an advisory services panel report Lowell Massachusetts





Urban Land Institute

Lowell Massachusetts

Strategies for Redevelopment and Revitalization

November 9–14, 2003 An Advisory Services Panel Report

ULI-the Urban Land Institute 1025 Thomas Jefferson Street, N.W. Suite 500 West Washington, D.C. 20007-5201

About ULI-the Urban Land Institute

LI-the Urban Land Institute is a nonprofit research and education organization that promotes responsible leadership in the use of land in order to enhance the total environment.

The Institute maintains a membership representing a broad spectrum of interests and sponsors a wide variety of educational programs and forums to encourage an open exchange of ideas and sharing of experience. ULI initiates research that anticipates emerging land use trends and issues and proposes creative solutions based on that research; provides advisory services; and publishes a wide variety of materials to disseminate information on land use and development.

Established in 1936, the Institute today has more than 20,000 members and associates from 70 countries, representing the entire spectrum of the land use and development disciplines. Professionals represented include developers, builders, property owners, investors, architects, public officials, planners, real estate brokers, appraisers, attorneys, engineers, financiers, academics, students, and librarians. ULI relies heavily on the experience of its members. It is through member involvement and information resources that ULI has been able to set standards of excellence in development practice. The Institute has long been recognized as one of America's most respected and widely quoted sources of objective information on urban planning, growth, and development.

This Advisory Services panel report is intended to further the objectives of the Institute and to make authoritative information generally available to those seeking knowledge in the field of urban land use.

Richard M. Rosan President

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About ULI Advisory Services

he goal of ULI's Advisory Services Program is to bring the finest expertise in the real estate field to bear on complex land use planning and development projects, programs, and policies. Since 1947, this program has assembled well over 400 ULI-member teams to help sponsors find creative, practical solutions for issues such as downtown redevelopment, land management strategies, evaluation of development potential, growth management, community revitalization, brownfields redevelopment, military base reuse, provision of low-cost and affordable housing, and asset management strategies, among other matters. A wide variety of public, private, and nonprofit organizations have contracted for ULI's Advisory Services.

Each panel team is composed of highly qualified professionals who volunteer their time to ULI. They are chosen for their knowledge of the panel topic and screened to ensure their objectivity. ULI panel teams are interdisciplinary and typically include several developers, a landscape architect, a planner, a market analyst, a finance expert, and others with the niche expertise needed to address a given project. ULI teams provide a holistic look at development problems. Each panel is chaired by a respected ULI member with previous panel experience.

The agenda for a five-day panel assignment is intensive. It includes an in-depth briefing day composed of a tour of the site and meetings with sponsor representatives; a day of hour-long interviews of typically 50 to 75 key community representatives; and two days of formulating recommendations. Many long nights of discussion precede the panel's conclusions. On the final day on site, the panel makes an oral presentation of its findings and conclusions to the sponsor. A written report is prepared and published.

Because the sponsoring entities are responsible for significant preparation before the panel's visit, including sending extensive briefing materials to each member and arranging for the panel to meet with key local community members and stakeholders in the project under consideration, participants in ULI's five-day panel assignments are able to make accurate assessments of a sponsor's issues and to provide recommendations in a compressed amount of time.

A major strength of the program is ULI's unique ability to draw on the knowledge and expertise of its members, including land developers and owners, public officials, academicians, representatives of financial institutions, and others. In fulfillment of the mission of the Urban Land Institute, this Advisory Services panel report is intended to provide objective advice that will promote the responsible use of land to enhance the environment.

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Special appreciation goes to John Cox, city manager; J. Matthew Coggins, assistant city manager for planning and development; and James Cook, Lowell Plan president and executive director, for their leadership in making this initiative possible. The panel also thanks James Conway III, Lowell Plan chairman, and Gary Campbell, chair of the Lowell Plan Economic Development Steering Committee.

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The panel especially would like to express its thanks to all of the business owners; building owners; developers; bankers; federal, state, and local officials; agency representatives; and others who generously gave their time and shared their insights for the benefit of the panel process and the future of downtown Lowell.

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Foreword: The Panel's Assignment

he Lowell Plan, Inc., and the city of Lowell invited an Urban Land Institute Advisory Services panel to provide its expert opinion on the development potential of four areas surrounding downtown Lowell. The Lowell Plan is a nonprofit economic development corporation founded in 1979 to assist the city in advancing various economic and community development projects.

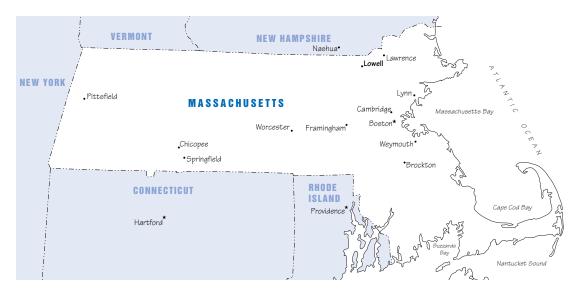
The four study areas surrounding Lowell's historic downtown feature very different existing uses and market potential, but they all share some form of connection to the downtown. To the southwest of the downtown is the study area known as the Jackson-Appleton-Middlesex (JAM) area. This area includes numerous vacant parcels and abandoned mill buildings. It has the best access of all the study areas to major transportation networks, including the Lowell Connector and the Gallagher Intermodal Transportation Center, also known as the Gallagher Terminal.

To the southeast of downtown is the second study area, which is known as the Central Plaza site. The state is considering redeveloping this aging 1960s-era strip shopping center as a judicial center. The sponsors want to know if this proposed use is appropriate for the site.

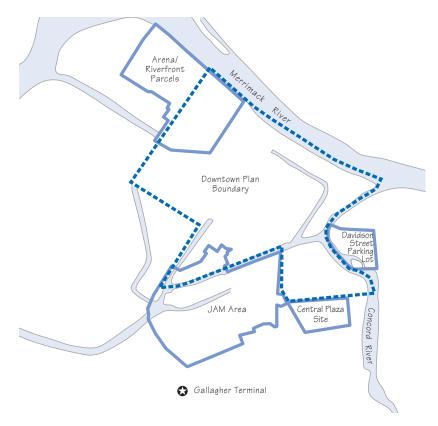
To the east of downtown is the third study area, which is known as the Davidson Street parking lot and consists mainly of surface parking, most of which is owned by the city. The parking lot is ideally located as an eastern anchor to downtown on the Concord River and offers beautiful river views. Lowell Memorial Auditorium is located just north of this study area.

To the northwest of downtown is the fourth area, which is referred to as the arena/riverfront parcels. These properties are ideally located adjacent to Lowell's new Paul E. Tsongas Arena and the popular new Edward A. LeLacheur Park minor league and University of Massachusetts at Lowell baseball stadium along the Merrimack River. An extensive riverwalk system parallels the river.

The sponsors hoped the panel would be able to assist them with their goals of guiding the future development of these areas to support and strengthen the downtown. Lowell is a city with



Location map.



The four study areas surround downtown Lowell.

significant and unique natural, historic, and cultural assets that the city would like to leverage to expand its resident population and tax base.

To address the questions raised by the sponsors, the panel divided itself into four teams. While all panel members continued to look at the "big picture" and work with their fellow panelists, each team specifically addressed a more focused topic and made specific observations and recommendations for the following four topic areas:

- Market potential;
- Marketing, planning, and design;
- Development strategies; and
- Implementation.

Each section of this report presents and builds on the information produced by these teams' recommendations. While the panel concentrated on these four areas when formulating its recommendations, it also considered many broader issues that it viewed as having an important overall impact on the city of Lowell.

Overview and Summary of Recommendations

merica's industrial revolution began in Lowell, Massachusetts. Miles of canals throughout the city harnessed the energy of the Merrimack River to power numerous five- to six-story-high textile mills that were considered massive in their day. The mills sprung up in the second quarter of the 19th century and lined the Merrimack River for nearly a mile. People from around the world were drawn to the economic opportunities the mills presented. Greek, Irish, Polish, and French Canadian immigrants flocked to Lowell, seeking the promise of a better life in America.

Today, of course, much has changed in Lowell. The deindustrialization of the American economy has continued unabated for decades. The mill jobs left the northeastern states for the southern states long ago, and are now moving overseas in pursuit of cheaper labor and less regulation. Surprisingly, though, much of Lowell's industrial era infrastructure remains. The city has done an incredible job of preserving the mill buildings, canals, cobblestone streets, and historic architecture. The U.S. National Park Service operates a national park in Lowell that tells the story of the American industrial revolution. Meticulously preserved historical artifacts give park visitors a sense of what life was like during those earlier times.

Another aspect of Lowell that has not changed is the spirit of its people. The city was founded by hopeful, optimistic, hearty, entrepreneurial souls. These industrial pioneers created systems that forever changed the world in which we live. Lowell was a city that got things done, even under incredibly difficult circumstances. During its short stay in Lowell, the panel witnessed a similar spirit among the city's current leaders. Through difficult economic times, city leaders, both public and private, have sought solutions to the city's problems and have persevered. They have worked together to spark economic development through the construction of two new arenas adjacent to downtown. Public and private leaders have financed new downtown businesses. Community organizations regularly conduct festivals and fairs that continue to make Lowell an attractive place to live.

The panel believes that the hard work of Lowell's city leaders is paying off. The city's successful downtown revitalization efforts are the envy of other mill towns. Today, however, Lowell is at a crossroads and in need of consensus about its future direction. The panel sensed that the city, having completed its first phase of revitalization, is ready to move into the second phase but is unsure where to marshal its resources and which direction to head. This confusion and lack of consensus is dangerous for Lowell's continuing revitalization.

The city should make every possible effort through regular, inclusive public meetings and a continuing dialogue—to reach some form of consensus on its future direction. "Balkanization" of the city's many interest groups cannot be tolerated. Lowell is in competition with other cities, states, and even countries for jobs and people. A

A system of canals, locks, and falls throughout downtown provides the city with a definite sense of place.



Near right: Many of Lowell's abandoned mills remain standing and represent residential and commercial development opportunities. Top far right: The Paul E. Tsongas Arena, which opened in 1998, attracts patrons to hockey games, concerts, family shows, trade shows, and conferences. Bottom far right: Beautifully restored historic architecture located throughout downtown Lowell is a unique resource that draws tourists and residents downtown.



unified revitalization effort is imperative. The panel remains optimistic about the city leaders' ability to reach consensus about Lowell's future because of the depth of commitment it witnessed during the interview process.

Lowell is ready to begin yet another transformation. From industrial city to depressed Rust Belt mill town to high-tech outpost, Lowell has always adapted to the realities of the marketplace. The panel believes that Lowell's new future is that of an urban residential commuter suburb of Boston with a mix of housing types and incomes, a strong arts and cultural community, and a strong tourist base—and, eventually, as an incubator for small and medium-sized "creative" companies.

Maintaining and improving Lowell's quality of life will be the key to its future. There is no reason that Lowell should not set the goal of becoming one of the top-ten best small American cities in which to live. The panel further believes that the plan laid out in this report provides the city with a blueprint to make this happen. As they pursue this goal, city leaders should never take the qual-



ity of the city's assets for granted. Lowell's historic architecture as well as its canals and quaint streets are unique and valuable assets that would be the envy of any other community. The city should never compromise the quality of its existing assets and should demand the same quality in new projects, as these assets will be the key to Lowell's future.

The panel's specific recommendations are summarized below. Each of these recommendations is discussed in more detail later in this report. The panel does not believe that the city needs an elaborate new plan. It feels that Lowell's substantial assets need to be better connected and marketed, but believes that the city's existing planning efforts are superior. Some of the panel's recommendations therefore concentrate on relatively small-scale improvements. Taken together, these improvements will go a long way toward improving the quality of life in Lowell, which will be the key to attracting high-end residential development. Specific recommendations for each of the four study areas follow as well. The list below summarizes the recommendations presented in this report.

Marketing, Planning, and Design

The panel's marketing recommendations include the following:

- Create a downtown association;
- Develop a menu of desired tenants and tenant mix for the downtown core and pursue these tenants;
- Better position the city as a haven for artists;
- Set up temporary, seasonal retailers that can capture the energy and excitement of the peak summer festival season during other parts of the year; and
- Improve the visibility and accessibility of Lowell's tourist attractions.

The panel's planning and design recommendations include the following:

- Improve the connectivity of the currently disjointed vehicular and pedestrian transportation systems;
- Make specific changes to the transportation system to improve the flow of vehicular traffic throughout the city;
- Let the market drive the construction of new parking spaces;
- Improve and optimize existing parking structures;
- Improve existing pedestrian connections and incorporate new pedestrian connections into new developments;
- Open up some of the longer mill buildings to support pedestrian connections to the canals;
- Improve and extend the existing trolley service and integrate it with other existing transit systems;
- Fully support the maintenance, extension, and improvement of the existing system of canal walks and riverwalks;
- Maintain the high quality of the existing infrastructure;

- Install attractive and consistent gateway signage at important entryways to the down-town; and
- Improve existing signage systems and install new signage.

Development Strategies

The panel offers specific recommendations for each of the four study areas. For the Jackson-Appleton-Middlesex (JAM) area, the panel suggests that:

- The city should amend its Urban Revitalization and Development Project Plan for the area.
- The city should develop an overall financial strategy and acquire the properties.
- The city should designate a master developer for the site.
- The master developer then should prepare a comprehensive market study and overall development plan.
- The master developer should prepare development proposals for city review and approval.
- The city should beef up code enforcement of derelict housing, especially housing facing South Common Park.

For the Central Plaza site, the panel recommends that the city:

• Locate the proposed justice center and the combined sewer overflow (CSO) storage facility on this site.

For the Davidson Street parking lot, the panel recommends that the city:

- Retain control of the parcels within the Davidson Street parking lot and obtain any additional parcels that may have strategic value; and
- Develop the site as a mixed-use project with a performing arts facility, when funding for such a facility is available.

For the arena/riverfront area, the panel recommends that the city:

- Begin immediate negotiations to acquire the parcel currently owned by the commonwealth of Massachusetts;
- Initiate a request for proposals (RFP) process to identify a restaurant lessee for the site;
- Hold all city-owned land in the area; and
- Construct a temporary use—such as an amphitheater, boat rental facility, antique/flea market warehouse, or regional farmers market—on the city-owned land that will make use of the site until a market for its highest and best use develops.

Implementation

The panel's recommendations for implementation include the following. It proposes that the city should:

• Create consensus on the future path of development for Lowell;

- Take the lead role in stimulating and regulating private development;
- Fully utilize all existing regulatory and financial tools at its disposal and consider implementing new tools; and
- Engage the University of Massachusetts at Lowell, Middlesex Community College, and the U.S. National Park Service in the city's planning efforts.

Market Potential

he panel was asked to assess the market potential for four specific areas that surround downtown Lowell. Such analysis requires a review of the city's demographics, history, and assets, along with an appraisal of the existing residential and commercial markets and suggestions regarding the market potential for each of these. Economic trends for the city as well as the region, the state, and the nation are factored into the analysis. Global economic trends also play a role in local economies and need to be factored in as well. While the movement of blue-collar jobs overseas is not news, the outsourcing of whitecollar jobs by major employers to lower-wage countries such as India, Indonesia, and the Middle East is a relatively new phenomenon that is having an impact on local economies.

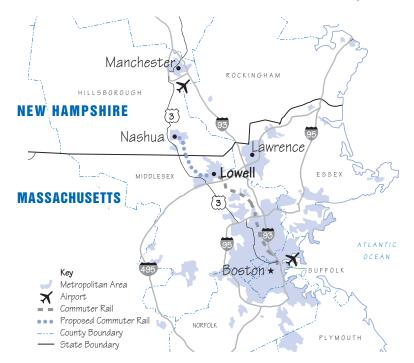
Lowell is no stranger to the painful sting of such cold macroeconomic trends. Like it or not, the city, like most others, is at the mercy of these trends. In a similar but much more positive way, the panel believes that the city also is at the mercy of its downtown. The downtown area strongly affects the rest of the city, including all four study areas. Lowell's future is inextricably tied to the future of its downtown. Fortunately, the panel believes that Lowell's downtown is one of the most beautiful in the country and has enormous potential. The panel therefore determined that a microeconomic analysis of downtown Lowell was crucial and concentrated much of its analysis on this part of the city.

Demographics

The city of Lowell is located 25 miles north of Boston in northern Middlesex County. Lowell has a total area of 14.54 square miles and is bisected by the Merrimack and Concord rivers. Numerous historic canals also flow through the city, which is comprised of 11 neighborhoods with a total of 105,167 residents, as reported in the 2000 census. Lowell's population has grown more slowly than that of the commonwealth. Between 1990 and 2000, the city's population grew by 1.67 percent, compared with a 5.5 percent increase in the population of Massachusetts. Household incomes in Lowell also lag behind the strong growth reported for the Boston metropolitan region, which extends north from Boston to southern New Hampshire and south along Interstate 495 to Worcester and Connecticut. Lowell's median household income in 1999 was \$39,192, compared with \$52,792 for the metropolitan Boston region.

Downtown Lowell occupies a central place in the city of Lowell, but it has a relatively small share of the city's population and disposable income. In 2000, the downtown had 3,881 residents whose 1999 median household income was \$18,468. The downtown population represents only 4 percent of the total city population, and the median income downtown is less than half that of the city as a whole. Downtown Lowell currently has 1,793

Location map.



Housing reserved for lowand moderate-income households, shown at the left in this photo, is becoming a smaller part of the overall housing market in downtown Lowell, as market-rate units are constructed throughout downtown.



housing units, 68 percent of which are set aside to serve low- and moderate-income individuals and families. The downtown has a relatively large number of low- and moderate-income housing units for seniors, which is reflected in the downtown's small household size compared to both the city as a whole and the region. Downtown Lowell's large low-income and elderly population limits the disposable income available to support new retail development.

These statistics mask an underlying story currently unfolding in downtown Lowell. Although the fact that 68 percent of the downtown housing is set aside for low- and moderate-income residents appears to indicate a housing market out of balance, historical analysis reveals a more dynamic market. Not long ago, 90 percent of the downtown's housing was set aside for low- and moderate-income households, and the percentage of such housing is estimated to plummet further-to 50 percentvery soon. Currently in the development pipeline are 757 new market-rate residential units that will be created downtown over the next three years, representing a 42 percent increase in the number of downtown housing units and a dramatic shift in the demographic composition of downtown Lowell. The market-rate units will attract higher-income households, which will significantly add to the demand for new neighborhood-serving retail, restaurants, and amenities.

Lowell clearly is in the early phases of changes that will have lasting impacts on its downtown and beyond. Downtown Lowell appears to be in the process of becoming a hip, affordable, urban bedroom community for people who work in Boston. The panel believes that this presents both challenges and opportunities for the city leadership. The city has done a great job of planting seeds that are now bearing fruit. City leaders should be congratulated for doing many things right, from constructing a new arena and baseball stadium to unearthing quaint cobblestone streets. Yet it should consider taking numerous additional actions now, to both encourage the continuing renaissance and to plan for the potential of rapidly escalating land and housing values. These actions are discussed later in this report.

History

Lowell's development is associated historically with the growth of manufacturing and immigration in America. The Lowell National Historical Park and the city's canals are a testament to the city's manufacturing heritage. However, manufacturing employment in the city has declined from the postwar era through the 1990s, and today represents only 17 percent of total employment. Many of the textile mills for which Lowell is famous moved to the Sunbelt long ago.

Lowell is a diverse, multiethnic community that has strong roots as a point of entry for Greek, Irish, Italian, Portuguese, and French immigrants. The legacy of that heritage remains in the city's landmarks, businesses, and neighborhoods. Today, Lowell is home to many of the region's Southeast Asian, Latino, and African immigrants. Firstand second-generation Asians, the majority from Southeast Asia, represent more than 16 percent of the city's population. These new immigrants contribute to small business development in the city's neighborhoods and represent an important source for future entrepreneurial development in Lowell.

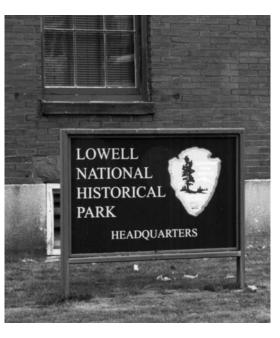
Assets

Lowell is blessed with numerous natural and built assets that the panel believes can be leveraged to support residential and tourism development. From the natural beauty of the Merrimack and Concord rivers to the meticulously rehabilitated historic structures and newly constructed cultural and sports facilities, the city has more than enough assets to draw people to it. Lowell's civic community has succeeded in building a foundation for attracting people to the downtown through the construction of cultural and sports facilities and the creation of a very attractive historic downtown area. Few competing communities offer the breadth of assets needed to attract downtown visitors.

A recent study estimated that 1.4 million people visited Lowell or attended events in the city in a one-year period. While impressive, these numbers clearly have not yet led to significant direct benefits to the downtown area, such as increased downtown retail and restaurant sales or the addition of new hotel rooms. The panel believes that the following assets should be seamlessly integrated into downtown Lowell, so that visitors will spend more time and money there.

Entertainment, Sports, and Cultural Facilities

Lowell is home to several attractive facilities. These include the following:



The Lowell National Historical Park provides visitors with a sense of what life was like during America's industrial revolution. The park's 141 acres include textile mills and workforce housing.

The Merrimack River is an important and marketable amenity.



Paul E. Tsongas Arena. Located on the banks of the Merrimack River and within walking distance of downtown Lowell, the Tsongas Arena opened in 1998. The arena is home to the Lowell Lock Monsters, the American Hockey League affiliate of the Carolina Hurricanes, and to the Division I University of Massachusetts at Lowell (UMass Lowell) River Hawks hockey team. Concerts, family shows, trade shows, and conferences also are held at the arena, which holds 6,500 patrons for hockey games and 7,800 for concerts.



Middlesex Community College occupies the former Wang training center building and is located at the eastern edge of downtown, adjacent to the Davidson Street parking lot. Edward A. LeLacheur Park. Also opened in 1998, LeLacheur Park is a 5,000-seat baseball stadium that is home to the Lowell Spinners, the Class A affiliate of the Boston Red Sox, and the UMass Lowell Riverhawks baseball team. Located on the banks of the Merrimack River near the Tsongas Arena, the stadium offers spectacular views of the river. Because tickets to Spinners games are relatively affordable, the games often sell out, and the stadium has proved quite popular with residents of the city and the region.

Lowell Memorial Auditorium. Located at the eastern edge of downtown, the Lowell Memorial Auditorium is a beautifully restored 1930s building that is home to the Merrimack Repertory Theatre. The auditorium has hosted touring Broadway musicals as well as pop concerts, boxing matches, and family shows. The theater company produces new plays and classic dramas in a full season of professional offerings.

Lowell National Historical Park. Spread throughout downtown on 141 acres of land is the Lowell National Historical Park. Maintained and operated by the U.S. National Park Service (NPS), the park commemorates the history of America's industrial revolution. The park contains textile mills, worker housing, 5.6 miles of canals, and 19th-century buildings. A trolley service connects various parts of the park. More than 700,000 people are estimated to visit the park annually.

Educational Institutions

Lowell also is home to several educational institutions, including the following: University of Massachusetts, Lowell. The institution popularly known as UMass Lowell is located on three campuses throughout Lowell and Chelmsford. Enrollment at the university is approximately 12,000, with 6,000 undergraduates, 3,000 graduate students, and 3,000 continuing education students. Roughly 2,000 students live on campus, most of them near the Tsongas Arena and LeLacheur Park. An additional 2,000 live immediately off campus, in the surrounding neighborhoods. The remaining majority of the students are commuters. Roughtly 850 faculty and staff work on the three campuses.

Although the university has no plans to expand, it is an important local institution and employer. Faculty and staff members tend to come from the demographic group that should be attracted to Lowell's revitalizing downtown area. In addition, students, while having limited disposable income, often bring demand for affordable restaurants, bars, and artistic entertainment venues. These establishments, if located in downtown Lowell, would add to the area's desirability and its "hip factor." Every effort should be made to draw students, faculty, and staff to the downtown area and to get them to stay and spend money there.

Middlesex Community College. This eastern anchor to the downtown area is housed in the former Wang training center. The college draws commuter students from the region. These students also add to the market potential of downtown.

Lowell High School. Located in the heart of downtown, this enormous public school serves 4,200 students during the school year. The panel believes that the school's presence in downtown can be viewed either as an asset or as a liability. High school students tend to spend a lot of money on particular types of goods, especially music, clothes, and other trendy items, making them a potentially valuable asset. Yet few downtown retailers appear to be attempting to capture this spending power. In fact, the panel noticed that many stores close just before school lets out, to avoid the onslaught of students. The panel understands that merchants may view the school as a liability, because such a huge number of teenagers converging on a retail area at one time can deter other shoppers, particularly older patrons.

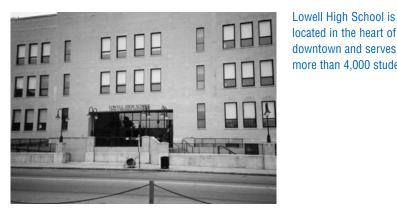
The panel recommends that downtown merchants attempt to better market themselves to high school students. It also suggests that the school stagger their exit, to avoid the mob impression created by such a large group of young people converging on the downtown all at once. The panel feels that, if the city ever considers moving the high school, the location would be perfect for a college annex.

An Extensive Transportation Network

The city of Lowell offers several advantages for commuters and travelers. It is located 25 miles from Boston and is close to the state's major highways, including Route 3 and Interstates 93 and 495. Lowell is within a 50-minute commute of most of the region's major high-technology and financial services companies. Located at the terminus of a Massachusetts Bay Transportation Authority (MBTA) commuter rail line, the city is only a 40minute train ride from Boston's North Station. The Gallagher Intermodal Transportation Center, constructed in 1983, offers train and bus service to Boston, Maine, and New Hampshire, as well as local bus service and plentiful on-site parking for commuters. The Gallagher Terminal is located at the edge of the downtown, close to the Lowell Connector, the 2.5-mile-long expressway that connects downtown Lowell with I-495 and Route 3.

Several new construction and capital projects in or near Lowell likely will improve the desirability of Lowell as a market for new residents. The expansion of Route 3 to six lanes should reduce commute times to major employers in Lexington and along the Route 128 beltway. The NPS is planning an expansion of its visitor trolley service and may extend it close to the Gallagher Terminal. In addition, UMass Lowell is planning a new parking garage close to its residence halls at LeLacheur Park.

The city of Lowell offers new residents transportation services and commute times that can compete with any suburban location outside of Boston and the inner-ring suburbs. New residents tend to be dual-income households whose residents commute to different locations in Boston and along Route 128 and I-495. Lowell offers reasonable commute times to Boston and all of the major employment centers north of the Massachusetts Turnpike.



Affordable Housing

The Boston metropolitan region witnessed incredible home price appreciation through the 1990s and the cost of housing continues to appreciate. Homeownership opportunities are out of the reach of many Boston households. While rental housing is more accessible, there are still many communities in which moderate-income Boston-area residents cannot even afford to rent. The median price of a house in the Boston region is \$386,300, whereas in Lowell it is only \$172,100, a price that is quite affordable in relation to the rest of the region. The affordability of Lowell's housing represents a huge asset for future development there.

Outstanding Historic Architecture

The quantity and quality of the historic architecture in Lowell is impressive. A lagging economy in the late 20th century removed much of the economic pressure that destroyed many such structures in other cities. These buildings represent an important asset for future residential and commercial development as well as tourism.



Lowell's efforts to reuse its existing building stock have created an interesting and attractive urban fabric.

downtown and serves

more than 4,000 students.



The American Textile History Museum celebrates Lowell's industrial heritage.

Rivers, Canals, Riverwalks, and Canal Walks

The rivers and canals that run through Lowell represent assets that the city has partially capitalized on through riverfront uses and the creation of a riverwalk system and extensive canal walks. While the rivers and canals could be utilized more fully, these natural assets and manmade systems represent a marketable amenity.

Museums, Galleries, and Festivals

Lowell is home to an impressive number of galleries and museums for a city of its small size. Its galleries, museums, and festivals make an important contribution to the cultural depth of the city, as well as to current and future tourism. They include the following:

- The American Textile History Museum;
- The New England Quilt Museum;
- Brush Gallery and Studios;
- Whistler House Museum of Art;
- The Revolving Museum;
- The Jack Kerouac Commemorative;
- The Boott Cotton Mills Museum;
- City of Lights Parade;
- The Lowell Folk Festival;
- The Lowell Summer Music Series;
- The Lowell Southeast Asian Water Festival;
- The Rib 'n Brews Festival; and
- Winterfest.

A Network of Concerned and Involved Residents

Probably more important than any of the physical assets listed above is Lowell's network of concerned and involved citizens. The panel was amazed at the number of organizations dedicated to improving life in Lowell and impressed by their depth of commitment, which it experienced throughout the interview process. It became clear that the many Lowell success stories were the result of this deep civic involvement. The panel believes that all of these groups, working together, represent the greatest asset for the future of the city.

Residential Market

The Boston metropolitan area has experienced strong, consistent demand for condominium and single-family housing throughout its urban and suburban residential real estate markets. Sales have been driven by low interest rates, growing household incomes, and changing consumer tastes for different types of housing units. Metropolitan Boston has experienced strong residential demand in urban markets near the region's major universities and cultural amenities, as well as in exurban markets, which have seen the fastest growth in the construction of new large-lot, single-family homes.

The steady increase in housing prices across product types and locations within metropolitan Boston places acute pressure on the stock of affordable housing available to those with modest incomes, young professionals, and families. The figure on the following page illustrates the steady increase in condominium sales prices in Lowell and select suburban towns outside of Boston. Sales prices of condominiums in Lowell have increased by 23 percent annually over the past five years. Regionally, condominium sales prices have increased from 12 percent annually in Burlington to 25 percent in Billerica. Lowell continues to fall at the more affordable end of the greater Boston real estate market. Yet Lowell's relative affordability, combined with the strong regional pressure on housing prices, gives the city a competitive advantage at a price point significantly higher than it was only two or three years ago.

New Housing in the Pipeline

The 787 units currently in the multifamily development pipeline are expected to be absorbed over the next two to three years. These units are being built in projects that range from small-scale conversions of commercial buildings to large-scale mill conversions that include as many as 150 units. Approximately 40 percent of the units are in entirely market-rate condominium projects, while 60 percent are almost entirely market-rate rentals. Rental rates range from less than \$1.00 per square foot to \$1.50 per square foot. Sales prices range from \$100,000 for small condo units to almost \$300,000 for luxury two-bedroom condos. The vast majority of the sales prices fall within the \$175,000 to \$260,000 range, with a premium being paid for loft space.

Downtown Lowell's new for-sale housing offers buyers a product type unique to Lowell and its neighboring towns. The new condominiums are located in historic mills, with water views and built-in amenities similar to those found in Boston's new higher-end construction. Lowell's new lofts and condominiums should appeal to specific submarkets of homebuyers located in metropolitan Boston.

Potential Residential Market

The development of new and innovative housing in downtown Lowell has attracted and will continue to attract a different demographic group than the one that currently resides there. Since the vast majority of the new housing will involve the redevelopment of structures that currently are vacant or contain commercial uses, the fear that it will displace existing low-income residents is unwarranted. The new housing will merely

Median Condominium Sales Prices in Lowell and Other Cities in the Boston Region, 1998–2002

Town	1998	1998	2000	2001	2002	Average Annual Increase
Billerica	\$62,500	\$76,399	\$83,500	\$116,250	\$152,950	25%
Burlington	\$244,000	\$260,450	\$220,000	\$348,900	\$378,950	12%
Cambridge	\$207,250	\$249,000	299,450	\$328,450	\$343,750	13%
Chelmsford	\$125,900	\$140,950	\$154,000	\$189,900	\$212,000	14%
Framingham	\$77,000	\$83,500	\$89,500	\$105,500	\$132,000	14%
Lawrence	\$44,250	\$46,350	\$55,300	\$79,100	\$95,000	21%
Lexington	\$278,000	\$259,900	\$324,250	\$329,500	\$397,500	9%
Lowell	\$56,000	\$68,828	\$85,000	\$104,900	\$129,000	23%
Salem	\$135,000	\$151,000	\$165,500	\$193,000	\$222,500	13%
Somerville	\$145,000	\$175,000	\$242,000	\$279,875	\$310,000	21%
Tewksbury	\$132,900	\$153,500	\$167,000	\$192,250	\$225,000	14%
Woburn	\$161,000	\$110,000	\$197,250	\$231,000	\$260,000	13%

Source: The Warren Group.

bring the market back to a more balanced mix, which is healthy for the city, both economically and socially. The demographic subgroups expected to be attracted to downtown Lowell's new housing are described below.

Young Professional Commuters. Housing prices in Boston's inner-ring suburbs of Somerville, Cambridge, and Watertown have risen beyond the means of many first-time homebuyers, including most of the renters seeking to take advantage of low interest rates. Lowell should be able to attract quite a few of these young urban professionals, many of whom grew up outside Massachusetts and came there to be educated at Bostonarea colleges.

Lowell offers several advantages for young professionals. The historic mills and new lofts offer the look and feel of the city at prices well below comparable residential units in Boston. The downtown is close to several major highways and offers reasonable commute times to major regional employers. The Gallagher Terminal offers relatively quick and convenient commuter train service into Boston's North Station.

Empty Nesters. The baby-boom generation is rapidly entering a new phase of life. Large singlefamily homes no longer meet the needs of 50-plus singles and couples with grown children. Major cities and suburban areas across the United States are experiencing significant growth in the sale of condominiums and townhouses specifically tailored to this active, affluent generation of professionals. Downtown Lowell offers several potential advantages for the empty-nester generation. The city is close to many of New England's most popular amenities: tax-free shopping in New Hampshire, ski resorts, the ocean, and metropolitan Boston. Downtown Lowell features historic buildings, arts and entertainment, and an urban atmosphere at a scale that provides both variety and familiarity.

Existing Younger Residents. Although the vast majority of new downtown residents likely will come from outside of Lowell, downtown's attractiveness also will convince many younger residents of Lowell to stay after they finish their education. As empty nesters and other relatively affluent pro-

fessionals are attracted to Lowell's convenience, affordability, and strong cultural amenities, the transformation of Lowell into a mixed-income residential community with high-quality middle-class housing is likely to help the city retain its younger generation.

Potential Rates and Absorption

Developers of market-rate housing currently are targeting the middle of the market, with rents ranging from \$1.00 to \$1.50 per square foot and the majority of the condominiums selling for prices that range between \$175,000 and \$260,000 per unit. Since the loft product is so new to Lowell, historical absorption data are an insufficient measure of future market performance. A review of comparables from Lowell and the surrounding market allows the panel to identify only the floor of the existing market. The panel believes the ceiling of the market has not been adequately tested. An analysis of comparables gives only a snapshot of the existing market; it does not quantify the potential of the market to absorb more expensive condominium units. The panel believes that the high end of the market is stronger than the sector that presently is being tested by developers, and that the introduction of new market-rate units will substantially change the market realities.

The completion and occupancy of these projects actually will increase the demand for more units as downtown develops its own community of young professionals, artists, and empty nesters. Adding higher-income and creative residents to an already attractive infrastructure will make Lowell a more livable location. The new residents will advance downtown Lowell toward its ultimate goal of creating the critical mass of housing needed to support new retail and an active, vibrant downtown. The amount of housing needed to reach this critical mass depends on the type and size of retail establishments desired and the size of the downtown. The panel believes that an ultimate goal of 4,000 downtown housing units is a reasonable and attainable goal.

Although it is unlikely that downtown Lowell will become a "24/7" downtown (one that is active 24 hours a day, seven days a week) anytime soon, these additional housing units will help create an active, vibrant downtown with substantially more



Abandoned mills have been converted to both rental and for-sale housing throughout the city.

retail space. Conversions of more mills and the upper levels of other downtown buildings to residential uses will become economically feasible. New construction of mid-rise condominium buildings also will become feasible as sales prices approach \$360 per square foot. Historical appreciation data showing 23 percent annual appreciation of condominium units indicate that this price level could be achieved in five years or less, provided no unexpected adverse economic conditions—such as a significant spike in interest rates—arise. Overall, the downtown market has the potential to absorb 2,000 residential units over the next ten years, advancing the downtown very close to the goal of 4,000 total units.

As noted earlier, the housing product in downtown Lowell has changed and continues to change. Market-rate housing currently accounts for more than 95 percent of the housing currently in the pipeline, and the ratio of for-sale to rental housing has shifted dramatically. Although more than 90 percent of the existing housing in the downtown area is rental housing, the units currently in the pipeline are 40 percent for sale and 60 percent rental. With the addition of these new units, the overall downtown ratio will become 25 percent for sale and 75 percent rental. As the condominium market takes hold, this ratio should approach 40 percent for sale and 60 percent rental, and the quality and value of that housing will rise dramatically. With an average household size of just under two people, downtown should more than double in population in the next ten years.

Office Market

The city of Lowell has struggled to retain its manufacturing base and to develop a new base in the professional services and high-technology sectors. Manufacturing in Lowell has declined steadily since the 1970s, most recently with the loss of Joan Fabrics Corporation and Freudenberg Nonwovens from the Jackson-Appleton-Middlesex (JAM) area. Lowell experienced significant success in the 1980s with the expansion of Wang Laboratories; however, no major companies have filled the void left by the collapse of Wang in the early 1990s.

Any effort to attract new regional and national office or industrial tenants to Lowell is dependent upon broader economic forces. Boston's current office vacancy rate is 16 percent, and vacancies are running as high as 24 percent in the suburban office markets north of Cambridge. The most desirable biotechnology and high-technology locations in metropolitan Boston are among those experiencing high vacancy rates. Cambridge's Kendall Square section, close to the Massachusetts Institute of Technology (MIT), suffered from a 22 percent vacancy rate in the second quarter of 2003. The area around the junction of I-495 and the Massachusetts Turnpike reported a 21 percent vacancy rate for the fourth quarter of 2003. Even the best office space in downtown Boston is now almost 10 percent vacant, compared with almost full occupancy only a few years ago. The vacancy rate for the entire greater Boston area stands at 15 percent, and rents along the highly desirable Route 128 and Massachusetts Turnpike corridors are down from a year ago. By comparison, interviewees reported vacancy rates at the Cross Point complex in Lowell that are almost twice as high as the worst markets in Boston. Lowell will not be able to attract new office tenants until the stronger office markets in Boston and along Route 128 have absorbed their vacant space.

Potential Future Office Market

As the above analysis indicates, significant new office development is unlikely to take place in Lowell any time in the near future, although brokers feel that the bottom of the market either has been reached or is very close. If this is the case, improving national and regional economic conditions likely would increase office demand, but Lowell is unlikely to capture that demand until the vacant space in Boston is absorbed. This does not mean the panel believes that there will never again be office demand in Lowell. On the contrary, as Lowell becomes known as a desirable place to live, the panel believes that jobs will follow. The residential component will have to come first, however, and improvements in the regional and national economy will be needed before Lowell sees any improvement in this sector.

Some long-term local partnerships and strategies, however, can be nurtured now that may well grow jobs in the future. Lowell may have a bright future developing and attracting small and mediumsized professional companies. UMass Lowell will be an important partner in generating high-quality advanced scientific and professional jobs. The university is seeking to leverage advanced research at its major technology research centers to spinoff new businesses. Small and medium-sized businesses, particularly software companies, may be attracted to Lowell's relatively low cost and high quality of life. The best way for the city to attract new companies, however, most likely will be to focus on the factors that will improve the quality of life for all users of the downtown. Once Lowell's high quality of life becomes established and known throughout the Boston region, Lowell very well could become the first choice for growing Boston companies looking for affordable satellite offices to outsource some of their functions.

Retail Market

Lowell's downtown core currently contains numerous vacant retail establishments. Although the changing demographic has begun to change the face of downtown retail-with the addition of several high-end shops and restaurants-the amount of retail space in the downtown exceeds the demand created by the limited number of downtown residents and the large proportion of low-income residents. A general rule of thumb is that 2,000 housing units can support 200,000 square feet of retail space, if the shops are within walking distance of residences. As noted earlier, the high percentage of housing set aside for lowand moderate-income individuals and families in downtown Lowell limits disposable income and thus demand, so this rule is not applicable for Lowell's current situation. As new market-rate housing is introduced and residents' disposable income increases, the demand for new retail space should expand faster than it has in the past. The city should consider targeting specific nodes for retail uses.

Potential Future Retail Market

The trend toward higher-end retail likely will continue as the demographic shift proceeds. As long as the current disparity between retail space and housing units remains, however, the city should permit other uses in the vacant space. The current oversupply of retail space likely will remain for quite some time, and such a large quantity of vacant retail space sends an impression of blight to visitors, which has negative repercussions for the city as a whole. The following sections of this report recommend temporary uses for downtown Lowell's vacant retail space. The city should consider allowing additional uses in this space as a special exception, simply to fill the space and avoid the negative impressions created by vacant storefronts.

Summary

The panel believes that Lowell's future will center around the quality of life in the city and that city leaders should continue to concentrate on maintaining and improving that high quality of life. The city's charm and amenities will attract residential development and tourism, which, in turn, will draw retail development and, eventually, commercial development and jobs. As Lowell becomes attractive to the "creative class"—defined by Richard Florida, author of *The Rise of the Creative Class* (New York: Basic Books, 2002), as people who specialize in creative ideas that spur new and varied economic activity, such as scientists, artists, entertainers, engineers, and high-end managers—it seems inevitable that jobs with innovative small and medium-sized companies will follow. The mantra for the city should be "Residential development leads to retail development, which leads to a high quality of life, which eventually leads to jobs." In the not-too-distant future, the panel fully expects to see Lowell written up in national publications as one of "America's top-ten best small cities in which to live." The pieces are all there; it is up to city leaders to assemble them correctly.

Marketing, Planning, and Design

he panel quickly realized that the city of Lowell has a sophisticated planning office, which has extensive plans for the city. The panelists therefore divided their time between formulating creative marketing ideas to better sell the many assets of the city and analyzing existing planning and design deficiencies. Accordingly, this section is divided into two parts. The first covers marketing, while the second explores planning and design issues. The panel determined that no elaborate new plan is required.

Marketing

The panel feels that the city has tremendous assets and that it has successfully completed its first phase of revitalization. Letting the rest of the region and the country know what a great city Lowell is will be an important element in the second phase of its revitalization. The downtown area and the city's many tourist attractions, including the national park and the arenas, are a great draw. For this reason, the panel extensively examined the city's marketing efforts and offers the following observations and recommendations.

Since the downtown area is the key to future residential development in Lowell, special attention must be paid to it. Maintaining what is already in place and enticing new uses to the area will be crucial to the successful marketing of the area, and to the entire revitalization plan. Improving the visibility and accessibility of Lowell's tourist attractions also will play an important role in this effort. The panel recommends that the city take several actions, as described below, to ensure that the existing quality of downtown does not slip, to increase foot traffic and sales, to better market the downtown area, and to improve the visibility of tourist attractions.

A Downtown Association

The panel recommends the creation of a downtown association that would be funded through a combination of city monies and private assessments. In addition, the panel recommends that a maintenance budget be developed, with private assessments underwriting a portion of the costs if total public funding proves infeasible. The overall retail strategy also must include ongoing attention to public infrastructure maintenance. Design features that differentiate downtown Lowell from other cities-its cobblestone streets, historic light fixtures, and street furniture, as well as more utilitarian features such as parking meters, street signs, and public parking structures-must underscore the quality of the downtown area. One useful method to supplement scarce public resources for such ongoing maintenance involves the establishment of a business improvement district (BID) that can generate special assessments for public space maintenance and operation.

Desired Tenant Mix

The city should develop a menu of desired tenants and tenant mix for the downtown core and then should pursue these tenants. The menu could be created through a collaborative effort involving city staff, the Lowell Development and Financial Corporation (LDFC), downtown property owners, and the artist community. The city could provide venture funds to recruit desirable tenants. It also could identify key spaces and then solicit the cooperation of property owners to hold these spaces for desired tenants. Incentives that can be offered to facilitate such cooperation include the following:

- Low-interest loans and/or grants for tenant improvements;
- The use of community development block grant (CDBG) funds for health and safety upgrades and other property improvements;
- Facade improvement loans or grants; and



Lowell's quaint cobblestone streets are proving to be a draw for higherincome Boston commuters desiring an affordable urban housing option.



• Property tax abatements or incentives.

A Haven for Artists

The city also should better position itself as a haven for artists, by taking the following actions:

Conduct monthly art walks. Arists' studios, galleries, and museums often are open to the public for limited hours. Many tourists are unaware of the treasure of art available in numerous cities because of these limited hours and because these venues typically are located in a variety of locations. During the monthly weekend art walks held in many cities, the owners and managers of studios, galleries, and museums all agree to open their facilities for a specified period of time. The art walk then is marketed as an event, encourag-



ing tourists and patrons to visit these facilities, to purchase art or merely admire it. Maps and signs showing the locations of Lowell's many studios, galleries, and museums should be produced in conjunction with such art walks, and restaurants should stay open on the designated nights. These monthly events should be well publicized regionally. As the region's residents discover the depth of the art community in Lowell, the high-end residential market should expand.

Convert vacant storefronts to temporary art spaces.

These installations can become part of the art walk. They should be changed regularly, so that many different artists, including students, get a chance to show their talents. Artists have flocked to Lowell where their art enlivens the city's streetscape. Attempts to draw artists to Lowell by building live/work spaces for them have been a success.



Install temporary public art. Gateways, canals, and riverwalks make great locations for temporary public art displays.

Use vacant mill space as a "kunsthalle," an art exhibition space. Vacant mill space could be minimally upgraded and used to house all types of artwork, including paintings, sculptures, crafts, and so forth. A juried show could be held once or twice a year. While guest curators and artists from around the Boston region and, eventually, the entire country, could be invited to exhibit, local artists should have priority in the initial phases. This could become an institution that will grow in importance over time. **Expand the definition of "art."** Antique shows as well as shows and sales of vintage clothing and textiles, books, crafts, furniture, and ethnic art all are popular events. A vacant storefront or part of a mill building could provide space for such shows, which could be held on a regular basis. Regional or national show producers could be brought in to assist in this endeavor. The city also should try to entice an art cinema to downtown Lowell.

Extend operating hours. The panel noted that the city is essentially closed on Sundays. As the planned arts events become reality, the city should encourage eateries and other shops to open on Sundays. This will help Lowell put on its best face and take advantage of new business. The chamber of commerce should work with downtown businesses to inform them of planned Sunday events that may draw customers downtown. Retailers then can do test runs to see if sales are sufficient to warrant opening regularly on Sundays. Newly planned events and additional residents will go a long way toward creating Sunday customers.

Allow more creative signage in the historic district. While the quality of this signage must remain

Openings in rehabilitated mills are needed to relieve the visual monotony of the buildings as well as to improve access to the buildings and the flow of pedestrian traffic.



high, those responsible for reviewing signage should permit larger signs and the selective use of illumination, including neon, in appropriate circumstances. The juxtaposition of modern signage with historic buildings often presents an interesting and lively contrast, creating the impression of a lively downtown.

Temporary, Seasonal Retail

The city should encourage temporary, seasonal retailers that can capture the energy and excitement of the peak summer festival season during other parts of the year. Lowell comes alive in the summer with its summer concerts and festivals. The following actions could convince concert and festival attendees to stay longer and to come back during the shoulder and off seasons:

Set up seasonal retailing opportunities. During the warm weather, bicycle rentals and water ice stands near tourist spots and waterways—with distinctive umbrellas and color schemes designed by local artists—could add to the vitality of the downtown and provide employment opportunities for high school students. The city should work with the high school to develop these stands; the goal should be for them to break even after the students are paid, with any profit going toward downtown streetscape and waterfront walkway maintenance.

During the winter holidays-perhaps on weekends from Thanksgiving to Christmas-museum stores, wholesalers, and small retailers from different cities could be invited to stock temporary specialty markets in a centrally located and interesting but underutilized space. Although Lowell's harsh winters make it difficult to keep up the momentum, some activities could spark additional interest in the city and attract tourists and residents alike. Examples include holiday arts and crafts fairs that exhibit and sell the work of local and regional craftspeople, as well as planned "midnight madness" events in which shops stay open until midnight on specified nights near the holidays. These events could be accompanied by various family entertainment productions, including carolers or Christmas tree displays. Lowell's diverse population creates opportunities for events that celebrate the richness of the holiday traditions of the Vietnamese, Latin American, or other

cultures. Additional venues should be considered that draw people inside. While these types of holiday-related events already are starting to happen, the city needs to assist and promote them more aggressively, by helping to plan them and by offering creative ideas—such as suspending parking meter fees during the holiday season—that will support them.

Improve the visibility and accessibility of Lowell's tourist attractions. The city's impressive tourist attractions, including the national park, the arenas, and the multitude of museums and galleries, are an important part of what makes Lowell unique. These tourist destinations go a long way toward improving Lowell's image. They need to be better marketed and the directional signage leading visitors to them must be improved. The panel was struck by the fact that when drivers enter Lowell from the adjacent interstate, there are no big brown signs—and few signs of any sort —directing tourists to the Lowell National Historical Park or the arenas. Directional signage is discussed further in the following section.

Planning and Design

The ability of any community to draw new businesses, residents, and tourists to its downtown core is critical to the community's long-term viability, sustainability, and sense of place. Communities that have significant cultural and historical resources are doubly blessed with a unique opportunity and a strength that should be recognized, built upon, and maintained. As demonstrated in the previous section, Lowell is such a place.

Lowell's existing assets—particularly its streetscape, riverfront, and canal areas—provide excellent resources that can be woven together to create a great city. The historic structures and incredible building stock, along with the national park, are additional resources that can be used to Lowell's advantage. This section focuses on how the city can make the most of its assets. The panel believes that while the city's individual elements are quite impressive, the ways in which these elements are integrated and connected could use some improvement. Fully integrating the city's many assets would have a multiplying effect; for example, baseball stadium patrons could visit a museum or gallery before the game and stay downtown for dinner afterward. The trite but accurate expression that the "sum is greater than its parts" is true for downtown Lowell.

This section addresses positive and negative planning and design elements in the downtown area and the four adjacent study areas. The panel also offers specific recommendations about these elements. Many of the negative planning and design elements that the panel encountered hinder visitors from discovering all that Lowell has to offer. A concentration on quality-of-life issues is at the core of the panel's recommendations. The previous section stated that significant new commercial development may not take place in Lowell for some time. Maintaining and improving the city's quality of life therefore becomes paramount as a draw for new residential development.

Downtown Lowell and the surrounding study areas contain several significant infrastructure systems that start to weave these various areas together into a connective whole. These systems include:

- Vehicular circulation;
- Parking structures;
- Pedestrian walkways;
- Busses;
- Trolleys;
- Canals;
- Rivers;
- Streetscapes;
- Gateways; and
- Signage.

The panel believes that the biggest planning and design challenge facing the city is how to integrate and improve the connectivity of the currently disjointed vehicular and pedestrian transportation systems. Each system is discussed in more detail below, followed by specific recommendations.

Vehicular Circulation

A superior system of ingress and egress is an essential element in attracting people into a downtown area, whether on a daily basis or for special events. One's sense of arriving at a destination or special place is heightened by the seamlessness of the experience. Interruptions to the journey reflect negatively on the destination and severely detract from one's enjoyment of the trip and, thus, from its ultimate success.

One's sense of arrival in Lowell via the Lowell Connector is anything but seamless. A motorist traveling to downtown Lowell via the connector is greeted by a confusing and difficult transition from the connector to the downtown street system that leads to a stressful and unenjoyable arrival in downtown Lowell. The lack of directional signage for wayfinding further adds to the confusion, potentially delaying the traveler's arrival and making the trip even more stressful.

During major events like a baseball or hockey game, traffic bottlenecks often occur at major intersections, causing delays and sometimes forcing motorists to look for various side-street alternatives, which in turn clogs residential streets. The limited number of roadways and bridge crossings that enter downtown constricts the flow of throughtown traffic. Heavy truck traffic in the downtown area further constricts traffic flow. During peak flow periods and at special events at the Tsongas Arena or LeLacheur Park, these constricted ingress and egress patterns—combined with a lack of signal synchronization—can cause extensive delays in moving through town.

The panel's recommendations for improving the flow of vehicular circulation throughout the city include the following:

- Replace and coordinate signal equipment to allow for synchronization on the following major streets in the downtown study area:
 - Thorndike Street;
 - Dutton Street;
 - Arcand Drive;
 - Appleton Street;

- Gorham Street;
- Bridge Street;
- Merrimack Street; and
- Fletcher Street.
- Realign or remove restrictions, where practical, of the street intersections listed below to increase traffic flow. The realignment of the intersection with the civil war monument (at Merrimack and Dutton streets and Arcand Drive) is of particular concern because it represents a major bottleneck for ingress to and egress from the arena and the ballpark:
 - Merrimack Street/Dutton Street/Arcand Drive;
 - Gorham Street and all intersecting east/west streets; and
 - Sampson Connector and all intersecting streets.
- Replace and repair limited bridge crossings, particularly those at University Avenue.
- Institute alternative truck routes to those listed below for through traffic; that is, large trucks whose destination is not downtown Lowell:
 - Fletcher Street/Pawtucket Street/Aiken Street; and
 - Appleton Street/Church Street/Andover Street/Nesmith Street.
- Fund replacement of street signage and ongoing maintenance programs.

Parking Lots/Garages

Inadequate parking is a problem in almost every U.S. downtown, particularly those whose core areas feature a strong historic street layout and many historic buildings. Lowell has more downtown parking spaces than many other cities, because several parking garages have been constructed there. These garages have played an integral role in spurring new development as well as in supporting existing businesses and institutions. While the garages provide a significant amount of downtown parking, they are not easy



for tourists or other visitors to find. There are very few signs to tell these drivers where they can park. The city should add more signage to direct drivers to downtown parking garages. In addition, the fees charged to park in these garages should be revisited to encourage their full use.

The panel recommends that the city let the market drive the construction of new parking spaces. While city parking garages have had an overall positive impact on downtown development, the panel believes that the city should not build any new parking garages unless they are built in conjunction with private development. The panel notes that parking garages have been built on land with water views. While this may have been the highest and best use for this land at the time, the panel believes that in the future, waterfront or water-view properties will be the city's most valuable properties and, as such, should be reserved for high-quality private development. The panel therefore recommends that the city:

- Create additional parking structures in appropriate locations as the need arises, but only in conjunction with private development through incentives and cost sharing. The following are appropriate locations for new parking garages to be built in conjunction with new development:
 - Riverplace Center;
 - Dressing Mills Place;

Integration of retail uses into the ground level of parking garages should be encouraged throughout the city. Public art throughout Lowell enhances the streetscape and creates a sense of place.



- Arcand Market/Lowell High School;
- Suffolk Mill;
- Lawrence Mill;
- The Davidson Street parking lot;
- Central Plaza;
- The JAM area; and
- LeLacheur Park.
- Investigate opportunities to incorporate revenuegenerating retail space on the ground-floor levels of new parking garages and retrofits of existing structures, where practical.

The panel also recommends that the city improve and optimize existing parking structures by taking the following actions:

- Install additional signage to improve the flow of traffic to parking structures;
- Consider adding new parking levels to existing structures that can accommodate the structural loading and requisite internal circulation —including the Downes, Ayotte, and Lower Locks parking garages—as the market and need arise; and

• Review the existing parking fee structure and build in flexibility to adjust fees in response to changing circumstances and market demand.

Walkways and Pedestrian Connections

The ability to facilitate movement at the pedestrian scale is imperative for the success of the downtown core. Several areas currently lack adequate sidewalks that provide safe and direct connections to points of interests, parking, transit stops, and activity centers. Where sidewalks do not exist and/or passages are not clearly demarcated, pedestrians can get lost, confused, and frustrated. In addition, many existing walkways are in poor condition and unsafe to use.

The panel recommends that the city improve existing pedestrian connections and incorporate new pedestrian connections into new developments by taking the following actions:

- Create ongoing budgets for the maintenance and repair of unsafe conditions on existing walkways.
- Add necessary pedestrian connectors that will allow the free flow of pedestrian traffic to a variety of destinations. Pedestrian connections from the transit station across Thorndike Street are critical to the successful flow of foot traffic from the multimodal center toward downtown.
- Create appropriate signage for information gathering, directional assistance, and learning at critical wayfinding points within the system.
- Ensure that adequate and appropriate walkway connections are incorporated into development plans as new projects are developed.

The panel also recommends that the city open up some of the longer mill buildings to support pedestrian connections to the canals. The extraordinary length of the mill buildings creates a physical barrier to the canals. The panel noticed several mill buildings that had been pierced to allow pedestrian traffic to flow through. This is an effective design solution, not only for pedestrian flow but also to break up the visual monotony of these long buildings, and should be supported. The city should look for mid-block opportunities to create visual and physical penetrations—at ground level only—that would open up these pedestrian connections. The panel sees these interior corridors as ideal locations for outdoor dining along the canals or waterfront, as well as for other touristrelated retail activities.

Transit

The city of Lowell is lucky to have three forms of transit available for the use of residents, employees, and tourists within or near the downtown and the surrounding study areas. The Gallagher Terminal acts as the northern terminus for trains arriving from the greater Boston metropolitan area. Within the boundaries of the Lowell National Historical Park, the historic trolley system developed by the NPS provides access to various points of historical and cultural significance. The Lowell Regional Transit Authority (LRTA) provides bus service from the downtown area to the Gallagher Terminal and to outlying areas and neighborhoods. There is, however, a lack of coordination among these related systems. Careful coordination of all three systems will result in significant increases in use and revenue.

The panel recommends improving and extending the existing NPS trolley service and integrating it with Lowell's other existing transit systems by taking the following actions:

- Pursue Alternate 1A of the NPS study for extending the historic trolley to both the Gallagher Terminal and the west end of the JAM area. The trolley extension to the Gallagher Terminal must create a seamless connection between the trains arriving from Boston and the departing trolley connector.
- Pursue the extension of the NPS trolley toward LeLacheur Park, the UMass dormitories, and the Acre, an historic immigrant neighborhood located west of downtown Lowell.
- Explore options for extending the NPS trolley across the University Avenue Bridge at the Merrimack River to the UMass North Campus.
- Coordinate trolley stops with the LRTA's crosstown bus stops; the trolley/bus interface is critical to the success of all modes of transit within Lowell.



• Expand the signage system so that it clearly identifies all transit stops, transfer stations, and routes.

Rivers and Canals

Waterfront land is a city's most valuable asset, which can be leveraged to create valuable urban amenities. Lowell is blessed not only with frontage along two rivers but also with an internal system of built canals, locks, falls, and historic structures reminiscent of those found in Amsterdam. The city's historical development pattern reflects the fact that initially it took full advantage of its water frontage for industrial purposes only, and therein lies the problem facing the city today. The proximity of the historic structures to the water restricts the general public's ability to access and enjoy these areas.

The city's natural and built waterfront is, of course, an enormously valuable asset and amenity. The ability of the city and the NPS to preserve, protect, and enhance this amenity is critical to the continuing success of Lowell's downtown revitalization. Enhancement efforts by the city and the NPS along the Merrimack riverwalk are a great start and need to be continued. They also need to be maintained; otherwise, these amenities will lose their appeal and, thus, their value to the city. Although the canal walks being developed by the The soon-to-be-redeveloped Lawrence Mills is connected to the city's riverwalk system, a unique and marketable amenity. The canals flowing throughout downtown Lowell are an underutilized asset. The current system of canal walks should be expanded wherever feasible.



NPS are still in their infancy, they are strong elements that must be expanded wherever the opportunity exists. While ownership issues, regulatory restrictions, and the underlying historic street and building relationships sometimes make it difficult to open up these waterways to the general public, the city and the NPS should continue to do so wherever possible.

The panel therefore recommends that the city and the NPS take the following actions to fully maintain, extend, and improve the existing system of canal walks and riverwalks:

- Continue to protect and enhance visible frontage along the rivers and canals. Maintain the integrity of the canal walls and lock systems, but explore opportunities to reconstruct or vary the aesthetics of the walls and their locations so that walkways along the canals can, where dimensional constraints allow, be much more engaged with the water.
- Establish viable funding for the long-term maintenance of walkway and landscape improvements. Do not extend the systems already in place unless funds are available to adequately maintain them. Consider creating landscape or mainte-

nance assessment districts to generate these funds. Such districts usually require the approval of a majority of the district's property owners, and revenue typically is generated through a small additional property tax. One or more BIDs also could be formed to establish regular funds for maintenance. The city should investigate whether CDBG funds could be used for some of the repairs. The availability of federal funds through the Federal Transportation Equity Act for the 21st Century (TEA 21) alternative transportation programs also should be explored.

- Once funding for maintenance is ensured, extend the canal walks wherever practical, to create continuous loops without dead ends.
- Wherever practical, provide connections between the canal walks and the riverwalks.
- Work closely with private developers, particularly those building infill projects along the rivers and canals, to encourage them to celebrate this amenity. Significant park, open space, and public/private plaza areas should be created wherever physical constraints allow. Discourage the construction of any more tight, single walk-



ways. If they do not already exist, regulations that require new development to improve the existing walkways and create new parks and plazas should be carefully crafted. Any new regulations requiring exactions from a developer should be carefully written to ensure that there is both a nexus between the governmental interest reflected in the exaction and the degree and extent that the exaction is proportional to the negative impact of the development. Relevant U.S. Supreme Court decisions on this matter include *Nollan* v. *California Coastal Commission* and *Dolan* v. *City of Tigard*.

- Look for opportunities to provide more views of the river and the canals for people as they travel through the downtown and the surrounding study areas. Create vistas to the water, points of interest along waterways, additional pedestrian crossings/bridges as mid-block connectors between developments, and so forth.
- Expand the informational and historic signage at critical points within the downtown and the surrounding study areas to clearly identify the locations of the waterways, their relationship to the street patterns and points of interest, and their connectivity as part of the more extensive movement systems within the greater downtown area.

Streetscapes

An excellent streetscape system already is in place in the downtown. The model street, Palmer, set the precedent in unearthing cobblestones; installing signature street lamps, sidewalks, trees, and grates; and advocating a storefront design compatible with the building stock. The streetscape improvements clearly delineate the down-



Far left: Maintaining the quaint Lowell streetscape is key to attracting marketrate and luxury housing to the downtown. Left: Street architecture adds to the appeal of downtown Lowell.

town area and distinguish it as a special place different from the rest of Lowell. Unfortunately, the panel noticed deferred or poorly executed infrastructure maintenance, which lessens the impact of these improvements.

The "broken windows" theory of city management was first espoused in 1982 in an Atlantic Monthly article by author George L. Kelling. Later expanded into a full-length book by Kelling, Catherine M. Coles, and James Q. Wilson, Fixing Broken Windows: Restoring Order and Reducing Crime in Our Communities (New York: Free Press, 1998), and successfully embraced by New York City Mayor Rudolph Giuliani, the theory contends that deferred maintenance, like the failure to repair a broken window or a pothole, leads passersby to conclude that no one cares and no one is in charge, which speeds the process of decline and invites criminal activity. Consistent and appropriate materials should be used to repair and maintain the substantial initial investment in infrastructure improvements, and all improvements must be maintained over the long term.

The panel recommends that the city maintain the high quality and value of the existing infrastructure improvements by taking the following actions: Attractive signage throughout the city is hindered by inadequate information on the signs.



- Prioritize streetscape maintenance by considering the importance and visibility of each street. Resources should be focused on high-visibility downtown streets and those used by tourists.
- Use consistent and appropriate materials when maintaining infrastructure; for example, replace missing cobblestones with cobblestones, not asphalt.

Gateways

All of the city's entry points should lay out a welcome mat, reassuring people that they have arrived in the right city and that it will be easy to get where they are going. At this point, it is not clear *when* one has arrived in Lowell and, as has been described above, it certainly is not clear how to navigate around the city. Gateways should feature the city name, appealing landscaping, flags, art, and other attractive elements. They must denote that one has entered a city that takes pride in itself. The panel also recommends that the city install attractive and consistent gateway signage at all important entryways to the downtown.

Signage

The panel noticed several deficiencies in the signage systems around Lowell. All of the following signage systems are in need of improvement. **Street Name Signage.** Downtown Lowell's street signage is inconsistent and very limited. This makes it impossible for newcomers to find their way around the city. It also makes for dangerous driving conditions.

Directional Signage. Signage indicating how one gets to particular destinations within a city should be clearly posted at highway exits, train and bus stations, all other entrances to the city, and various other locations within the city. Lowell is not user friendly; it hides its assets rather than clearly directing visitors to them. The Lowell Connector does not connect anything, and truncates abruptly. The entries to the city from other directions involve crossing bridges. Both of these factors make clear and consistent directional signage even more important.

Informational Signage. While informational signage can be found at NPS sites and other historical monuments, most of it is general in nature rather than specific to the site where it is located. and therefore is not very helpful or informative for tourists. Many of the information signs are not in good repair or have been vandalized. The city and the NPS must take a consistent approach to the system of identifying important buildings and sites in each part of Lowell. A sign at one site should lead to another sign at another site, so that the signage system gradually tells visitors a complete story, such as the story of Lowell, of the arts community, or of some important person. The informational signs staggered along Merrimack Street are vague and do not even indicate where the viewer is standing. The canals and the river are not easy to find.

The Gallagher Terminal is truly a hidden resource; it is difficult for anyone—and especially for a newcomer—to find, whether on foot or in a car. Anyone entering Lowell for the first time via train or bus is hard put to figure out how to get out of the terminal and find the downtown. The bus map posted on a wall outside the station is difficult to read and to understand. This lack of both directional and informational signage, coupled with the spaghetti roads of traffic, leaves pedestrians without an adequate sense of how to get to the downtown, and with a walk that can only be described as dangerous and unpleasant. The panel recommends that the city improve its existing signage systems and install new signs. It should:

- Install street signs bearing the names of cross streets on buildings or poles at every intersection.
- Install directional signage on all major access roads, indicating the route to downtown, tourist attractions, sports and cultural venues, academic institutions, and canal and river walkways.
- Improve informational signage. This signage should be clear and consistent. It also should be tailored to the location of the sign. Many signs give no indication as to where the person viewing the sign is located in relation to tourist destinations.
- Repair missing or vandalized signs.
- Install informational and directional signage at the Gallagher Terminal. These signs should make it clear how to get downtown, either by foot or by mass transit.

Summary

Inherent in the success to date in the downtown and the surrounding study areas is the regulatory elements firmly in place that protect Lowell's valuable amenities, be they the historic mill structures, the fragile nature of the rivers, or the canals that made the mill industries flourish. The city is now in a position, through cooperative dialogue with all the relevant regulatory agencies, to take the utilization of these cultural gems to the next level, to explore opportunities to further enhance, energize, and proclaim their significance to the history of the town and its vibrant past, present, and future. Successfully addressing this challenge will require the cooperation of all of Lowell's landowners, jurisdictional agencies, and business leaders.

City leaders should prepare for and hold discussions among the key stakeholders on what elements of the current regulatory guidelines are inhibiting active development and connections to the rivers and canal systems within the downtown and the surrounding study areas. They should:

- Identify which elements are nonnegotiable; that is, which are essential to preserving the integrity of the structures and the "story" to be told.
- Determine which areas/elements of the urban fabric and which structures can be altered without harming them or deviating from the ideals and charter of the NPS goals.
- Look for creative, noninvasive options that allow development improvements at the street level that do not do significant damage to the integrity of the historic fabric.
- Create opportunities for advancing, rewarding, and encouraging redevelopment and adaptive use of the historic structures along the canals and riverways.

Development Strategies

he panel's proposed development strategy for the four study areas builds upon the findings and recommendations presented in the two previous sections. The panel believes that the city of Lowell, after completing one of the most successful revitalization efforts in the country, is poised for its next major phase of revitalization. As in any healthy democracy, a variety of ideas and opinions have been expressed about the direction this phase should take. The panel viewed its mission as gathering these ideas and applying its collective knowledge and experience toward a blueprint for revitalization that can engender community consensus.

After a careful analysis of market conditions and various plans, as well as interviews with governmental and civic leaders, the panel recommends two goals for the next phase of revitalization. First, Lowell should strive to maintain and improve a high quality of life in the downtown area that will attract and support new high-quality residential development there. Such development will lead to new retail development and, ultimately, new jobs. Second, the city should expand and improve tourist uses and activities, in order to retain Lowell's identity as a unique destination city. Tourism should be used as a vehicle to drive new residential development and other economic development activity. In short, the panel believes that, ironically, Lowell's industrial past is the engine that will drive it into a future of new residential development and tourism.

The panel was asked to look specifically at four large-scale revitalization areas that surround downtown Lowell. These areas are the Jackson-Appleton-Middlesex (JAM) area, the Central Plaza shopping center site, the Davidson Street parking lot, and the arena/riverfront parcels. The four areas are starkly different in terms of their location and land uses, but they share a common thread: All are within the downtown's sphere of influence. The panel found that two of these areas —the Davidson Street parking lot and the arena/ riverfront parcels—are well suited for a residential/tourism focus. The other two sites—Central Plaza and the JAM area—appear better suited to advance other important city goals and objectives that support downtown revitalization. Specific recommendations for each area are listed below.

Jackson-Appleton-Middlesex (JAM) Area

The panel feels that the JAM area represents Lowell's most significant opportunity for future growth and economic development. It therefore is especially critical that this area be positioned so that it has the broadest appeal to potential market demand. The JAM area offers better access to transportation than any of the other three study areas, as well as better opportunities to assemble the large-scale parcels that are necessary to support new commercial development. The panel therefore believes that this area offers the greatest potential for job-producing economic development.

On the other hand, no market currently exists for private sector-initiated office or light industrial development in the JAM area, primarily since numerous vacant office buildings and potential development sites are available in competitive locations throughout the greater Boston region. A consideration of macroeconomic trends at the national level also suggests that such development may be unlikely in the near future.

The panel does not recommend residential development or the enhancement of tourist uses in the JAM area, unless no market for commercial uses can be found. Other areas near downtown provide opportunities to increase the density and critical mass of residential and tourist uses in ways that more effectively advance overall community goals, such as further revitalization of the Merrimack Street retail core.

Although there currently is no market for office or light industrial space in the JAM area, the panel believes that this market will develop with the transformation of downtown Lowell into a more affluent urban bedroom community. The panel predicts that the changing demographic of downtown Lowell will first create demand for retail space in and around downtown. As the residential and retail markets flourish, a market for office and light industrial space will follow. As stated in the Market Potential section of this report, the city of Lowell may have a bright future developing and attracting small and medium-sized professional companies. The potential also exists-through partnerships with UMass Lowell-to generate high-quality advanced scientific and professional jobs. The university is seeking to leverage advanced research at its major technology research centers to spin off new businesses. Small and medium-sized firms, particularly software companies, may be attracted to Lowell's relatively lowcost and high quality of life.

The panel therefore recommends that the city spend the intervening years acquiring properties in this area and positioning them for future development. A detailed description of this process appears below. The city should view this as an investment that, while requiring initial upfront funding, will provide handsome returns to the city when the office market emerges and the JAM site is well positioned for development.

The public sector must take the lead in this process of increasing the potential to create job-producing uses in the JAM area. At the same time, meaningful private sector involvement also should be facilitated as soon as possible. The following two principles should guide the private and public sectors' involvement. First, the limited public sector investment that may be available for the JAM area should be focused in a way that increases the feasibility of private development and therefore private developer interest, to the greatest degree practicable. Second, the public and private sector roles should be defined in a way that takes maximum advantage of each sector's strengths and capacities. Market research, marketing, and the pur-



suit of potential tenants should be the primary responsibility of the private sector.

With these principles guiding future actions, the panel recommends the following development strategy be pursued for the JAM area:

Amend the City Plan

The city should amend its Urban Revitalization and Development Project Plan for the JAM area. The plan fails to reflect the departure of several major industrial users since it was adopted. The amended plan should call for the acquisition of all property north of Middlesex Street and spot acquisition of any property south of Middlesex Street that is so blighted that it cannot be addressed through rehabilitation by current property owners.

Develop a Strategy to Acquire Properties

After successfully amending the project plan, the city should develop an overall financial strategy that:

- Allows expeditious short-term acquisition of property in the area;
- Ensures an appropriate long-term return on the city's investment; and
- Does not adversely affect the financial feasibility of developing properties, thereby dampening private sector developer interest.

Abandoned mills in the Jackson-Appleton-Middlesex area would be ideal for conversion to funky office space for mediumsized companies. The panel believes that the office market, although very limited today, likely will follow the residential and retail markets. The city will need to investigate a wide array of both private and public sector resources that could be used to acquire these properties. Some examples of potential funding sources or mechanisms include the following:

- Capital improvement funds;
- Community development block grants (CDBGs);
- Tax increment financing (TIF);
- Federal and state brownfield remediation and redevelopment programs;
- U.S. Department of Housing and Urban Development (HUD) and Fannie Mae neighborhood redevelopment grants;
- Special service district assessments;
- Federal historic tax credits;
- Revenue from new sales taxes; and
- Industrial development and municipal revenue bonds.

Designate a Master Developer

After it has begun to acquire properties, the city should identify a master developer for the area through a request for qualifications (RFQ) process. The RFQ should stipulate that demonstrated successful experience with large-scale, mixed-use development projects will be a prerequisite for master developer designation. The city could publicize its RFQ in national publications and Web sites targeted to the development community. The Urban Land Institute posts RFQs and RFPs on its Web site, and numerous other venues also reach the target market of developers.

Conduct a Market Study and Prepare a Flexible Development Plan

The master developer should conduct a comprehensive market study. After the market study is complete, the master developer should work with the city to prepare an overall development plan as well as a demolition, site preparation, and infrastructure financing strategy. The master developer also should initiate an overall marketing program to seek out and attract potential users to the JAM area.

The overall development plan should be flexible, so that it can accommodate potentially unique future opportunities that may arise over the course of time and are consistent with the city's basic goals for the area. For example, many private institutions in the greater Boston area now occupy significantly appreciated property. At the same time, these institutions lack currently available funding for necessary facility improvements, and therefore are considering selling their current land assets and relocating to a new site on which they can develop modern facilities. One or more such institutions could provide an excellent anchor for the JAM area. The commonwealth also is actively recruiting companies from outside Massachusetts to locate there.

Having a master developer and an overall development plan in place will give the JAM area a competitive advantage over other sites. Companies looking to locate new businesses or relocate existing businesses often consider several locations, weighing the advantages and disadvantages of each. Having a detailed yet flexible plan in place not only will be reassuring to prospective clients, it also will allow the city to accommodate the tight schedules such companies usually demand for facility completion when making their site selection decisions. Assessment of risk is at the core of any financial decision, especially in real estate. By reducing the risk to the prospective companies, the city obviously will increase not only the marketability of the project, but also its value. Any public money spent on predevelopment efforts should be viewed as an investment that quite likely will pay significant returns, not only in increased tax revenues but also in appreciated real estate values.

As stated above, building flexibility into the overall development plan is crucial to allow the city and the master developer to respond to changing market demands. Several possible scenarios could make this flexibility essential. Efforts to attract commercial uses could fail if the national economy does not continue to recover from its early 2000 recession. If this happens, the flexibility to go after residential or tourist uses instead of commercial ones would be helpful. New technology could create heretofore unimagined new products that may create demand for new kinds of office space. In that case, the ability to quickly adapt the space offered would be valuable. The market analysis could point to a highest and best use that is different from any of the assumptions the panel or the city has made; having the flexibility to adapt to these findings also would be very useful.

Prepare Specific Development Proposals

After it identifies one or more appropriate users for the area, the master developer should prepare development proposals for specific sites for city review and approval. Upon city approval, the master developer would take down the specific site from the city and proceed with development. The return on the city's investment for the initial land acquisition could be comprised of the sales price for the specific sites as well as downstream development return participation, depending on how each particular deal is structured.

Beef Up Code Enforcement

The panel believes that the current dilapidated state of the housing in this area—particularly that facing South Common Park—reflects poorly on the JAM area and presents a poor entryway to the city. Loans and grants to facilitate the rehabilitation of property south of Middlesex Street that is not slated for acquisition may be an effective way to ensure improvement of the entire area that will set the backdrop for the potential attraction of significant job-producing uses in the area north of Middlesex Street. The city should investigate whether CDBG funds could be used for such code enforcement.

If there are any community groups in the area, the city should begin by scheduling meetings with these groups to determine what is causing the deterioration. Before beginning any enforcement efforts, the city should attempt to work with local residents to determine the underlying causes of the problem. Are there significant numbers of absentee landlords? Can the city track the ownership of the properties? Could elderly residents be relocated to housing that requires less upkeep? Are funds for home repair available from government or nonprofit organizations? The goal should be to build support among residents who



are maintaining their properties to pressure the owners of the derelict structures to take remedial action.

Other cities have adopted novel approaches that combine enforcement with assistance. In Littleton, Colorado, for example, a city program assists homeowners who are having trouble maintaining their property, such as the elderly, by ensuring that their dwellings are maintained, fences repaired, lawns tended, and so forth. In Portland, Oregon, an annual volunteer program sponsored by local employers fixes up the homes of elderly residents in the city. Many cities have annual "Christmas in April" events during which local companies donate home improvement materials and volunteers make repairs to the homes of needy elderly residents.

Central Plaza

Although the panel does not recommend residential/tourist-focused redevelopment of the Central Plaza site, it does suggest some specific uses for this site. The site's strategic value lies in its ability to serve two other important purposes. The panel therefore recommends the following development strategy for this site:

Locate Two Important Uses There

The panel believes that the Central Plaza site is the best location for the proposed new justice center. In addition, the panel further believes that it The Central Plaza site currently is occupied by a neighborhood retail center that has numerous vacancies. also may be an appropriate location for a combined sewer overflow (CSO) storage facility, if such a facility is required or deemed to be the preferred solution and is technically feasible. It may be possible to locate the facility below a parking garage for the justice center.

More than 100 communities throughout New England are burdened with sewer systems in which sewer pipes carry both sewage and stormwater to wastewater treatment plants. After a heavy rainfall, the combined flows often are too much for the wastewater treatment plants to handle, resulting in excess wastewater being discharged in local waterways. Lowell has nine combined pipes that discharge wastewater into local waterways after significant rainfall or snow melting. The U.S. Environmental Protection Agency (EPA) is working with local communities to solve this problem.

A CSO facility is one potential remedy. If officials deem it to be the best solution, and if the site characteristics make its construction feasible, the panel believes that it should be constructed beneath the proposed justice center. The continued outflow of wastewater to local waterways is a major environmental and health issue that will be difficult and expensive to fix. Since the Central Plaza site may represent one of only a few opportunities to solve this major problem, the opportunity to use the site for this purpose should be investigated fully.

Combining the justice center and a CSO facility on the Central Plaza site may reveal potential new combinations of local, state, and federal funding for the project, which also offers opportunities for long-time allies in the business, legislative, and city management arena to band together in pursuit of a common goal. The several small office buildings near the site, which include some existing dispersed court locations, also present excellent opportunities for the expansion of justice center-related offices and the development of auxiliary business uses. As development proceeds, the parking garage's design and security features must be vetted by the commonwealth to ensure that they do not conflict with the stringent requirements of modern court facilities.

Davidson Street Parking Lot

The Davidson Street parking lot currently is an underutilized site. The property occupies a beautiful location on the banks of the Concord River, near downtown and Lowell Memorial Auditorium. The panel believes that developing the proposed justice center on this site would not fully leverage the site's assets. The panel therefore proposes the following development strategy:

Prepare the Site for Development

The city should retain control of the Davidson Street parking lot parcels and obtain any additional parcels that may have strategic value. It should prepare this site for development by cleaning it up and providing the necessary infrastructure. Although the city should consider which additional parcels may be of strategic value, it may not be necessary for it to acquire all of the privately owned land at the periphery of the lot.

Develop a Mixed-Use Project with a Performing Arts Facility

The highest and best use for this site is a mixeduse development containing high-quality, midrise residences that take advantage of the Concord River views and restaurants that maximize the public amenities at this riverfront location. The panel therefore recommends that the city develop a mixed-use project with a first-class performing arts facility, when funding for such a facility is available. The city should begin to identify funding sources for the performing arts facility. A high-density, high-quality residential component could spin off a portion of the subsidy needed for the performing arts center. Such a mix of uses would augment the adjoining Lowell Memorial Auditorium and strengthen the residential/tourism focus recommended for downtown revitalization. It would provide a more positive anchor and better support for retail activity along the eastern portion of Merrimack Street than would a justice center.

Arena/Riverfront Parcels

The panel recommends a phased development strategy to take maximum long-term advantage of this riverfront location. It has identified two distinct development strategies for different parcels



The existing postal facility (center) is ideally situated on the banks of the Merrimack River and adjacent to the Tsongas Arena (shown to the left).

within this area. For the parcel adjacent to the Tremont Power House, the panel recommends that the city do the following:

Acquire the Parcel

The city should begin immediate negotiations to acquire the parcel currently owned by the commonwealth. This parcel has a 25-year lease limitation and two five-year extensions. The city should acquire the property in order to control the development process and ensure that a use that is complementary to the arena and the ballpark is developed on the site. City control also should result in a faster entitlement process.

Initiate an RFP Process for a Restaurant

Because of its proximity to both the baseball stadium and the arena, this site is an excellent location for a restaurant, which would further invigorate the area on event nights.

For all the remaining lands adjacent to the Tsongas Arena between the Merrimack River and Father Morrissette Boulevard, the panel recommends that the city do the following:

Hold All City-Owned Lands

Pursuing the immediate development of cityowned land that is not burdened by parking lease commitments would sell this prime waterfront location short of its highest and best use potential. Moreover, ongoing downtown revitalization will only enhance the land's future attractiveness and marketability as one of the last remaining waterfront development opportunities in Lowell. In the future, a wider range of potential development options than those identified to date could be secured through an RFP process, with the city providing a facilitative role in attracting the interest of private developers. Future development could produce the city's finest mixed-use (hotel, office, and/or meeting/convention support) property.

Construct a Temporary Use

The city should build a temporary structure on its land until the market develops for the highest and best use for the site. Suggested temporary uses include an amphitheater, boat rental facility, antique/flea market warehouse, or regional farmers market. A temporary structure on this site would connect city residents to the water and could be removed once the market can support the highest and best use. The city should demolish the existing U.S. Postal Service maintenance facilities and work with the USPS to find an alternate location for this facility.

Implementation

mplementation is always the most difficult aspect of any plan. Good intentions are meaningless without a specific plan for getting the job done. The panel believes that the ambitious plan laid out in the previous sections of this report is very doable, for several reasons. First, the plan comes from the people of Lowell. During its confidential interviews with a cross section of city stakeholders, the panel listened to what the people of Lowell had to say. The panelists incorporated what they heard into a plan for the city and continually tested the political viability of their ideas through question-and-answer sessions with interviewees and among themselves. Second, the ideas are based in market realities, and suggested programs and policies come from the panelists' real world experiences. Finally, the panel's opinions are completely unbiased. The panel's only agenda was to answer the questions posed by the sponsors.

Throughout this report, however, the panel often addresses issues that were not specifically mentioned by the sponsors. It does so because, in these instances, it felt strongly that these issues were significant enough to be mentioned. The panel's findings and recommendations for the implementation of the plan, as outlined in previous sections, follow. Its general recommendations regarding implementation are followed by suggested "next steps."

General Findings and Recommendations

The panel was impressed with the accomplishments of Lowell's thoughtful, committed city leaders over the last 30 years. Despite adverse macroeconomic trends, the city raised hundreds of million of dollars to invest in schools, waterfronts and canals, land acquisition, a sports arena and ballpark, parking garages, and infrastructure while attracting national attention for its downtown revitalization efforts.

As the community has matured, however, people, processes, and focus have shifted. The combination of leadership and energy has shown some stress. The community's "creative energy" is in need of review, consensus, and focus. In light of the present economy and the lack of availability of traditional capital programs at the federal and state levels—and sensing an opportunity for reflection—the community has stepped back and is carefully evaluating where and how growth is to be implemented over the next several decades.

The panel believes this is a logical and wise step. It feels that consensus can and should be formed about the future direction of growth in Lowell. Every city today is competing for jobs, money, and people, not only nationally but internationally. For Lowell to forge ahead in the new century, consensus and cooperation are more than just a good idea, they are vital to the city's future.

During the interview process, the panel heard a wide variety of opinions and received a wide variety of advice. Often, completely contradictory statements were made from one interview to the next. While this is to be expected-and is understood by the panelists to be typical of many communities—the panel is concerned that the gap between viewpoints is widening and that communication between different groups is suffering. The city cannot allow this Balkanization of its many community interests. Lowell's continuing renaissance will require effective communication among the groups and eventual consensus. Webster defines consensus as "the judgment arrived at by most of those concerned." Consensus is almost never unanimous; if it is, one should question how democratic was the system that produced it. The panel hopes that once the big decisions have been made, the many groups will feel they have

had their say and will pull together for the greater good of the community.

In the past, the city allowed the availability of state and federal resources to dictate its development agenda. The days of readily available state and federal resources are mostly gone, and may never return. Fortunately, Lowell has laid the groundwork for a more market-driven development future to take hold. Evidence of this already can be seen in the significant amount of market-rate housing now in the pipeline. This change puts the city in a position to shape future development by leveraging its assets. It also allows the city to pursue a more selective strategy of supporting only the projects that fit its development vision and plans, selectively utilizing the dollars to help fund projects that support strategic priorities. The panel's general implementation recommendations include the following:

Create Consensus

The city must create consensus on the future path of development in Lowell. It has proven in the past that it can come together and accomplish great feats. Public/private partnerships are Lowell's "ace in the hole" and represent the city's best hope for the future. The panel's recommendations represent a unique opportunity for the public and private sectors to come together and support the second phase of downtown Lowell's revitalization.

The public/private partnerships that have proven so successful in Lowell are a rarity in other municipalities. Many cities have attempted to form them, but few have been as successful as Lowell. The successful cooperation of Lowell's public and private sectors provides benefits to both parties. The public sector benefits by getting immediate feedback on the feasibility of ideas and proposed public projects, while the private sector benefits by being able to leverage its investments further than it would normally be able to. The continuing cooperation between city hall-the legislative body responsible for the overall effort supported by its excellent staff-and a nonprofit economic development corporation and an affiliated lending institution is a successful collaboration that would be the envy of most well-managed communities. The panel believes that the recommendations provided in this report encompass the many



concerns of the varied stakeholders in Lowell and therefore represent the best opportunity for achieving consensus.

Take the Lead

City government should take the lead role in stimulating and regulating private development. Leadership and oversight of the next phase of downtown revitalization should originate at city hall. Those involved with the Lowell Plan, as well as with the Lowell Development and Financial Corporation (LDFC), will continue to provide valuable input, as previously described. The city of Lowell, the LDFC, and the Lowell Plan have demonstrated a real commitment to acquiring public and private resources to accomplish specific public goals.

The city, through its elected and appointed officials and, particularly, through the Lowell Division of Planning and Development, must become the key player and prime mover of the downtown revitalization effort. Accordingly, it is incumbent upon the city to muster and proactively utilize all tools and incentives at its disposal to support revitalization, including facilitation of a participatory and collaborative forum that enables all vested interests to provide meaningful input into the process. By supporting infrastructure improvements, incentives, and zoning controls, the city can control new development. A central forum for business input can provide a useful complement for private sector market input that can help optimize Excellent examples of restored and rehabilitated architecture abound in downtown Lowell.

the efficacy of public sector initiatives in today's tight fiscal environment.

Fully Utilize Existing Tools and Consider New Ones

The city should fully utilize all of the regulatory and financial tools currently at its disposal and should consider implementing new ones. The entire menu of tools and incentives that the public sector has at its disposal can and should be made available to help make private sector development that advances city goals and objectives financially feasible. These tools include:

- Active involvement in the resource allocation processes at both the state and federal levels, to earmark monies for needed capital improvements that are well beyond the means of local resources.
- Active enforcement of building and safety codes, including remediation by the city and placement of tax assessment liens for recouping costs on properties where voluntary compliance is not forthcoming.
- Facilitation of market-based private development through public/private partnerships that allow the private marketplace to influence specific land use decisions within the context of broadly defined goals and objectives, rather than reliance on overly prescriptive public sector land use determinations. Public tools available to enhance such partnerships include the following:
 - Land banking through public acquisition and holding of prime sites for future private development. With a further buildup of additional private development throughout downtown and the surrounding study areas, the value of these land-banked properties will increase, thus also increasing their potential future contribution to the city's overall quality of life.
 - Financial incentives such as tax increment financing (TIF) and district improvement financing (DIF), property tax deferment or abatement until a project is sufficiently stabilized, public infrastructure improvements, and land writedowns often can make the differ-

ence in whether a high-quality development locates in Lowell or in another community.

• Greater outreach to educate and advertise the significant benefits that are potentially available from other federal programs such as Renewal Community (RC) and New Market Tax Credit (NMTC) tax incentives to support private sector development in Lowell.

Engage Educational Institutions

The city should engage UMass Lowell and Middlesex Community College in its planning efforts. Although UMass Lowell is not a downtown property owner, it does own a significant amount of property immediately northwest of the downtown, bordering on the Merrimack River and Northern Canal. Inasmuch as one of the panel's recommended development strategies for enhancing the downtown quality of life involves strengthening connections to the rivers and canals, appropriate development of the UMass Lowell property could be an important component in achieving this goal. It appears, however, that the university's plan to build a parking garage on a site along the Merrimack River adjacent to LeLacheur Park does not support this goal. If this is the case, the city should discuss various alternatives for such projects with the university before they are finalized.

Engage the National Park Service

The city also should engage the NPS in its planning efforts. The NPS should be responsible for completing the waterfront park and related connections in and around the canal system. Preserving and connecting Lowell's waterway assets should be a high priority. The city should capitalize on the NPS's access to federal resources as a means to connect and maintain the waterways, riverfront parks, and pathways. The quality of access to the water-and development along the water as a public amenity—will greatly affect the overall quality of growth and, specifically, the quality of new individual development projects over the next 20 years. Many existing buildings front the canals and rivers, so visual access and active pedestrian relationships or connections to the waterways will need to be evaluated and negotiated with the NPS in order to attain the best results possible. Minor modifications or adaptive use in historic districts, though difficult, should be

promoted to protect the intent of the preservation while allowing new uses to be successful and aesthetically pleasing.

Next Steps

The panel's further recommendations are listed below, in order of when they should be done. Also listed are items requiring further consensus.

Recommendations that should be acted on immediately include all marketing, planning, and design recommendations. For the JAM area, the city should immediately:

- Amend the Urban Revitalization and Development Project Plan;
- Develop an overall financial strategy and acquire properties; and
- Beef up code enforcement, especially for the derelict housing facing South Common Park.

For Central Plaza, the city should immediately:

• Locate the proposed justice center and the combined sewer overflow (CSO) storage facility on this site.

For the Davidson Street parking lot, the city should immediately:

• Retain control of the parcels within the lot and obtain any additional parcels that have strategic value.

For the arena/riverfront area, the city should immediately:

- Begin negotiations to acquire the parcel currently owned by the commonwealth of Massachusetts;
- Initiate an RFP process to identify a restaurant lessee;
- Hold all city-owned lands; and

• Construct a temporary use until a market develops for the site's highest and best use for the site. Suggested temporary uses include an amphitheater, boat rental facility, antique/flea market warehouse, or regional farmers market.

After the actions listed above have commenced or been completed, the city should implement the following additional recommendations. It should designate a master developer for the JAM area. The master developer then should prepare a comprehensive market study and an overall development plan. The master developer subsequently should prepare development proposals for city review and approval. The city should redevelop the Davidson Street parking lot as a mixed-use project with a performing arts facility when funding for such a facility is available.

The panel's final two recommendations may need further consensus before they can be implemented. First, a specific mix of uses at the Davidson Street parking lot site— particularly the performing arts center—must be decided upon. The panel believes that many of these uses will be market driven, and that future market demand will differ from current demand, based on the demographic changes taking place and those that have been projected. Further discussion about the desired mix of uses will be required, especially regarding the performing arts center and how it will distinguish itself from Lowell's existing cultural facilities.

Second, a downtown association—specifically, a BID—should be created. The panel understands that the limited financial resources of the city and many of the downtown merchants may make it difficult to enact this recommendation. Further discussion and creative financing alternatives should be discussed.

Conclusion

uring its short stay in Lowell, the panel was truly impressed with the city's many assets. Lowell is blessed with a beautiful location at the confluence of the Merrimack and Concord rivers. The historic canals, riverwalks, national park, beautifully restored historic architecture, cobblestone streets, arenas, culture, and historic mills all make Lowell a unique and attractive place. The panel believes that the city has done a good job with its downtown revitalization efforts. The preservation and renovation of the downtown area's historic assets have created value that the city now can use to leverage new high-quality residential development. The panel also commends the city for its cooperative spirit, which has brought about great accomplishments, including the Tsongas Arena and the LeLacheur Park minor league baseball stadium. The combination of a quaint downtown, new arenas, and a vibrant arts community make Lowell a very attractive residential and tourist destination. The panel believes that Lowell is in the process of being "discovered" by Boston commuters. This means that a significant demographic shift and development pressures likely are coming.

While the panel is optimistic about Lowell's future, it recognizes that several obstacles to the beginning of the second phase of revitalization still exist. The city must proactively address little problems before they become big ones. It also must seize opportunities before rising land values preclude it from doing so. First and foremost, the panel's overriding message is that the city's leaders must work together and find consensus on a future vision for Lowell. The city is in competition with every other neighborhood in the greater Boston area—as well as with other American cities and, indeed, many cities in other nations —for jobs and residents. Cooperation and consensus are necessities, not luxuries.

Secondly, the panel believes that the focus of all city efforts should be the quality of life in Lowell. Maintaining and improving the quality of life is the key to attracting new residential development and tourism. The panel has laid out specific recommendations in this regard throughout this report. In each of the four study areas, the panel believes that the city can begin now to take specific actions that will help it plan for its future. The proposed judicial center and CSO storage facility at the Central Plaza site and the restaurant and temporary use proposed for the arena/riverfront parcels are "do now" projects. With regard to the Davidson Street parking lot and the JAM area, the city should begin to prepare these sites for the changing market to come. Investment in preliminary work on these parcels will pay off handsomely for the city in terms of financial benefits, control of the future land uses, and positive spin-off developments.

The panel's final recommendation is to never downgrade the quality of the assets of Lowell. The city has assets that are the envy of many other cities. These assets should not be taken for granted. The panel feels that "There's a lot to *love* [not just like] about Lowell" would be a more appropriate city motto. City leaders should demand development of a quality befitting such a beautiful and historic city. The pride of city leaders is fully justified. Working together, Lowell's stakeholders are capable of accomplishing great things. This is evidenced by the city's existing on-the-ground accomplishments. Because of this history and the passion of the community leaders it interviewed, the panel is confident that, once consensus is reached, the city can achieve even its loftiest goals.

About the Panel

J. Michael Pitchford

Panel Chair Charlotte, North Carolina

Pitchford is a senior vice president and community development equity executive at Bank of America (BOA). For the past nine years, he has overseen the placement of equity in community economic development and affordable housing throughout the BOA franchise. The bank's equity business includes limited-partner investments in community-based real estate, low-income tax credits (LIHTCs), and historic tax credits (HTCs). It also makes investments in and loans to community development financial institutions (CDFIs). Altogether, BOA's community development equity commitments exceed \$3 billion.

Pitchford also has overseen the Banc of America Community Development Corporation (CDC). The Banc of America CDC acquires, builds, rehabilitates, and invests in low- and moderate-income housing in 17 U.S. cities. It has a portfolio of hundreds of affordable for-sale units and 10,000 affordable rental units. Pitchford joined BOA in 1982. Prior to his present position, he spent a dozen years as a real estate lender and team leader managing residential and commercial construction lenders.

Pitchford is the immediate past chairman of the National Housing Conference (NHC). He also serves on the advisory board of the Center for Housing Policy (CHP) and is a member of the board and on the executive committee of the National Equity Fund (NEF). He is a member of the Urban Land Institute (ULI), where he serves as chair of the Institute's Affordable Housing Council and is a member of its Policy and Practice Committee. Pitchford has bachelor's and master's degrees from Old Dominion University.

Jeanne Giordano

New York, New York

Giordano established her own studio, Jeanne Giordano Ltd., in January 1996, following more than 20 years of leadership positions in public and private development. Her office specializes in providing unusual design solutions to difficult problems. The firm's projects include urban design and planning, with an emphasis on unique public space and retail environments, including commercial and retail interiors. Her current clients include Universal Music, the Times Square Business Improvement District, the Marriott Marquis Hotel, and the Franklin and Eleanor Roosevelt Library and Museum, as well as a restaurant/pool hall and private function space for trade shows and parties.

From 1989 through 1995, Giordano directed the Grand Central Terminal Development Office, which focused on the restoration of this long neglected landmark, for the Metropolitan Transportation Authority. Her efforts helped restore the terminal's image from that of a rundown, poorly managed environment to a living, vital, retail and public space by introducing diverse retail, promotional, and entertainment features.

Giordano served as director of development for the city of Salem, Oregon—the state capital—from 1975 through 1979. She and her 40-member staff were responsible for conceptualizing, negotiating, implementing, and managing a multimillion-dollar retail and commercial downtown revitalization as well as neighborhood urban renewal projects. Giordano also has held senior positions with Rouse Associates and the Carley Capital Group.

As a Loeb Fellow at the Harvard Graduate School of Design, a fellow of the Salzburg Seminars, and a fellow of the American Academy in Rome, Giordano has studied and lectured on the design and programming of public spaces, markets, and mixeduse projects around the world, and has sat on numerous design and architecture juries. She served on a previous ULI panel that studied the potential of the former World's Fair site in Knoxville, Tennessee. A member of the Urban Land Institute, she has served on the Institute's Inner-City Council.

Bruce Hazzard

Asheville, North Carolina

Hazzard has more than 20 years of experience in project management and consultant coordination. He typically is responsible for contract administration, project coordination, and personnel management. A principal with Design Workshop, Inc., Hazzard also directs the firm's quality management program. While specializing in construction drawings, contract administration, and observation, his expertise also includes overseeing projects from planning through construction, with a focus on firmwide quality control and contracts management. Hazzard currently is principle-incharge of the Aspen Springs Ranch project.

A registered landscape architect in Texas, Arizona, Illinois, Indiana, North Carolina, and California, Hazzard also is a nationally certified construction document technologist, specifier, and construction contracts administrator.

Richard E. Holt

Fairview, Oregon

For more than 20 years, Holt developed his real estate and business acumen with major international corporations. Currently president/CEO of Holt & Everhart, Inc., he previously served as regional manager of real estate for Xerox, director of real estate for National Gypsum, and vice president for a Burlington Resources real estate subsidiary. His work for these international companies provided rich experience in all types and sizes of real estate transactions, investments, and development projects, including conceptualizing and initiating a mixed-use special plan district developed on the South Bluffs of Memphis, Tennessee.

In 1993, Holt began his own business in Portland, Oregon. Holt & Everhart, Inc., is known nationally for the development of Fairview Village, a 95acre traditional neighborhood development that will complete the core area of the city of Fairview, Oregon. Now in its ninth season of construction, the village infrastructure is complete, with three miles of public roads and lanes, nine public parks, two stone bridges, three pedestrian bridges, an elementary school, a preschool, a Bally's Total Fitness center, a Target store, a U.S. Post Office, the Fairview City Hall, a county library, 128 apartments, and 288 additional residential units. Fairview Village has received the Oregon Governor's Livability Award, the Builders Award from 1000 Friends of Oregon, the National Association of Home Builders' (NAHB) National Sales and Marketing Award, Pacific Coast Builders Conference's 2000 Grand Award: the "Gold Nugget" for Best Community/100 acres and less, and NAHB's 2000 Gold Award for "Best Smart Growth Community" in America. Holt & Everhart also has a 260-acre rural subdivision underway in Maui, with a potential new village site on the island under consideration.

In addition to managing Holt & Everhart, Holt has served on the Portland Planning Commission since 1995 and the McCall Society of 1000 Friends of Oregon. He is involved with the Portland City Club, is a charter member of the Portland Cultural Resources Advisory Committee, and is a member of the Congress of New Urbanism, the Urban Land Institute, and a founder of the National Town Builders Association.

Holt completed his bachelor of science degree at Oklahoma State University in microbiology and graduate work in chemistry at the University of Texas. He served as an officer in the U.S. Marines, spending five years in active fighter squadrons as an advanced fighter tactics instructor.

Victor Karen

Boston, Massachusetts

Karen is director of advisory services for the RF Walsh Company, a Boston-based development and construction management firm. His predevelopment planning and development management experience includes a large-scale, mixed-use project in the Seaport District adjoining downtown Boston and coordinating negotiations and entitlements for conveyance of excess medical center property for development of a biomedical research center in the city's Longwood medical and academic area.

Before joining the RF Walsh Company, Karen was director of real estate for MassDevelopment, in which capacity he coordinated state agency involvement in the reuse of a 1,500-acre naval air station closed by the military in 1995. As deputy director of the Boston Redevelopment Authority, the city's planning and development agency, he managed public review and approval of downtown and waterfront revitalization projects, including mixed-use redevelopment of the 100-acre Charlestown Navy Yard.

Karen is a registered architect with a master's degree in architecture from the Massachusetts Institute of Technology. He was a member of the ULI Advisory Services panels that visited Treasure Island in San Francisco, California, and St. Juliens Creek Naval Annex in Chesapeake, Virginia.

Leslie Little

San Jose, California

Little is director of downtown management for the San Jose Redevelopment Agency (SJRA). One million square feet of office space, 856 hotel rooms, 2,600 residential units, and numerous public cultural facilities are under construction or recently have been completed in the city. The most significant project is a \$187 million public/private, mixeduse project being constructed on three noncontiguous sites in a National Register-listed Historic District utilizing a combination of tax increment. brownfields economic development initiative (BEDI), Section 108 (CDBG), and private financing resources. Within the last four years, the SJRA has invested \$488 million in San Jose's downtown. In addition to project development, Little supports strategic planning related to downtown historic preservation, arts and cultural facilities, and multimodel transit expansion.

Little has been employed in the redevelopment/ economic development field for 26 years. She has worked in the California communities of Long Beach, Monterey Park, and South Gate. She also has been employed by the city of Leesburg, Florida, and by the Regional Economic Development Commission–Metro Orlando. Little possesses a BA in political science from the University of Redlands and an MPA from California State University, Fullerton.

Eric Nakajima

Boston, Massachusetts

Nakajima is an associate with Bay Area Economics (BAE). Throughout his career, he has emphasized innovative analysis and realistic solutions to complex problems of economic revitalization, community preservation, and public finance. The primary emphasis of Nakajima's career has been to adapt lessons learned from his national experiences to his home state of Massachusetts.

Nakajima published a study of the Massachusetts state and local policies that developed the biotechnology industry in Worcester, based on his academic work with noted experts on regional development at the University of California at Berkeley and interviews with Massachusetts officials, that was recognized in 2001 by the State Science and Technology Institute. He served as a member of a consultant team engaged by the Irvine Foundation to evaluate collaborative regional economic development initiatives throughout California. That experience, combined with more than 18 months of primary research in Massachusetts, led to the publication of an original analysis of state growth management practices in Massachusetts by Northeastern University's Center for Urban and Regional Policy in 2002. Former governor Michael S. Dukakis called the report "highly unusual in its depth of understanding of both policy implementation and politics in Massachusetts."

More recently, Nakajima has worked with BAE on numerous technical studies of affordable housing, community development, and smart growth. He currently is engaged in an analysis of the District of Columbia's revenue bond program, and has advised the District of Columbia on best practices for the use of tax increment financing for neighborhood revitalization. Nakajima recently analyzed the use of tax increment financing to fund infrastructure improvements for a HOPE VI project in Bradenton, Florida. He has analyzed housing linkage programs nationwide, with particular attention to contrasting approaches in Massachusetts and California. For the city of Somerville, Massachusetts, he analyzed affordable housing development costs as part of a linkage fee program. Nakajima also assessed the redevelopment feasibility of an historic fire station in downtown Marlborough, Massachusetts; evaluated neighborhood housing markets for the city of Hopewell, Virginia; and supported the feasibility analysis of a major transit-oriented, mixed-use development project in West Hyattsville, Maryland.

Prior to joining BAE, Nakajima worked as a market research analyst for a leading Silicon Valley company. He also has served as a policy adviser to gubernatorial campaigns in Massachusetts and as a policy coordinator in the administration of Governor Dukakis. Nakajima was a student member of the board of trustees of the University of Massachusetts. He received a BA in political science from the University of Massachusetts at Amherst and an MCP from the University of California at Berkeley.

Allen Parker

Banning, California

As chief administrative officer for the Morongo Band of Mission Indians, Parker oversees tribal administration, economic development endeavors, and other tribal enterprises. Before joining that group, he spent almost 30 years as a city manager and redevelopment director for a variety of cities, including Maywood and Oak Park, Illinois, and East Palo Alto, Half Moon Bay, Seal Beach, Compton, and South El Monte, California.

Parker received a master's in public administration from the University of Kansas in Lawrence, Kansas, and a bachelor's in business administration from Chapman College in Orange, California. He is a member of the International City Management Association and the Urban Land Institute.

Nathan Watson

New Orleans, Louisiana

Watson is a real estate professional developing commercial and residential projects in the New Orleans metropolitan area. He formed his own company—Watson Developments—in 2003, after working for ten years in progressive capacities for Columbus Properties, a major Gulf Coast region commercial real estate developer. Combining Watson's diverse background in architecture and planning with real estate finance, Watson Developments focuses on bringing innovative solutions to both urban and suburban real estate development needs. The firm's current projects range from a \$300 million convention hotel in downtown New Orleans to an environmentally sensitive residential development in a nearby rural area.

Watson has been active in real estate development in New Orleans for more than ten years. At Columbus Properties, he was responsible for the development and marketing of a 74-acre masterplanned mixed-use development of a former rail yard in downtown New Orleans that comprises more than 700 luxury apartments (of which 90 percent are complete), an expansion of the city's convention center (now complete), and 2,500 hotel rooms (in predevelopment). The development venture produced over \$100 million in sales and \$70 million in profits for its owners.

Earlier in his career, Watson launched and served as president of FirsTrust Community Development Corporation, a for-profit developer that focused on urban infill multifamily housing through a variety of public/private financing sources. The company developed 200 residential units during Watson's tenure. Watson earned a BA in architecture from Auburn University and an MBA from Columbia University.