leading developments and leading land use practitioners to address the issue of how best to create stimulating, compelling, and functional urban environments in which to live, work, shop, visit, and play.

The principal objectives of the book are to describe what has been learned through experience about developing mixed-use projects—from completing market analyses, feasibility studies, and development strategies to financing, planning and design, and marketing and management. Ten case studies delineate actual situations, strategies, and experiences, and the text draws on numerous examples throughout. The final chapter focuses on the most recent trends in mixed-use development and the outlook for this type of development.

Creating Mixed-Use Environments Today

Despite the trends leading away from mixed-use development throughout much of the 20th century, countervailing influences have now brought mixed-use development and urban place-making concepts back to the forefront of development trends around the world. The art of creating or enhancing viable and attractive mixed-use environments in cities and suburbs is flourishing and is being energized from many directions. Today, for example, mixed-use development examples and ideas pop up everywhere:

- Developers of master-planned communities incorporate mixed-use town centers into their developments to enhance a sense of place for their communities.
- Developers and redevelopment officials work together to stimulate revitalization and new mixed-use development in downtowns, urban infill locations, suburban downtowns, and suburban office districts.
- Many retailers, restaurant operators, and entertainment developers seek out new streetfront and open-air settings for their operations, notably town center, main street, and mixed-use environments.
- As a result of the growing number of childless house-holds that prefer more urban lifestyles, higher-density housing increasingly is being developed in and around commercial areas—downtowns, town centers, transit stations, and suburban office districts—leading to more mixed-use development in those areas.
- Smart growth and new urbanism activists bring new ideas and policy initiatives to the table regarding mixed-use environments as a means for addressing numerous problems, from environmental degradation to urban decay to sprawl.
- Transit and local government officials promote transit-oriented development and transit villages that can increase transit use while also creating stimulating urban living environments.
- Suburban planners and officials encourage mixed-use town center development as a way to create identity and attractive pedestrian environments and gathering places for their communities.
- Asian cities such as Kuala Lumpur and Shanghai are building major high-rise mixed-use projects as an effective and attractive method for managing their rapid growth and urbanization.

Today the concept of urban place making—the creation of active, distinctive, pedestrian-friendly urban environments through effective programming and design of a mix of uses—is not simply a dream of urban planners; it is a marketable development concept that both the public and private sectors increasingly embrace.

The modern concept of mixed-use development that is being implemented today, however, is quite different from the historical models, largely because it incorporates many modern building forms—high-rise office buildings, large hotels, large apartment buildings, shopping and entertainment centers, convention facilities, health clubs, transit stations, and parking structures. Modern mixed-use developments are often characterized by the dramatic design, size, impact, and sense of place that is created—including significant public spaces and amenities—making them the subject of broad attention even when they are developed as small-scale projects.

Perhaps most distinctively, unlike most mixed-use environments of the past that evolved over time and involved many builders, modern mixed-use projects are usually developed over a relatively short period of time by one master developer under one master plan. For better or worse, they are very much designed and planned environments, presenting a fundamental challenge for developers and planners: how to plan urban buildings and environments that are not contrived, that feel authentic and “real.”

Achieving success in developing mixed-use properties is not easy. Mixed-use development is complex and does not lend itself to the formulaic approach of many single-use projects. Each project and situation is different, and the development concept and outcome vary dramatically, depending on the particular site, market, developer, urban designer, and financing. Uses must be marketable in their own right, phased at the right time, and work together synergistically to create a whole that is greater than the sum of its parts.

What Is a Mixed-Use Development?

Since the publication in 1976 of ULI’s first book on mixed-use development—Mixed-Use Developments: New Ways of Land Use—both the concept of mixed-use development and the actual product have evolved tremendously. The original definition developed in 1976, however, still holds today. Mixed-use developments are characterized by:

- three or more significant revenue-producing uses (such as retail/entertainment, office, residential, hotel, and/or civic/cultural/recreation) that in well-planned projects are mutually supporting;
• significant physical and functional integration of project components (and thus a relatively close-knit and intensive use of land), including uninterrupted pedestrian connections; and
• development in conformance with a coherent plan (that frequently stipulates the type and scale of uses, permitted densities, and related items).

Three or More Significant Revenue-Producing Uses
Although many real estate projects have more than one use, mixed-use developments as defined and discussed in this book generally include three or more major uses. The three or more uses should be significant (for example, retail space should offer more than site-serving convenience facilities) and should attract a significant market in their own right. In most mixed-use projects, the primary uses are usually income producing, such as retail, office, residential, and/or hotel facilities. Other significant uses might include arenas, convention centers, performing arts facilities, museums, and major civic buildings. In the case of cultural and civic facilities, some funding may be needed from philanthropic or public sources to make the use financially viable. The important factor is that they be significant uses that draw their own clientele to the project.

Physical and Functional Integration
The second characteristic of mixed-use developments is a significant physical and functional integration of project components and thus an intensive use of land. All project components should be interconnected by pedestrian links, although this integration can take many physical forms:

• a vertical mixing of project components into a single mixed-use building or tower, often occupying only one city block;
• careful positioning of key project components around central public spaces (for example, a street, park, plaza, atrium, galleria, or shopping center);
• interconnection of project components through pedestrian-friendly pathways (including sidewalks along streets, interior walkways, enclosed corridors and concourses, retail plazas and mall areas, escalators, and aerial bridges between buildings).

Pedestrian circulation and orientation are critical elements in planning, because without them the project will not achieve the desired synergies and sense of place that are the hallmarks of good mixed-use developments.

This second characteristic distinguishes mixed-use developments from multiuse developments that may include three or more significant revenue-producing uses but do not integrate them. For example, such lower-intensity, more-spread-out developments might include low-density master-planned communities and business parks, both of which may include a variety of uses but whose densities and physical integration tend to be significantly less
than mixed-use developments, resulting in less regular interaction between uses and more use of automobiles for movement within the project.

**Development in Conformance with a Coherent Plan**

Finally, mixed-use developments are conceived and executed following a coherent development strategy and plan. Master planning for a mixed-use development, compared with a single-purpose project, demands much more diverse and specialized participation from developers, market analysts, architects and land planners, property managers, and capital/financing sources. The planning process is therefore far more complex than for most other real estate projects. Such plans may comprise a collection of materials, including market studies, a development program (possibly with several options), land use and building configuration plans and models, working drawings, cost estimates, feasibility analyses, financing plans, marketing plans, and management plans.

Conceptual plans for mixed-use developments typically set forth at a minimum the types and scale of land uses, permitted densities, and general areas on the site where different kinds of development are to occur. Plans for projects entailing substantial public investment and/or control may also specify procedures for architectural review as well as the respective responsibilities and financial obligations of public and private sectors (for the provision of infrastructure, for example). These documents guide—in the case of some projects, govern—development as to the scale, timing, type, and density of buildings and relationships among project components, open space, and infrastructure at the site. This approach distinguishes such projects from the unplanned mixing of uses often resulting from the separate, unrelated actions of several different developers.

**Physical and Structural Configurations**

Although mixed-use developments include diverse types, sizes, and configurations, some basic physical and structural models can help to define these developments. The physical configuration of mixed-use developments generally can be grouped into three broad categories: mixed-use towers, integrated multitower structures, and mixed-use town centers/urban villages/districts. These types also represent three concepts on a continuum, with

---

The master plan for Santana Row in San Jose illustrates several key concepts in mixed-use development. It is a well-thought-out plan that physically and functionally integrates uses in a pedestrian-friendly environment. The project has been developed by a single developer, Federal Realty Investment Trust.

900 North Michigan Avenue in Chicago is a mixed-use tower that includes a large base structure with retail and parking, and a tower that includes office, hotel, and residential uses.
mixed-use towers generally the highest density and town centers/urban villages the lowest.

**Mixed-Use Towers**
A mixed-use tower is a single structure, typically of considerable mass and height, whose uses principally are layered vertically. Several varieties are possible. One is a simple high-rise tower with three or more layered uses. The John Hancock Center in Chicago, one of the older and best-known examples of a mixed-use tower, includes residential units over office with retail at the base. Another example mixes residential and hotel uses over retail in one tower, such as was done at Park Tower in Chicago.

Another variation is a tower rising from an enlarged base structure, such as 900 North Michigan Avenue, which includes—top to bottom—condominiums, a hotel, office space, and a retail mall in the enlarged base, together with parking. Similarly, Water Tower Place in Chicago comprises a large ten-story base structure with a combination of retail, entertainment, and office uses out of which rises a 74-story tower that includes a hotel and residences.

A third variation is to attach a low-rise structure to a large tower. Jin Mao Tower in Shanghai (see Chapter 8), for example, includes hotel space stacked on top of office space, with a separate multilevel retail mall set to one side of the tower. Similarly, the 35-story Espirito Santo Plaza in Miami combines office, hotel, and residential uses in a single structure, with a large banking hall at its base. The office areas for the bank occupy the lower floors of the tower close to the banking hall, which is a large separate multistory structure at the base of the project. Residential and hotel uses are located atop the office space. A separate 11-story parking structure at the east end of the site includes a landscaped roof garden and health club with swimming pool and tennis court.

Among the most distinctive qualities of the mixed-use tower configuration is the consolidation of project mass into a single and therefore striking physical profile, establishing a dramatic project identity that is helpful in marketing the development. For example, both the Jin Mao Tower and the John Hancock Center can claim to be one of the tallest buildings in the world. Among the disadvantages is that little opportunity exists to create a compelling outdoor public space or civic realm.

**Integrated Multitower Structures**
Integrated multitower or multicomponent structures include individual buildings and towers architecturally connected by a common atrium, concourse, shopping complex, and/or underground parking structure that integrates all or most of the project components at the lower levels in a common base. They are typically found in downtown central business districts (CBDs) and higher-density suburban locations such as suburban downtowns. The Houston Galleria in Houston and Copley Place in Boston are classic examples.

Numerous variations are possible. The Fashion Centre at Pentagon City in Arlington, Virginia, includes a multilevel shopping center anchored by two department stores that offers direct structural connections to an office building, a hotel, and a multilevel parking structure, with a separate apartment building. Similarly, at WestEnd City Center in Budapest (see Chapter 8), office and hotel structures are connected at the base by a large retail mall, with parking in a structure to one side.

In some cases, buildings rise from a common platform or podium that may include several levels containing parking, service areas, and retail facilities. For example, Sony Center am Potsdamer Platz (see Chapter 8) includes eight buildings above a parking structure and lower-level service area that serves as the base for the entire site.

AOL Time Warner Center in New York is another variation, in this case involving two mixed-use towers that rise from a multistory base structure. The base structure
includes two underground levels and ten levels above ground containing retail, office, and cultural facilities. Both towers include condominiums and office space, and one also includes a hotel.

Mixed-Use Town Centers, Urban Villages, and Districts

Mixed-use town centers, urban villages, and districts are organized around streets, parks, plazas, and/or squares and function more like an urban district than a single project. They frequently involve stacking uses—residential or office over retail, for example—in low- or mid-rise buildings, but they are predominantly made up of a variety of individual buildings arranged along streets and around public squares or other open spaces. Seven of the ten case studies in this book fall into this category: Addison Circle, CityPlace, Peabody Place, Phillips Place, University Park at MIT, Valencia Town Center Drive, and Yerba Buena Center. This configuration has become increasingly popular as more mixed-use projects are developed outside downtowns.

Mizner Park in Boca Raton, Florida, opened in 1990, is one of the earliest examples of this type of development. It is a town center organized around a two-block-long main street lined with retail space and a linear park with fountains and benches running down the middle of the street. Residential over retail uses line one side, office over retail space the other. The project has become an instant downtown for the city, which never before had a real one. CityPlace in West Palm Beach, Florida, and Valencia Town Center Drive in Valencia, California, also use a main street configuration that includes retail, office, hotel, entertainment, and residential uses. A more urban example is Peabody Place, a major high-density mixed-use district and urban village in downtown Memphis. This redevelopment project includes office, retail, residential, hotel, and entertainment uses, and numerous historic buildings on seven blocks in downtown Memphis (see Chapter 8).

Mixed-use town centers and urban villages are clearly the direction that most mixed-use designs are moving today, and they are likely to become increasingly common as suburban mixed-use developments grow in popularity and urban redevelopment continues to focus on designing around existing streets in and around major downtowns. Such projects are often developed on large sites where buildings can be arranged and mixed horizontally as well as vertically and easily linked by open-air streets, pedestrian connections, parks, and squares. They also offer greater flexibility for timing and phasing projects, important factors in improving feasibility and reducing risk.

A Short History of Mixed-Use Development

Cities throughout history have provided many good models for intense mixed-use configurations that today’s urban designers study carefully. Ancient cities of Greece
• Research Park—Also known as research and development (R&D) and science parks, these parks are designed to take advantage of a relationship with a university to foster innovation and the transfer of technology. Facilities are typically multifunctional, with a combination of wet and dry labs, offices, and sometimes light manufacturing and storage space. Biomedical parks are a specialized version.

• Technology Park—Technology parks cater to high-tech companies that require a setting conducive to innovation. They rely on proximity to similar or related companies, rather than a university, to create a synergistic atmosphere for business development.

• Incubator Park—The needs of small, startup businesses are met in incubator parks or designated incubator sections of research or technology parks. Often supported by local communities through their economic development agencies or colleges, they provide flexibly configured and economically priced space, as well as opportunities for shared services and business counseling.

• Corporate Park—Corporate parks are the latest step in the evolution of business parks. Often located at high-profile sites, they may look like office parks, but often the activities and uses housed there go beyond traditional office space to include research laboratories and even light manufacturing. Supporting uses such as service-oriented shopping centers, recreational facilities, and hotel/conference centers are provided as a focus rather than an afterthought.

**Origins of Today’s Business Parks**

The first planned industrial estate was begun in 1800 in Manchester, England, when a private company, Trafford Park Estates, Ltd., purchased a 1,200-acre (485-ha) country estate on the Manchester Ship Channel adjoining the docks. This industrial district, served by more than 35 miles (55 km) of railroad, was dominated by heavy manufacturing. It remained the world’s largest planned industrial estate until the 1950s, when larger facilities were developed in the United States and Canada. Although this first planned industrial development was served by navigable deep water, few subsequent parks have been accessible by water transportation.²

The first planned industrial districts in North America were created in Chicago. Their focus was on manufacturing, and the catalyst for their development was access to railroad lines and plentiful supplies of electric power and steam. Representatives of the Union Stock Yard and Transit Company undertook development of the Central Manufacturing/Original East District to attract additional freight for the company’s belt line. This 260-acre (105-ha) tract was located less than three and one-half miles (5.5 km) southwest of downtown Chicago. It featured buildings with a uniform height of four stories, private rail sidings for each building, and streets laid out on a grid. Landscaping, planting strips, and ornamental street lighting were an integral part of the design.

By 1910, the management of the Central Manufacturing District had acquired 80 acres (32.5 ha) for a second project, the Pershing Road Development. Located diagonally opposite the Original East District, the Pershing Road Development opened in 1916. This pioneer industrial district had notable site characteristics that were forerunners of park designs implemented several decades later. Rail access was placed at the rear of the district, and major buildings were oriented to a major traffic thoroughfare, creating a street frontage that faced a public park.

The Clearing Industrial District was another pioneer industrial district development in the Chicago area. Organized by private real estate developers and opened in 1900, this 530-acre (215-ha) project took advantage of a location adjacent to rail yards and the Chicago Municipal Airport. Its plan called for 40-acre (16-ha) superblocks, each with access to the main rail lead.³