancouver was the first city in North America to encourage higher-density, mixed-use development to enhance livability and attract people and investment to its center. To prevent buildings from overwhelming the human scale at street level, urban-design regulations required a mix of lower-rise housing and stores at the base of towers.

4.23 The City of Baltimore launched a "dollar house program" in 1973, an alternative to urban renewal for attracting investment back into urban neighborhoods. The program quickly captured national attention and revealed a large reservoir of interest in living in historic urban neighborhoods. The resulting "urban homesteading" proved more critical than the Inner Harbor redevelopment effort in revitalizing Baltimore's urban core, and sparked a national movement.

4.24 Kentlands, Maryland, challenged prevailing suburban development patterns by using New Urbanist principles to create a "village" of closely packed houses on narrow lots, many of which were a short walk from a new Main Street.

4.25 East Beach is the newest in a series of closely packed New Urbanist neighborhoods, many planned by Urban Design Associates, that have transformed Norfolk from a town focused entirely on Navy installations into a

community of choice. The shift has helped Norfolk build the region's greatest concentration of small restaurants and entertainment unique to its downtown.

4.26 a,b One of the most economically depressed cities on the East Coast in the 1970s and '80s, Providence began a dramatic turnaround under Mayor Buddy Cianci. He supported interrelated initiatives—some begun by previous administrations—that together transformed downtown and close-in neighborhoods into a lively urban center. Major components included daylighting the Providence River and two tributaries to create a landmark riverfront; providing economic incentives for artists to move downtown; supporting developers who pioneered beautiful conversions of vacant office buildings into lofts, contemporary restaurants, and entertainment venues; and launching festivals, including WaterFire, which brings hundreds of thousands of people downtown every year.

4.27 Development in the Pearl District took off after Portland inaugurated a downtown streetcar system.

4.28 © 2013 Sitephocus, LLC, www.sitephocus.com

4.29 Courtesy Goody Clancy

4.30 © 2013 Sitephocus, LLC, www.sitephocus.com

4.31, 4.32 Arguing that Columbus, Ohio, needed a new neighborhood to help attract and retain struggling artists and entrepreneurs, Mayor Michael Coleman proposed revitalizing the depressed East Franklinton neighborhood (*top*) into an "arts and innovation" neighborhood. Although the idea was initially greeted by broad skepticism, the city partnered with its housing authority, the Franklinton Development Association (a community development corporation), and developers interested in converting empty factory buildings into

arts studios to launch a community-based planning process. One year later, developers were competing to develop a mix of uses that included a 30 percent set-aside for affordable artist housing.

4.33 Courtesy of James Herbert © six eight. Photo by Norm Daly, courtesy of the City of Santa Cruz

4.34 Accessory unit built under the Santa Cruz infill program.

4.35 San Francisco is transforming Mission Bay, a 303-acre landfill developed for industrial uses after World War II, into a mixed-use $15 to 20 billion innovation neighborhood anchored by a new University of California medical campus.

4.36 Creating a lively public realm that offers a hierarchy of public spaces from the least to the most interactive is a key step in the next stage of growth for Kendall Square—an innovation community that began as a biotech research district and is evolving into a broadly based center of innovation that benefits from a dense mix of life science, engineering, information technology, and similar fields that work more and more collaboratively.

4.37 Third Street has evolved from a last-ditch effort to save Santa Monica's downtown Main Street into a nationally recognized visitor destination too costly for small independent businesses. Third Street's newfound economic success, however, supports a year-round schedule of festivals and entertainment that reinforce its role as the center of the community.

4.38 © 2013 Sitephocus, LLC, www.sitephocus.com

4.39 © 2013 Sitephocus, LLC, www.sitephocus.com

4.40 © 2013 Sitephocus, LLC, www.sitephocus.com

4.41 Edgewood, a mixed-use development in an older Atlanta neighborhood, created a walkable retail Main Street, but behind the street's buildings the developer erected big-box retail and vast parking lots, largely hidden from the site's Main Street. New housing merges into the adjacent neighborhood at either end of the three-block Main Street.

4.42 Santana Row replaced the Town and Country Village shopping center in San Jose with a mixed-use complex that includes more than one million square feet of housing and creates a series of narrow, walkable streets lined with diverse activities.

4.43 The Fenway Community Development Corporation in Boston initiated a community-based "urban village plan" that reversed years of community opposition to denser development along nearby Boylston Street and led to a city-sponsored plan that linked dense, mixed-use development to a mix of community benefits that includes affordable housing, a lively Main Street, and a state-of-the-art neighborhood health center.

4.44 In 2000, Chicago was one of the few cities that did not actively discourage tall buildings. Skidmore, Owings, & Merrill's Lakeshore East Master Plan proposed a new, high-density, mixed-use downtown Chicago neighborhood—roughly 10 million square feet on a 26-acre site a few blocks north of the Loop, the downtown core—at a time when *density* remained a pejorative term.

4.45 © OLIN / Sahar Coston-Hardy

4.46 Courtesy Flickr user Nouhailler

4.47 © OLIN / Sahar Coston-Hardy

4.48 © OLIN/ Sahar Coston-Hardy

initiatives, including a new waterfront and art museum; new housing that ranges from condominiums and townhouses to lofts in renovated downtown buildings; and support for the arts and entertainment, which has nurtured new galleries and other businesses and created a lively South Side arts district.

4.66 a,b To emphasize the downtown's role as the center for regional life, the city developed a highly innovative, and ultimately successful, strategy—creating a building whose sole purpose is to serve as a "public room." The result is a civic space sought after not only for important regional meetings and public gatherings but also by neighborhood organizations and clubs of all sorts.

4.67 (a) Walkability stood as the critical goal for the Downtown Wichita Master Plan. A key strategy involved targeting new investment in housing, retail, offices, and hotels to reinforce vitality along priority walkable streets that connected a new arena, the convention center, Old Town, and other downtown destinations, (b) Downtown stakeholders supported concentrating private and public investment along these corridors for at least five years to reinforce all of downtown's appeal as a live/work/play environment. Soon after the master plan's approval, the city and county joined with a developer to redevelop a brownfield site that could not accommodate extended periods of occupation (such as housing or offices) as a shared parking facility (faced by a climbing wall) and a small park, (c) Together with housing and retail on adjacent surface parking lots, the development brought the area next to Old Town to life and strengthened walkable connections to nearby parts of downtown.

4.68 Wichita's Old Town district had attracted several hundred residents to lofts, renovated from outmoded