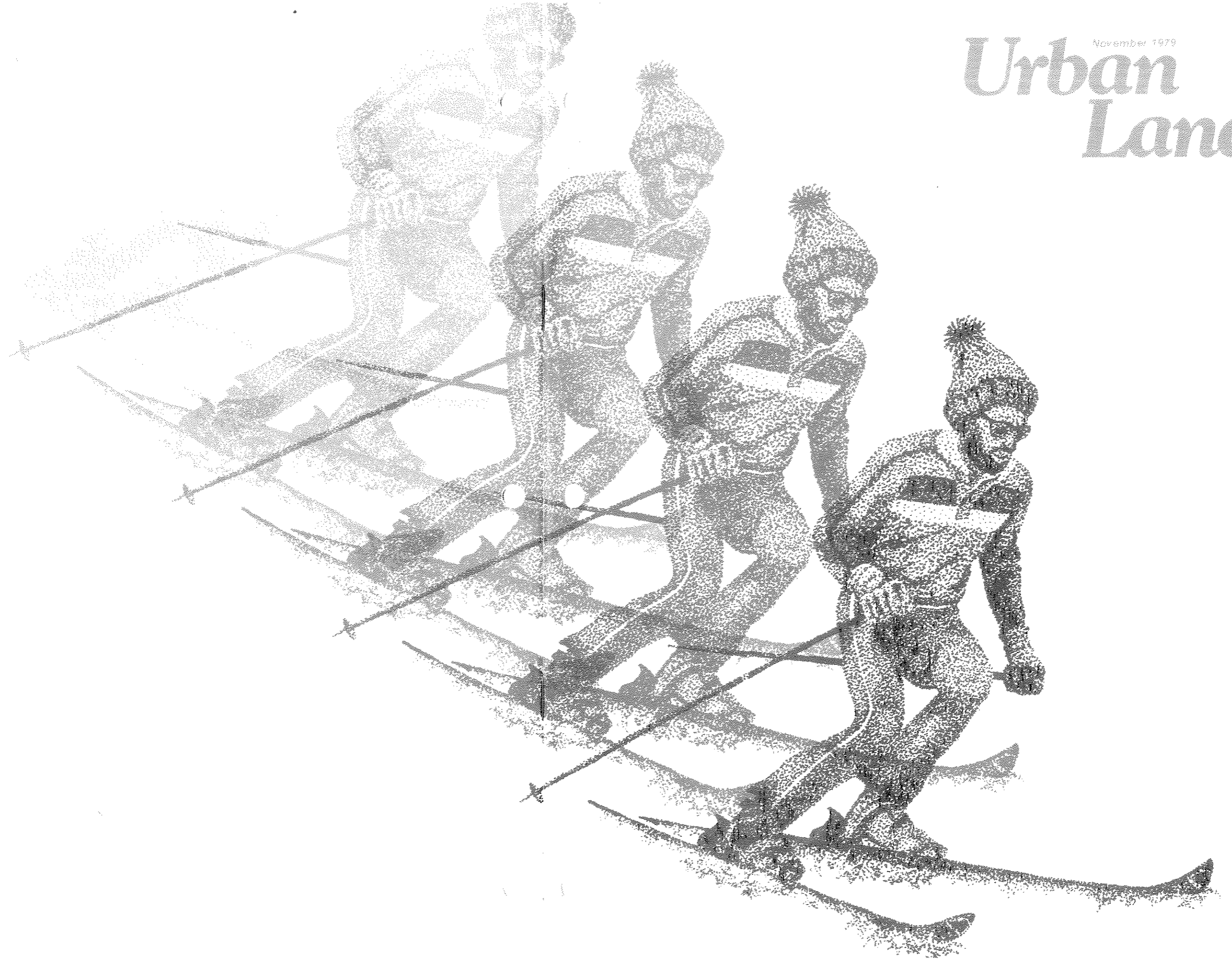


November 1979
*Urban
Land*



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Urban Land

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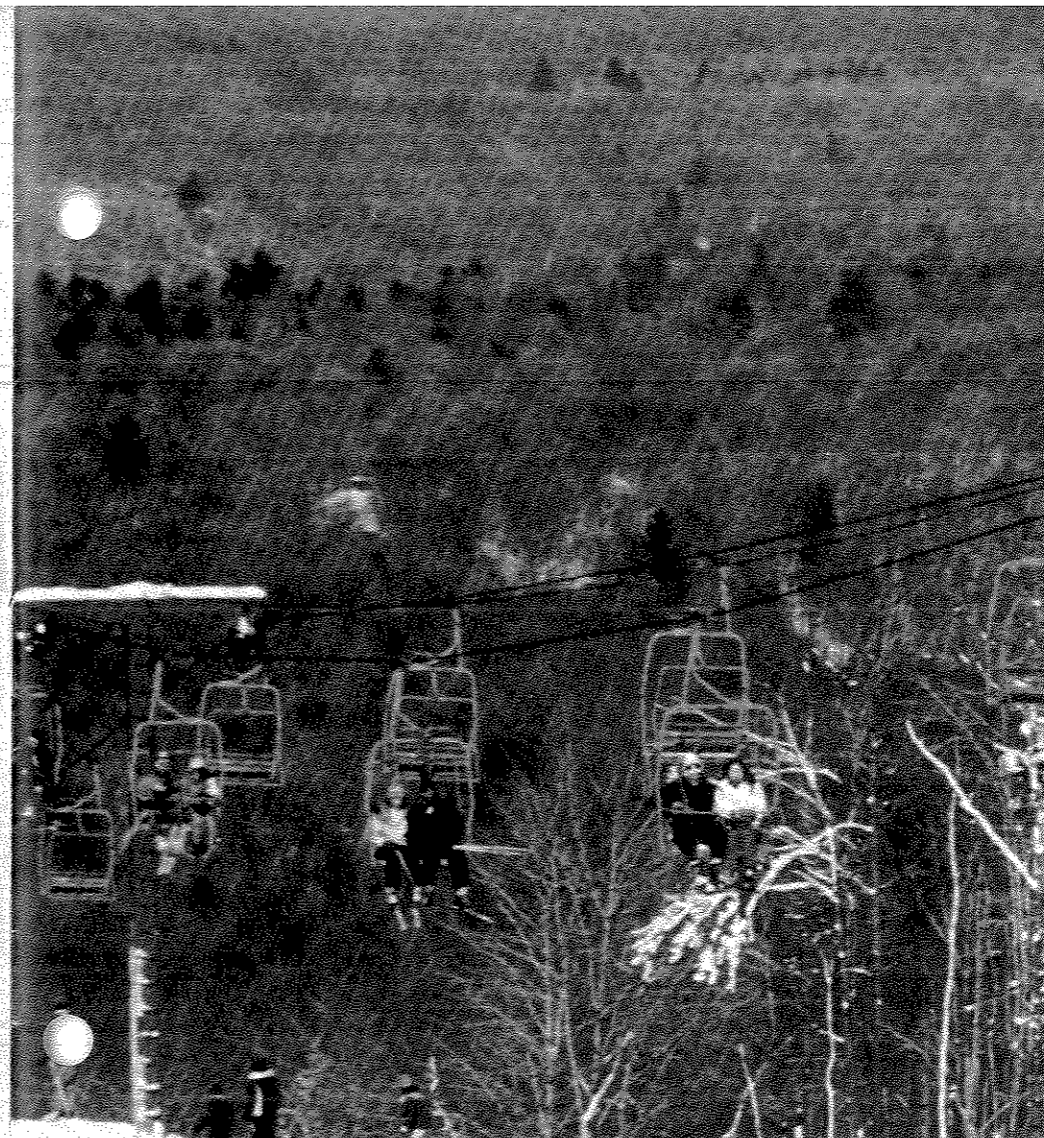
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There's No Business Like Snow . . .

John M. Adams

Blue Ridge Real Estate Company has been associated with the ownership of land for recreational and commercial utilization for more than a half century. The company was formed in 1911 to hold land in trust for potential industrial use for The Lehigh and New England Railroad, a carrier which was exclusively devoted to freight traffic, principally cement and coal.

One of the company's first actions was to relocate the corporate offices to Blakeslee, Pennsylvania, thereby putting management in close proximity to the firm's large land holdings in the Poconos. From the outset Blue Ridge policy would be to put into use its more than 30,000 acres in Northeast Pennsylvania with emphasis on long-term appreciation in corporate assets.

Early Ventures

Blue Ridge is currently best known as the owner and operator of the Jack Frost Mountain ski area, located in the Pocono Mountains of Pennsylvania. Blue Ridge has been a public company since 1966, when it was spun off by the LNC Corporation to form what is now informally referred to as the Blue Ridge/Big Boulder Group.

The decision to construct the Jack Frost Mountain ski area was based upon earlier successes in the creation and operation of a mountain lake resort and the Big Boulder ski area, the first commercial ski area in Pennsylvania. Development of the resort introduced a concept that would be adopted elsewhere years later. Cottages were built on the property surrounding the resort hotel and sold with a leaseback arrangement that provided the hotel with additional accommodations and permitted the property owners the use of the hotel and its recreational facilities for their dining convenience, guest lodging, and entertainment. Thus while functioning as a hotel catering to the public, it also served as an activities center for the property owners. It proved an immediate success and was particularly attractive to those families who enjoyed fishing, hunting, skiing, and other seasonal sports.

Deed covenants and architectural requirements established pleasing styles of architecture particularly suited to the Poconos and the resort became a model for other recreation-oriented communities.

Big Boulder Ski Area

To complement the resort facilities, Big Boulder ski area was constructed. It opened in 1948 with one slope, a T-Bar lift, and a rustic chalet.

Big Boulder ski area now has 10 slopes and trails and six chairlifts, including a new dual double chairlift, (two chairlifts operating independently but mounted on the same lift towers), and a J-Bar surface lift. Known as the ski area "where snowmaking is an art," Big Boulder was the first Pennsylvania ski area to make its own snow. Once a process of trial and error, snowmaking has become an increasingly sophisticated technique. At the foot of the slopes, a 175-acre lake was created to impound water for snowmaking and to later provide the water-related amenities for the ultimate use of the company lands surrounding it.

Big Boulder recently has secured preliminary governmental approvals for a 150-unit resort to be built on a 29-acre site on the north shore of Big Boulder Lake, affording an excellent view of the ski slopes across the water. This is the first in a series of coordinated moves to create a year-round resort community there.

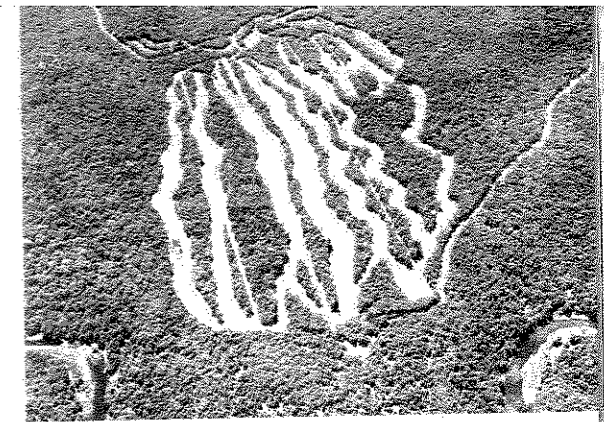
Big Boulder ski area has become more attractive to skiers over the years because of its added facilities, its snowmaking system expansion, and its enhanced accessibility to

New York and New Jersey residents with the opening in 1969 of Interstate Route 80. Moreover, the 1960 Winter Olympics in California's Squaw Valley and the instant popularity of American skiers such as Silver Medalist Billy Kidd in the 1964 Innsbruck Olympics had created an explosion of interest and participation in skiing.

The Decision on Jack Frost Mountain

In 1964 Blue Ridge began to examine its Pocono holdings for other recreational sites, with particular attention to a heavily wooded tract of land of some 2,600 acres only 4 miles from the Pocono exit on the Northeast Extension of the Pennsylvania Turnpike. This wilderness area had been a private preserve leased to a few hunters and trout fishermen.

Blue Ridge commissioned Harland Bartholomew and Associates of St. Louis to develop a land use plan for the area. Their concept provided for a ski area to be constructed on the



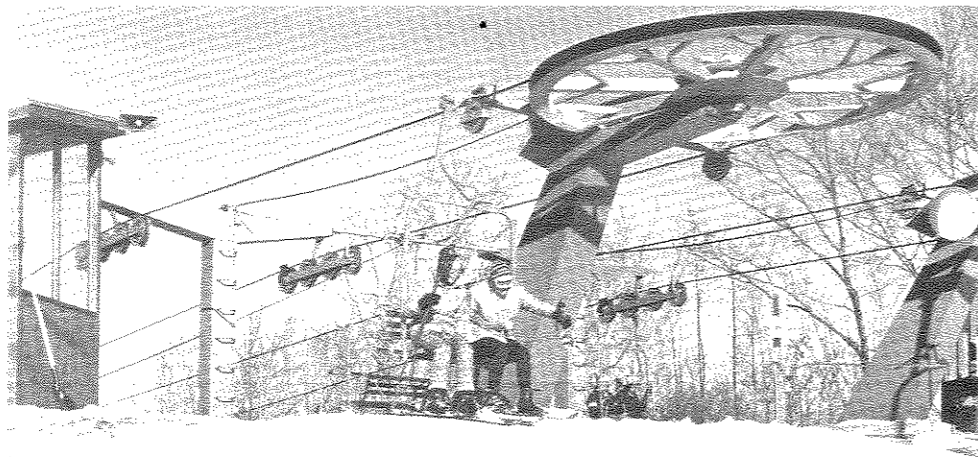
Left, Summit Lodge at Jack Frost Mountain Ski Area. Above, aerial view before installation of the lifts.

northeastern facing slopes overlooking the Lehigh River. Resorts were visualized in both the summit and base areas along with resort accommodations and housing in varying densities, as indicated by market studies and terrain considerations. Entrance to the ski area would be via a 2.3-mile-long private roadway constructed across the plateau to the summit area. The initial plan called for the assembly of all skier services in one structure, the Summit Lodge, which would be close to slopes, lifts, and other areas designated for various recreational activities. Thus, the Summit Lodge would be designed not only to serve skiers in the winter months but also to accommodate other seasonal activities—tennis, golf, etc.

Planning the Ski Area

Having determined that approximately 130 acres would be needed for ski slopes and support facilities, that another 112 acres would be reserved for future expansion of the ski area, and that the ski area would be built as the first stage of a year-round resort and recreational community, Blue Ridge called on Kinney and Associates of Pennington, New Jersey, a prominent ski area consulting firm, and Sel Hannah, a ski area consultant of Franconia, New Hampshire, to design the slope and trail configuration of the mountain complex, the layout of the lifts, and the snowmaking system.

Jack Frost Mountain ski area was to be built as a complete ski resort complex, rather than on a staged basis. Each component, though capable of ultimate expansion, was to be fully operational the day the ski area opened. These basic elements were to include: a summit lodge, 11 slopes ranging in difficulty from "Easiest" to "Most Difficult," 4 double chairlifts, one dual double chairlift, a J-Bar lift, a completely electrified snowmaking system, and parking for 1,500 vehicles. Water supply would be provided by two deep wells, and a tertiary sewage treatment plant would be installed having a capacity of 30,000 gallons per day capable of expansion to 90,000 gallons per day treatment.



Left, placing lift towers by helicopter, 1972. Above, skiers disembarking from the dual double chairlift.

Design Objectives

The slope design had two fundamental objectives: first, a functional consideration, which recognized that the ski area would attract novice and intermediate skiers, thus requiring that several of the slopes be designed for those classes of skiers, and, second, an environmental consideration, which would ensure that construction and operations only minimally disturb the natural surroundings overlooking the river in its valley, some 475 feet below. The slopes were to be constructed so as to bring the skier to a point near the lifts without need for an "uphill" approach. Like Big Boulder, Jack Frost Mountain would offer only daytime skiing initially.

The Lifts

The lift towers were to have a relatively low profile so as to not extend above the treeline adjacent to the slopes. This environmentally-related design produced a second useful effect—greater stability of operation under windy conditions. A helicopter was used to install the lift towers after their assembly in the west parking zone. The "sky drop" not only was quicker but also enabled the installation to proceed without damaging the slopes and ground cover, as would have occurred had vehicular equipment been employed. The lifts were designed to handle 6,400 skiers per hour—2,400 per hour on the dual double chairlift, one of the first of its kind built in the United States, 1,200 per hour on the double chairlifts, and 600 per hour on the J-Bar surface lift.

The lift house at each chairlift permits bullwheel loading (loading from the rear) under cover and has the added advantage of allowing the skier a better visual approach to the loading area. A relatively new loading system design in 1970, this has worked extremely well during Jack Frost Mountain's seven seasons of operation.

The Snowmaking System

Since snowmaking was introduced at Big Boulder in the early 1950s many ski area complexes have come to recognize and accept the need for substantial snowmaking systems. The customer demands and expects the most consistent, dependable conditions possible. For even those resorts situated at higher elevations in New England and the West, a reasonably long season is a must if the ski operation is to be a profitable investment. This is all the more essential in the Mid-Atlantic states where the average annual natural snowfall amounts to 50 inches. A snowmaking system was designed for Jack Frost Mountain to produce man-made snow on all of its 11 slopes.

The electric-powered system relies on two essential components: compressed air, which is delivered by six stationary industrial air compressors producing 8700 cubic feet per minute at 100 pounds per square inch plus 2400 cubic feet per minute, as required, from portable compressors, and a water delivery system capable of producing 1000 gallons per minute having its source in the adjacent Tobyhanna Creek, a tributary of the Lehigh River, just a few hundred yards from the mountain's base area. The air and water are delivered through a 10-mile network of

welded steel piping placed in the wooded areas adjacent to the slopes, to rubber hoses, and then on to mixing chambers in the tripod mounted "guns" placed by the snowmaking crews on each of the slopes. Under ideal conditions, as much as 6 inches of snow can be produced in a hour. Variables of temperature, humidity, and wind make snowmaking a very challenging operation. Other "guns" varying in size and design features have been added to the snowmaking system since the original installation. Jack Frost Mountain currently is in the process of expanding its water delivery system by approximately 40 percent and has purchased a Hedco snowmaking unit for use on the more level terrain at the summit and base areas. This piece of equipment draws on a natural air supply rather than compressed air. Snowmaking is necessary but it isn't inexpensive. Production expenses for snowmaking, including labor, maintenance, and power, are approximately \$125,000 for an average season of 4 months.

A communications system is in place for the use of ski area and ski patrol personnel.

The Summit Lodge

The new lodge, capable of serving 2,500 skiers, has an award-winning design, is colorful and contemporary in appearance, and provides for the practical needs of skiers—food and beverage service, sanitary facilities, lockers, equipment rentals, ski school, and a first aid room, as well as centralized staff quarters. While the decor is uniquely fresh in its generous display of bright hues and imaginative lines, the ample use of wood paneling on interior surfaces maintains a nicely balanced, warm atmosphere.

Open For Business

Jack Frost Mountain opened in December 1972. It was immediately successful, and on some peak weekend and holiday periods there are as many as 4,000 skiers on the property. In 1975 the Summit Lodge was expanded to provide larger quarters for the ski school, sport shop, and ski rental facilities, and in 1977 an addition was made to the east dining room. The lodge now contains a total of 30,700 square feet, combining visual appeal with functional efficiency.

Snowmaking is necessary but it isn't inexpensive. Production expenses for snowmaking are approximately \$125,000 for an average 4-month season.

The investment by Blue Ridge in Jack Frost Mountain ski area will approach \$4 million by the end of fiscal 1980 excluding land. The direct costs to date of the principal components of the ski area construction are detailed as follows (figures rounded):

General planning and design (ski area only)	\$ 52,000
Roads, parking lots	359,000
Construction of slopes and trails	150,000
Chair and surface lifts	719,000
Snowmaking equipment	808,000
Grooming equipment	150,000
Buildings	867,000
Utilities	318,000

Support Services

In a ski area catering to novice and intermediate skiers, the ski rental, food service, and ski school facilities are critical to the successful operation of the resort. But they represent significant profit centers as well.

Currently the Jack Frost Mountain ski rental shop has in excess of 2,500 complete sets of rental equipment (skis, boots, and poles), placing it in the top 10 percent of United States ski areas in inventory volume.

The ski shop offers leading lines of equipment and clothing priced competitively with most urban ski shops. Because of the proximity of the Poconos to metropolitan areas, the Jack Frost Mountain customer, unlike the destination skier, can readily shop elsewhere so pricing must be competitive. Both ski and rental shops are operated under a concession arrangement.

The food and beverage service, also a concession, utilizes a full service cafeteria and kitchen facility, two spacious dining rooms with seats for 750 persons, and a T-Bar Cocktail Lounge. A modern scramble system cafeteria allows the serving of over 1,200 skiers per hour.

The Ski School

The Ski School operation at a novice or intermediate ski facility is the hub of daily business activity. At Jack Frost Mountain the Ski School staff has grown to 75 instructors. Using the American Teaching Method, which is the accepted method of the Professional Ski Instructors of America, and the very popular Graduated Length Method (GLM), lesson programs for beginners to experts are offered daily. Special children's programs, for age four and up, are also available. For the pre-schooler, Jack Frost Mountain has babysitting facilities in its Summit Lodge.

The GLM program has made a dramatic impact on skiing as has the improved quality of equipment. New skiers start on short skis (about 3-foot-long) and on completing each of a series of lessons are usually able to graduate to a longer length ski, hence the name Graduated Length Method. Because of this approach at Jack Frost Mountain, the new skier develops more confidence and a sense of accomplishment early in his skiing experience and is more interested in continuing the sport.

The Market

The marketing strategy of Jack Frost Mountain has been successfully keyed to its close proximity to the residents of New York, New Jersey, Pennsylvania, Delaware, Maryland, District of Columbia, and Virginia and to the huge beginning skier segment of this primary market. In terms of income potential, the ski and rental shops and the ski school obviously cater to the new or novice skier since the advanced skier usually owns his own equipment and depends on the ski school only for specialized instruction.

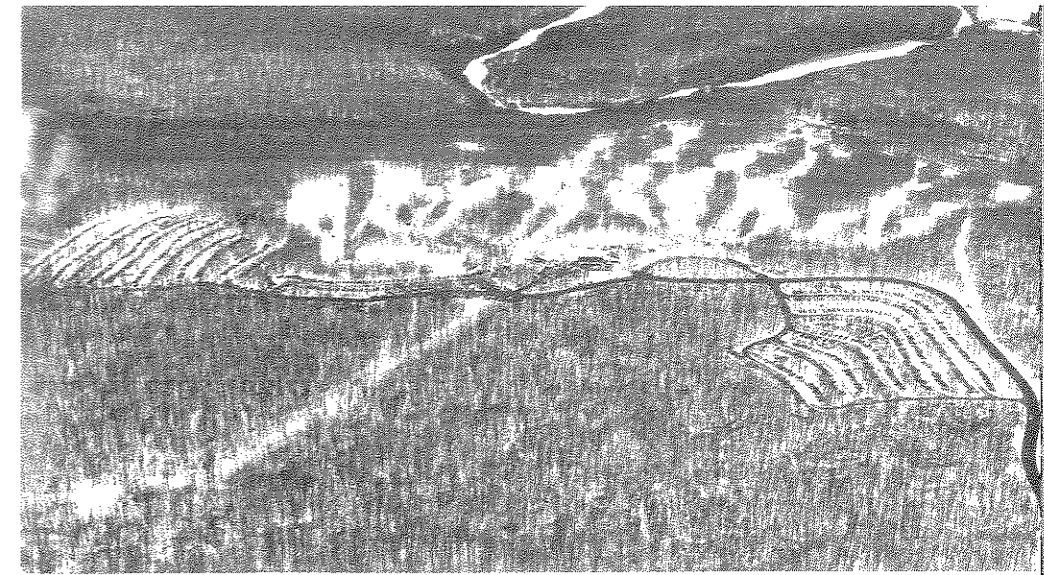
Jack Frost Mountain, located only 4 air miles north of Big Boulder, has joined that area in promoting a "Ski the Big Two" theme in which the advantages of a same-day reciprocal lift ticket are stressed along with the choice of two full service ski areas having a combined total of 21 slopes and 13 lifts. Jack Frost Mountain has also been innovative in developing a "First Day on Skis" package and multiple "Learn to Ski" programs,

along with midweek specials. Discount incentives for the purchase of season lift tickets are available during the pre-season period. An extremely active program of "Citizens Races" (sponsored this year in cooperation with Anheuser-Busch) is a spur to competition among skiers of all ages who haven't the time or capability for professional skiing. And, of special significance in these times of increasing concern about higher fuel costs, Jack Frost Mountain is well advanced in its emphasis on group skiing for schools, industry, ski clubs, and the like, a marketing approach stressed from its beginning. This program works in liaison with bus charter firms, travel agencies, and various organizations to encourage groups to use mass transportation, with the extra inducement of a group discount that covers items such as equipment rentals, lessons, and lifts. Because of their proximity to markets within 2 hours' driving time that provide 80 percent of skier volume, Jack Frost Mountain and Big Boulder are theming their promotional effort this year to "The Big Two—Close To You."

Jack Frost Mountain draws its 150,000 customers from these relatively nearby areas: 38 percent Philadelphia/Delaware Valley; 19 percent Central and Northern New Jersey; 15 percent Lehigh Valley, i.e., Allentown/Bethlehem/Easton; 14 percent Baltimore/Washington; 9 percent Wyoming Valley, i.e., Wilkes-Barre/Scranton; 4 percent New York metropolitan area.

Along demographic lines, these characteristics similar to most nationwide skier patterns emerge: 56 percent male; 44 percent female; 55 percent ages 12 to 25 years; 29

Aerial view of the ski area taken from a point over Interstate 80.



percent ages 26 to 35 years; 10 percent ages 36 to 44 years; 6 percent age 45 and older. Singles comprise 60 percent of the skiers. The average skier visits Jack Frost Mountain six times a season.

Jack Frost Mountain and The Future

Blue Ridge planned Jack Frost Mountain ski area as the "seeding operation" in the creation of a four-season recreation community. In 1977 RKR/Hess Associates, consulting engineers and land use planners headquartered in Stroudsburg, Pennsylvania, were engaged to prepare an updated conceptual master plan for the Jack Frost Mountain tract.

The master plan identifies locations for a resort hotel, commercial shops and year-round recreational facilities at the summit area as well as single-family, low-density housing; single-family, medium-density housing; and medium- to high-density clustered units.

Strouse, Greenberg and Co., a Philadelphia based real estate consulting firm, was engaged to prepare a marketing study that would be useful in future arrangements with investors and/or developers who would carry out the actual development of the several parcels leased from Blue Ridge or otherwise made available for such purposes.

Land Keyed to Type, Density Use

Each land use area is directly related to the type and density of residential or commercial use that is proposed. The RKR/Hess and Strouse Greenberg reports have played an important role in determining and evaluating the size and location of the various land use areas that are best suited for the specified type and density of development activity. For example, the acreage programmed for low-density residential development at one dwelling unit per acre has been sited in an area that includes some steeper slope conditions overlooking the Tobyhanna Creek most suitable for single-family use. Other acreage surrounding a proposed golf course has been programmed for medium-density residential development at two dwelling units per acre. Cross-country skiing can be scheduled within this sector.

Two areas have been programmed for higher density residential development because of their prominent location near the summit of Jack Frost Mountain on ridge lines with an outstanding panoramic view of the Lehigh River Valley and because of their proximity to the existing Summit Lodge, the planned resort lodge, and the commercial village.

The commercial village will include such services as a restaurant and lounge, a craft shop, and a sportswear and sporting goods store.

The resort hotel and convention center is proposed to occupy the highest point on the property offering outstanding views. The planners and consultants think a resort of 300 rooms with public meeting and convention space to be feasible. Their opinion is based on current convention demands experienced by other resorts. The shoulder periods of late fall and early spring will depend on conference business to maintain high occupancy levels while summer and winter levels should be strong due to the recreational amenities available.

The creation of the resort community at Jack Frost Mountain is expected to take place over a period of 15 or more years. It is the present intention of Blue Ridge to maintain a relatively passive investment role with its involvement confined to the leasing of certain portions of the tract and the operation of the ski area and other commercial facilities.

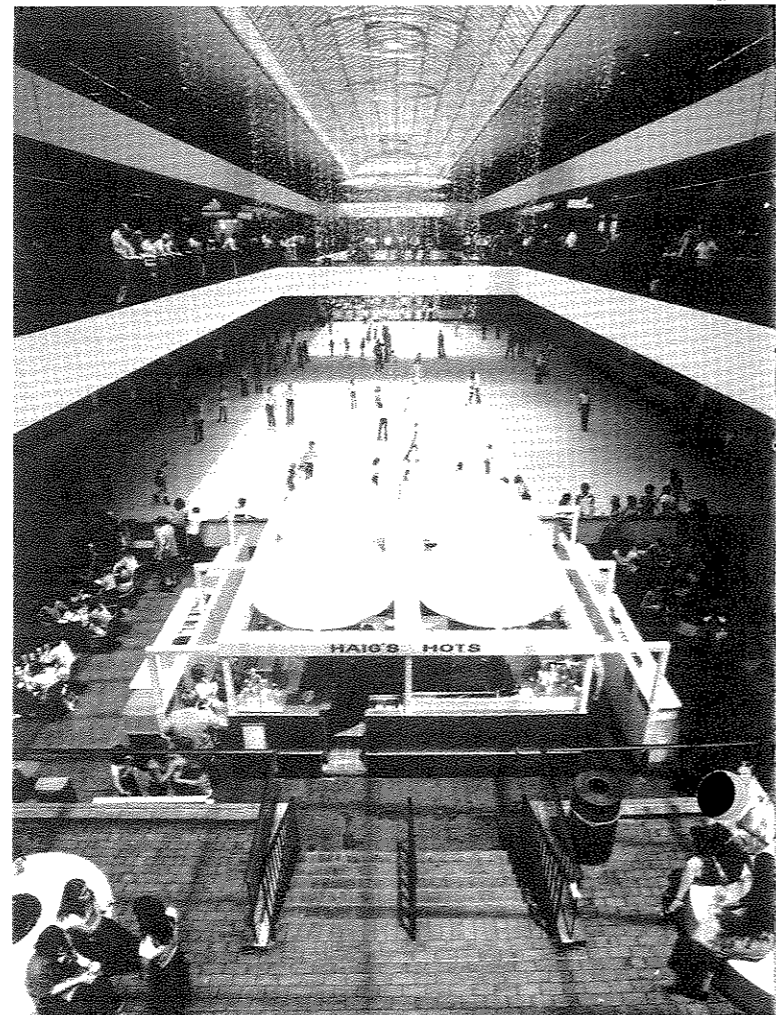
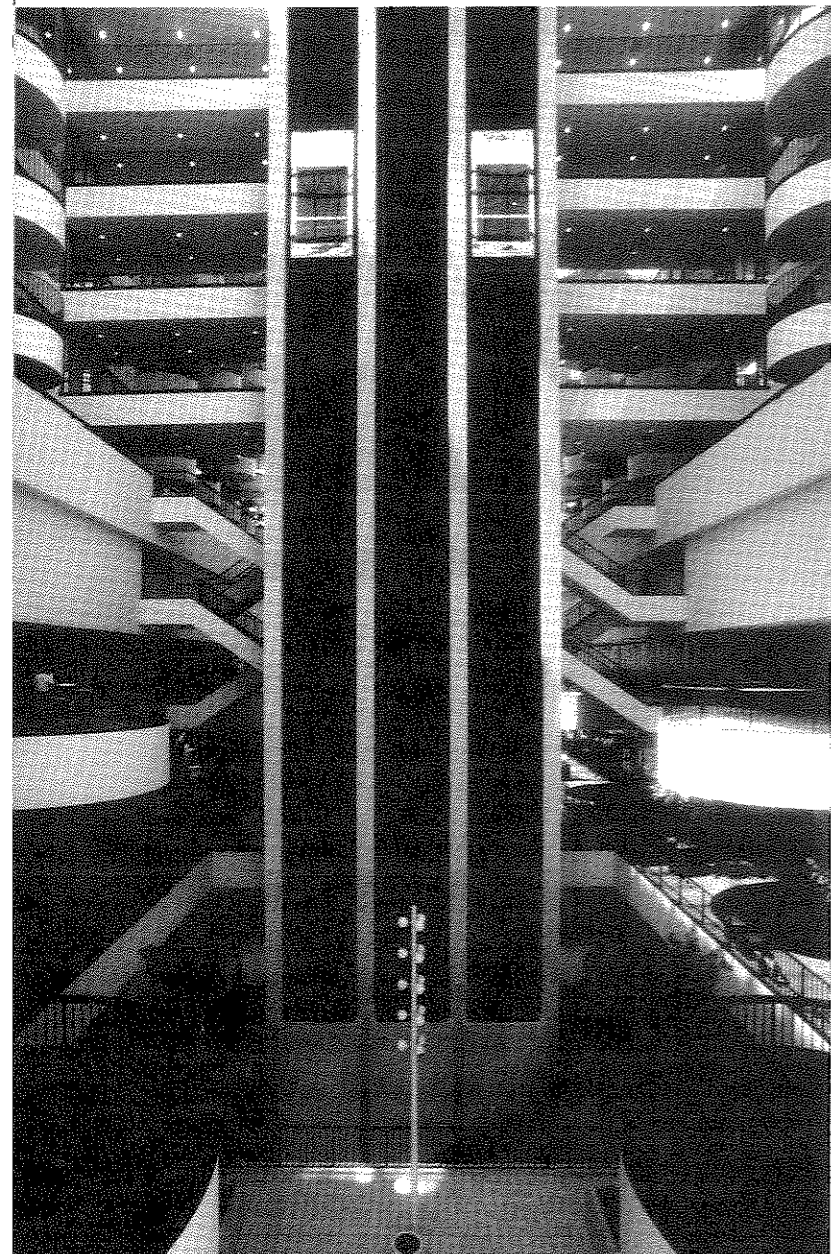
John M. Adams is president of Blue Ridge Real Estate Company.

ULI's First Annual Award of Excellence

Goes to the Galleria



Above, the Galleria: Neiman-Marcus (right of highway), Transco Tower office building (in background), the Galleria Mall, Houston Oaks Hotel, Post Oak office tower, Lord & Taylor, Galleria Tower offices (dark structure), and the Galleria Plaza Hotel (in background). Below left, glass-enclosed elevators leading from the Galleria II retail mall to the Galleria Tower office building. Below right, mall in Galleria I featuring an 80-foot by 180-foot ice skating rink with two "chandeliers" of rain lights hanging below the vaulted skylight.



Highlighting the Urban Land Institute's October meeting in Orlando, Florida, was the presentation of the first annual Award of Excellence to the Galleria in Houston, Texas.

the Galleria, owned and developed by Gerald D. Hines Interests, Houston, was selected as an exceptional achievement in mixed-use development which displays exemplary consolidation of business, community, and environmental interests.

The ULI Award was created in 1978 to acknowledge contributions by the development and land use industries to their community and society and to reflect ULI's concern for improved land use. Furthermore, the Award is testimony to the outstanding achievements in development which have resulted in workable, livable environments. the Galleria incorporates these qualities of excellence and stands as a model project in the best possible use of land planning and development.

In making the presentation to Gerald D. Hines, Michael F. Kelly, president of ULI and of SCI Associates in Minneapolis, Minnesota, cited the Galleria as an innovator in land utilization. He also noted that it is a unique integration of an urban cultural force within a suburban setting.

The awards committee formulated the policy and guidelines to be used in the selection process. It proposed the annual conferment of a single

award and stipulated that the award-winning project should:

- be located in the U.S. or Canada
- display a relevance to contemporary issues and needs
- exhibit positive impact on the community and environment, and
- have been substantially completed during the decade designated for the award year (for the 1979 award, the decade was 1966 to 1975).

After the eligibility guidelines were formalized, an Awards Jury was created to evaluate, review, and select this year's recipient. The 11 individuals serving on the jury, including nine ULI members and two outside the Institute, embodied the various talents and broad areas of expertise within the development industry. Their special skills combined the knowledge, experience, and insight necessary for assessment and examination of the more than 100 projects which were suggested for the Award.

In a formal Statement of Award, the jury stated that their final decision was based upon the Galleria's superior design and enterprising leadership. The statement read:

the Galleria has provided a sense of urbanity within the framework of suburban development. As a design and land use concept, the Galleria has provided a model which has been simulated, interpreted, adapted, or modified for use in a variety of other settings.

The organization for the development of the Galleria provides superior examples of entrepreneurial skill, development leadership, application of professional design skills, and stewardship of land and improvements most worthy of emulation in any type of development endeavor. It is the combination of the skill and talents, well applied, that result in excellence.

Individual comments by the jury stated that the Galleria:

"... illustrates a blend of uses and physical configurations that have been identified as having great potential for the application of energy-saving techniques."

"... represents the level of land use intensity that might permit the development of mass transit within the auto-oriented structure of the suburbs."

"... was a pace-setter that took the chance before the concept had been proven elsewhere."

The culmination of the Committee and Jury's untiring efforts and the enthusiastic response to the Awards program by the membership guaranteed the selection of a superior project for the 1979 Award and for all future honorees.

Installation of the granite and bronze plaque will be held at the Galleria after January 1, 1980. At that time, recognition will be given to those individuals whose contributions were a major part of the Galleria's successful development.



(R. to L.) Michael F. Kelly, ULI President, presents the Award of Excellence plaque to Gerald D. Hines, owner and developer of theGalleria. Jury member, Robert McNulty, president of Partners for Livable Places, participated in the award ceremony.

theGalleria

theGalleria is a multi-use complex located 6½ miles from downtown Houston. The \$70 million project began in 1967 and is situated on 32.895 acres. Its design is a 20th century interpretation of the famous 19th century Galleria in Milan, Italy.

The development of theGalleria occurred in several phases. Galleria I is a sophisticated suburban commercial complex containing a 405-room hotel; a 22-story, 310,000 sq. ft. office tower; a 25-story, 460,000 sq. ft. office tower; a 200,000 sq. ft. department store; a 450,000 sq. ft. three-level mall; and a 7,000-car parking area. A 550-foot-long, 40-foot-wide vaulted skylight covers the entire mall and the first level contains an olympic size skating rink. Galleria II features an atrium covered by vaulted skylights which rises 80 feet in height. The 350,000 sq. ft. Galleria II mall serves a 500-room hotel, a 135,000 sq. ft. specialty store, theatres, numerous boutiques, and food operations.

By carefully selecting various elements that now make up theGalleria complex, and by introducing many recreational and after-hours functions, i.e., restaurants, theatres, sport facilities, theGalleria has a 24-hour activity cycle and is one of the most popular places in Houston.

AWARDS JURY

- Alan M. Voorhees, jury chairman, founder of Alan M. Voorhees and Associates, former Dean of College of Architecture, Art, and Urban Studies, University of Illinois
- James Coker, member, Commercial and Retail Development Council; owner, James Coker & Associates, Dallas
- Nina Gruen, member, Development Policies and Regulations Council; Gruen Gruen + Associates
- Charles Kober, member, Commercial and Retail Development Council; president, Charles Kober Associates, Los Angeles
- Henry Paparazzo, ULI Trustee; president, Heritage Development Group, Inc., Southbury, Connecticut
- Richard Reese, vice chairman, Development Policies and Regulations Council; president, Santa Margarita Company; former vice president of planning, Irvine Company.
- Charles Seymour, member, Industrial and Office Park Development Council; president, Jackson Cross Company, Philadelphia, Pennsylvania
- Harold Shipp, ULI Trustee; president, Shipp Corporation, Ltd., Mississauga, Ontario, Canada
- George Sternlieb, member, Federal Policy Council; ULI Fellow and Trustee; director, Rutgers University Center for Urban Policy Research

Non-ULI Members

- William K. Reilly, president, Conservation Foundation
- Robert McNulty, president, Partners for Livable Places

AWARDS COMMITTEE

- I. Rocke Ransen, committee chairman; first vice president, ULI; president, Mondev International, Montreal, Canada
- Edmund Bacon, member, Urban Development/Mixed Use Council; vice president, Mondev International, Philadelphia
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Public Transit and Downtown Development

Mary E. Lovely

The unpleasant picture of physically declining and economically obsolete urban America has been with us for quite some time. In recent years, however, central cities have shown surprising signs of renewed growth. A resurgence in office construction, new opportunities for office-related retail and services, and significant residential renovation activity are producing substantial changes in the urban condition.

While these recent trends have created new hope for the general revitalization of the central city, they have also caused clogged freeways and congested city streets. The benefits of a downtown location are lost when employees find it difficult to get to work, when shoppers cannot find a parking space, or when getting across town for a business meeting requires strategic planning. To maintain downtown economic growth, many American cities are being forced to undertake major public transportation improvements to provide better downtown mobility.

Perhaps the best example of the need for downtown access improvements is Houston. The fastest growing big city in the country, Houston is well known for its phenomenal population growth and rapid economic expansion. As an energy capital and regional financial and business center, this city is witnessing tremendous development activity. Office space in the central business district alone increased 54 percent from 1970 to 1978 and now totals over 22 million square feet.

This article attempts to bring together the findings and conclusions on recent and current ULI research related to transit and urban development, including a study of transit-related joint development projects in the U.S. and Canada, an analysis of the changing economic role of central cities, and a current study of downtown office growth.—Ed.

Surprisingly, despite the wide downtown streets of this automobile-dominated city, the future growth of Houston's central business district is being threatened by severe access problems. Since the 1950s, the metropolitan area has been well served by an excellent freeway system. New highway construction, however, cannot possibly keep pace with the 350 new vehicles that crowd onto metropolitan streets and freeways each day. Houston's rapid and sprawling growth has, therefore, resulted in ever-shrinking mobility. Today it takes twice as long to drive to work in Houston than it did 10 years ago.

In 1974 Houston acquired the area's ailing transit service from a private operator. It was apparent that the existing bus system could not meet the growing demand for regional public transportation. At that time, only 43 percent of the metropolitan area was being served by the outdated service, providing only 2 percent of all county work trips and 13 percent of downtown work trips.

In 1978 Houston voters approved a 1 percent sales tax to fund a regional bus service. The Metropolitan Transit Authority, which began operations in January 1979, is undertaking an aggressive program of route extensions, commuter bus service, and systems management designed to make more efficient use of transportation resources. A 10-year regional access program has been developed which includes an extended carpool/vanpool scheme, a traffic operation improvement program, and the construction of exclusive bus lanes on major freeways.

Central City Economic Growth

Growth in central city office space has not been confined to southwestern cities like Houston. A recent survey of local organizations by the Urban Land Institute found that downtown office space in 20 selected cities has increased an average of 41.4 percent between 1970 and 1978. Even the older northern cities of Baltimore, Boston, Chicago, Detroit, Newark, Philadelphia, and Pittsburgh experienced an average increase of 34 percent in their downtown office activity during that time period.

This increase in downtown office development holds the promise of central city revitalization. New office workers are forming a growing market for downtown retailing, entertainment, and services. Projects such as The Gallery in Philadelphia, Eaton Centre in Toronto, and Merchant's Plaza in Indianapolis are indicative of the potential for downtown development keyed to the office market. Retail renovation activity is also increasing due to downtown office growth. Specialty shopping centers are well suited to such renovation as exemplified by The Corner in Boston and the upcoming rehabilitation of The Arcade in Providence.

The increasing number of office workers also constitutes a growing element in the central city housing market. Renovation of homes in older, historic areas, particularly in the south and northeast regions of the country has radically changed the face of some urban neighborhoods.

Public Transportation Holds The Key

While office space expansion, awakening retail sales, and burgeoning housing demand create the potential for central city economic renewal they also lead to powerful new demands on urban transportation systems. These increasing demands come at a time when expressways and city streets are seriously congested, with many areas experiencing intolerably high levels of air pollution. Because regional access and efficient downtown circulation are such important factors in the attractiveness of the city for office location and as a place to shop and to live, congestion can effectively limit the growth of central city areas.

Even if cities were able to expand their highway and local street capacity to meet the growing demands for downtown mobility, the provision of adequate parking space would be a problem. At the same time that many public policies are aimed at the reduction of on-street parking spaces, intensifying development of urban land is limiting the land available for downtown parking lots. Meanwhile, construction costs for single-use parking structures and spaces within new buildings are skyrocketing.

Given the constraints on downtown access caused by growth, public transportation improvements can play a vital role in increasing the accessibility of central city areas. While no public system has ever succeeded in relieving traffic congestion fully, mass transit adds significant capacity to urban transportation services. Public transportation improvements can act as a "skimmer" of the growing demand for central city mobility and prevent highway and local street capacity from limiting urban accessibility. The role as a "skimmer" refers to transit's ability to accommodate mobility demands above the acceptable level of congestion in downtowns.

The Cities And Their Systems

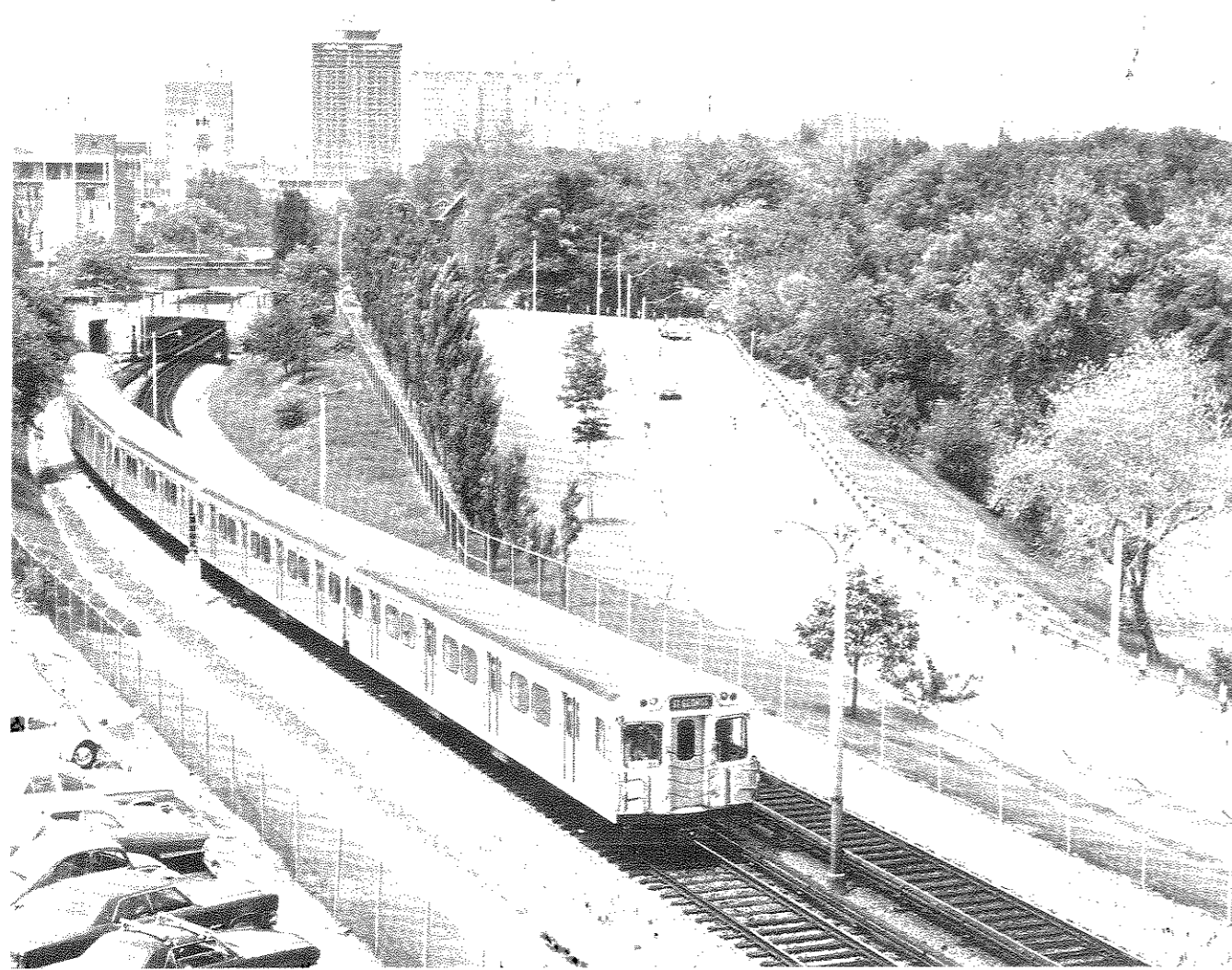
While many cities are experiencing serious congestion problems, the structural arrangements of their mass transit systems vary widely. To exhibit the range of strategies for linking transit and downtown development, the public transportation improvement programs of seven major North American cities are presented here. In each city, the role of public transportation in the expansion of office and service functions and the locational advantage offered by downtown transit improvements are discussed.

Toronto And Montreal: A New Role For Transit

During the late 19th and early 20th centuries, streetcar lines were built in major cities like Boston, New York, and Chicago, opening up large portions of suburban land for development. The pressure for such expansion was great. Both the rapid rate of migration into cities and explosive growth in urban, manufacturing-oriented economies created strong demand for new land. Lack of adequate transportation hindered economic growth as well as depressed the physical conditions of urban life. Under these circumstances, the provision of transportation services almost inevitably resulted in the rapid development of land along streetcar lines.

These early streetcar services represented major advances in urban mobility. With the dawn of automobile travel, however, the ability of transit to influence land use became far less than inevitable. Suburban areas, increasingly independent of the central city, became part of complex, polynuclear metropolitan areas. As activities spread out from the central city and downtown economies declined, the link between public transit and the spatial structure of urban areas seemed tenuous.

During the 1960s the Toronto rapid transit system began to produce some results contrary to the American experience. New development in the metropolitan region was concentrating in areas served by the transit system, reinforcing a centralized, rather than sprawled, growth pattern. Intensive, high-rise developments, mainly offices and apartments, clustered near transit stations. The transit system provided the level of mobility necessary to support these high density clusters.



With its intensive downtown development pattern and high density nodes at suburban transit stations, Toronto is considered one of the best examples of a transit-oriented city. (Photo courtesy of the Toronto Transit Commission.)

A booming postwar economy, large influxes of immigrants, and a favorable geographic and political system created tremendous pressure for the development of regional Toronto. The metropolitan rapid transit system was designed specifically to concentrate this development in central Toronto and in nodes along the transit route. The system is quite compact, stretching 15 miles by 1966 and only 26 miles today, mostly within central city limits. Because of the looping nature of the subway system, the entire central business district is within walking distance of a subway station. Thus, the system's design promotes a concentrated growth pattern, preserving central Toronto as the center of activity. Consequently, the city has been able to retain the largest share of metropolitan employment, particularly in office based and service industries.

Metropolitan Toronto's policy of encouraging development near transit stations was a strong force in making the land use potential of the station areas a reality. Areas served by the transit system have been allowed higher floor area ratios, resulting in obvious high-rise clusters near stations. In particular, public officials promoted downtown growth, allowing higher densities and relaxing some zoning regulations. Metro Toronto has been so successful in encouraging development in central Toronto that it has encountered problems of overburdened municipal facilities. Through the downzoning of central areas and the encouragement of mixed use complexes in other locations, Toronto now hopes to establish suburban activity nodes.

As in Toronto, the Montreal subway was designed to strengthen downtown mobility. Built to alleviate serious bus and automobile congestion in the central business district, Montreal Metro is truly an urban circulation system. Serving 21 miles of the central city, two lines of the Metro come together downtown to form a "U" shape as in Toronto. Stations are located only a short distance apart, particularly in the core area, to afford an easy walk to a subway entrance. This design results in excellent transit access within the core area.

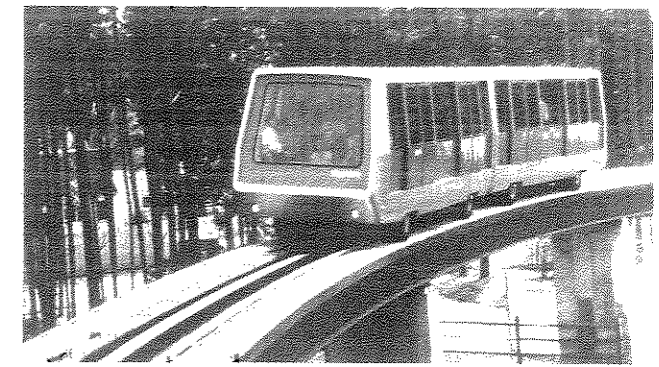
Through the coordination of city planning and transit engineering, Montreal has been able to develop a system of mobility that supports concentrated development. Central Montreal has traditionally been the hub of regional commercial and governmental office activities. Prior to Metro, however, the downtown economy was declining due to the decentralization of office-based industries and retailing. Metro has succeeded in strengthening downtown as the regional center, adding the transportation capacity needed to support intensive development. Except for two suburban stations, virtually all new development associated with Metro has taken place downtown.

A number of important projects have been built with direct connections to the Montreal Metro. Among the noteworthy are Place Bonaventure, which contains a large exhibition hall, and Alexis Nihon Plaza, an office and retail complex that utilizes subway traffic by funneling commuters through the Plaza to an adjacent bus station.

Montreal Metro has had its most forceful impact, though, on downtown retailing. An extensive system of underground passages, planned by the city, has become an important asset to downtown department stores. Direct store connections to these passageways link retail areas with the heavy pedestrian flow of subway riders. Often lined with store windows and specialty shops, these passageways provide weatherproof circulation within Montreal's commercial center. Early portions of the underground system were built by the city, but with the coming of Metro, retailers and developers have constructed many of the connections privately or in public/private joint ventures. Through this underground system, Montreal has succeeded in using Metro to strengthen its central retail area and to provide an important amenity in the downtown environment.

BART: A Lack of Coordination

As high-rise office and apartment buildings bloomed near Canadian transit stations, Bay Area planners looked at plans for a regional rapid transit system with great expectations. Many saw the Bay Area Rapid Transit (BART) system as an instrument for restructuring the pattern of urban growth. It was hoped that with BART the central areas of San Francisco and Oakland would be strengthened through improved regional access.

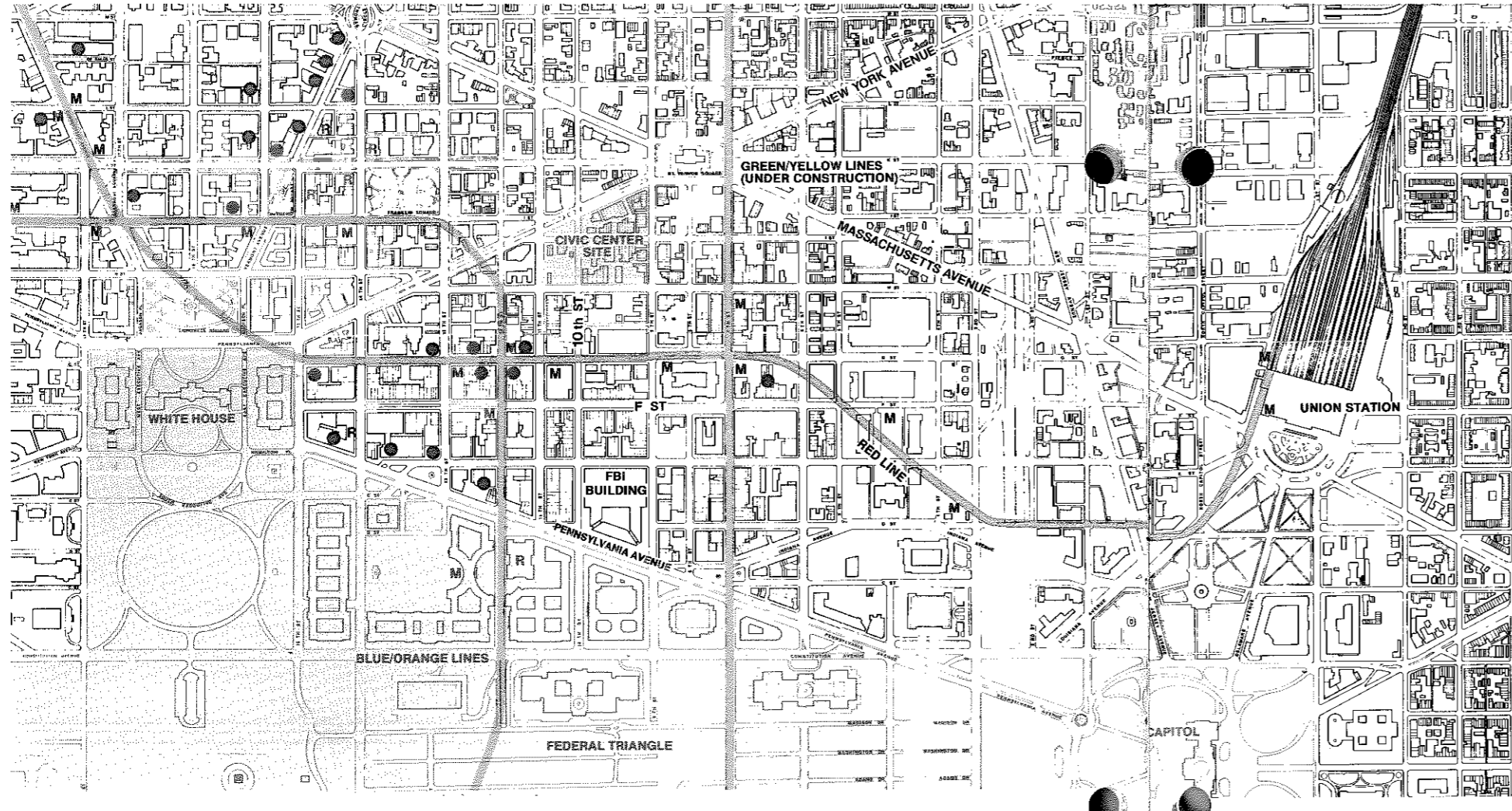


Downtown people movers can enhance the efficiency of central business districts by improving mobility. This vehicle by Westinghouse Electric is one of nine under consideration for use in the initial DPM systems. (Photo courtesy of Westinghouse Electric Corporation.)

As analyses of BART's impact on land use was tallied, however, the system was found to be having only a marginal effect on development. Furthermore, despite the addition of 35 high-rise office buildings to the San Francisco skyline, some observers claimed that BART was having little impact on downtown office growth. What is so different about the Bay Area system that it produces impacts so seemingly contrary to the Canadian experience?

The most important difference between Canadian rapid transit and BART is the system design. The primary purpose of the Toronto and Montreal subways is to move people within the city. The BART system, on the other hand, is designed to answer regional commuting needs. Built to relieve peak period highway congestion throughout the Bay Area corridor, BART's lines are extensions from the major cities of Oakland and San Francisco out into the suburbs. Stations are located an average of 2 miles apart with few central city stops.

In the major downtown area on the system, San Francisco, the growth in office space has been phenomenal. During the late 1960s and early 1970s, so many office buildings were under construction that public attention turned toward preservation of San Francisco's historic character. It is believed by many researchers that office space in this area, the financial district of San Francisco, would have expanded without BART, given the strength of development pressures in the downtown. Most concede, however, that BART influenced both the intensity and location of that development. Strikingly, significant office development has occurred south of Market Street, a declining urban renewal area that saw little development until BART came along.



- Legend**
- M** Entrances to Metro Stations
 - Commercial Projects in Final Planning under Construction
 - R** Major Renovations in Progress
 - ▭ Site of Proposed Civic Center/Convention Complex
 - ▭ White House, Federal Triangle Office Complex, and Mall

Even with little planning for development, however, Metro has played an important role in Washington's current development boom. According to the Federal City Council—a 100-member group of D.C. business, professional, and civic leaders—the subway system has helped spawn more than \$970 million worth of private development. If the full 101-mile system is completed, another \$5 billion in development is anticipated. The Council claims that these figures are conservative and only include projects where Metro was a significant factor in the location, timing, or type of development. Among the many Metro-related projects are International Square and 1101 Connecticut Avenue building, both commercial and office complexes, renovation of the Sheraton Park Hotel, and redevelopment of the LaSalle building site into a major office and retail project.

Much of this construction has been located in the area known as "new downtown," Washington's prime area for offices and retailing. In recent years, over 50 percent of the metropolitan area's private office space has been developed here. With such strong pressures for new space in this area, it is likely that much of the current construction would be taking place without Metro. The system, however, has certainly accelerated the development of this area as developers are eager to seize some of the opportunities flowing from a real estate-transit connection. One indication of the impact Metro is having on real estate is the high prices (up to \$300 per square foot) now being paid for prime downtown sites near Metro stations.

The new downtown is not the only area of Washington that will feel the impact of Metro. With few sites still available and with D.C. height restrictions limiting the intensity of possible development in the area, developers are beginning to focus on the old downtown area of Washington. They have good reasons for doing so. Downtown is the heart of the Metro system. With eight stations located within its boundaries, developers are regarding the downtown area with new eyes. *Forbes* magazine (April 16, 1977) has calculated that in 1 square mile between the White House and the Capitol, 16 new public and institutional structures and 35 new private buildings will rise by 1981. Office rents in this area, once thought doomed to continued decline, are expected to reach between \$15 and \$18 per square foot in the next 2 years.

Washington's Metro system has made the older downtown area the most accessible in Washington. When the system is completed, passengers on all five Metro lines will be able to reach the area of 10th and F Streets without making a transfer. Accelerating property sales and development activity in the old downtown confirm the attractiveness of the area with its numerous station entrances.

If BART did influence the intensity and location of development in San Francisco, it did so in spite of the system's design. As originally planned, the first stop in San Francisco was to be Montgomery Street, almost 1 mile from the Bay. Between Montgomery Street and the Bay, though, much of the office development in the city was taking place. City officials put pressure on BART authorities to add a station at Embarcadero Street, but due to a serious shortfall in funds, the request was denied. The federal government also turned down a city request for funds to construct the station. Left to its own devices, the city decided to extend its urban renewal district to include the station site and constructed the station using funds derived from tax increment financing.

The city of Oakland had an even smaller influence on station location and design than did San Francisco. Issues regarding route alignment and design arose very late in the BART planning process, and the city was not sufficiently prepared to explore possible alternatives. Yet, despite the lack of local input, BART does seem to be having some impact on Oakland development. The city, at the center of the BART network, is witnessing its first significant downtown office boom since the 1940s.

Washington's Metro: The Proving Ground

The failure of BART to produce land use impacts on the order of Toronto and Montreal spurred some very pessimistic appraisals of the ability of public transportation projects to aid downtown development. Cities planning rapid transit construction, particularly Washington, D.C., now found their impact analyses subject to careful scrutiny. With funding for additional miles of the Washington Metro still unapproved, the federal government has sought reassurance that its investment is cost-effective and that the land use benefits ascribed to Metro can be realized. In this sense, Metro is an important test of the ability of rapid transit to support urban revitalization.

Designed to relieve highway congestion and to reduce traffic levels in central Washington, Metro is both a commuter rail line and a downtown circulation system. The District, which still retains 47 percent of the jobs in the metropolitan area, is served by 38 of the 101 miles planned for the system. Metro provides an efficient means of downtown travel, reaching major office buildings, the city's retail district, the prime office area around Farragut Square, major tourist spots, and nearby office centers in Maryland and Virginia. It also serves the District's residential areas, although city buses that feed into Metro are needed to complete the public circulation system.

During the planning phase of Metro the Washington Metropolitan Area Transit Authority (WMATA) paid little attention to the system's possible developmental impacts. Even though the potential for center city renewal was claimed as one of Metro's benefits, route selection and property acquisition was based on the notion of getting suitable right-of-ways for the least cost. While monetary considerations are undoubtedly important, this minimum cost perspective produced many stations located on undevelopable land, on elevated tracks, or within railroad right-of-ways. Naturally these configurations limit the development potential of Metro station areas.

Downtown retailing is also getting a much needed boost from Metro. Woodward & Lothrop, a downtown department store with a direct connection to Metro, has plans for expansion. Two other key developments in the retail core are those proposed by the Oliver T. Carr Company. Carr is constructing a \$57 million office, retail, and restaurant complex in the same block as Garfinkel's department store. Close by, at Metro Center, Carr holds exclusive rights to develop urban renewal parcels owned by the District. It is expected that the complex will have significant retail footage. These projects signal renewed vitality in Washington's aging retail core.

Noticeably absent from most discussions of downtown development is official District strategy. So far, the District seems to be responding to current development conditions on a parcel-by-parcel basis without an overall strategy for a coherent downtown. To date there has been little coordination between the city and Metro, both of whom have parcels in the old downtown available for lease and development. Presently, though, District planners are busy initiating the production of a new comprehensive plan. Downtown development should figure prominently in the plan, especially policies designed to encourage the rejuvenation of the old downtown as the city's retailing center.

Los Angeles: Introducing DPM

The ability of public transportation improvements to positively impact on downtown development has become an important element in most local decisions to invest large sums of money in new transit systems. With construction of a \$175 million downtown people mover (DPM)—an elevated transit system using small cars running singly or in trains—soon to begin, Los Angeles is an excellent example of how local officials can coordinate downtown development strategy with transit investments. By locating the system in the heart of the prime downtown development area, Los Angeles has been able to integrate its DPM stations with new private construction. To date, this coordination has provided over \$5 million in private capital funding for the DPM through easement grants, station construction, and structural modification to building designs.

Much of this coordination between private developers and the public sector was accomplished by the Community Redevelopment Agency (CRA) of the city of Los Angeles, which oversees land use and transportation development in urban renewal areas. Because the DPM lies almost totally within two redevelopment projects and is adjacent to a third, the CRA has been able to use its staff and its powers of land assembly, design and construction review, and contract negotiation to insure the successful integration of the DPM and downtown development.



Denver's Transitway/Mall will feature a tree-lined 16th Street with paving to demarcate the vehicle right-of-way. Planners anticipate substantial renovation of the retail facilities on 16th Street in response to the Transitway/Mall. (Photo courtesy of Denver RTD.)

Many Los Angeles businessmen and developers recognize the special benefits transit improvements can bestow on their properties and are willing to contribute to the downtown people mover program. The Chamber of Commerce and the Central City Association, organizations that represent a large segment of the private sector, have recommended the creation of a benefit assessment district for the purpose of collecting \$1.3 million annually in private sector funding of the DPM's operating deficit. The assessments will be based on proximity to the DPM stations and will cover 25 percent of operating costs. A recent analysis by the Community Redevelopment Agency found that the DPM will create \$9 million in annual private benefits, including incremental office rents, retail sales profits, and parking cost savings.

Portland And Denver: Transitways

As part of their downtown development strategies, many cities have created auto-free downtown malls. By closing major central business district arteries to motor vehicles, these cities have sought to create a downtown retail environment competitive with suburban shopping centers. These full pedestrian streets were commonly built with urban renewal funds that provided cities with the money and autonomy to implement them. Today, a number of cities are finding that transitways—pedestrian malls that restrict but do not ban vehicles—are a more feasible alternative given the availability of federal transportation funds. Such transitways are often modeled after Nicollet Mall in Minneapolis, a pedestrian mall with exclusive bus lanes. Nicollet Mall has gained national attention for its success in controlling traffic, improving transit ridership, and substantially increasing the number of downtown shoppers.

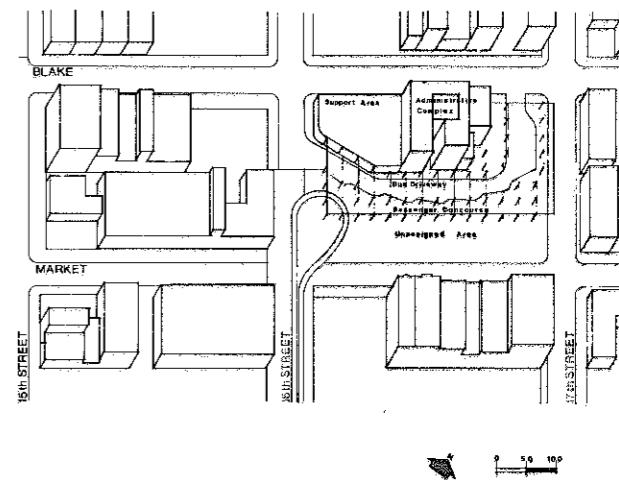
Portland's Transit Mall was planned as the focal point of the city's program for downtown development. Encompassing 11 blocks of two parallel downtown streets, the Transit Mall has been used to create an attractive center city environment. Each street is one-way, containing two bus lanes and widened, tree-lined sidewalks. The Transit Mall raises public transportation to a new level of convenience. Sheltered waiting areas, lighted maps, TV screen displays of scheduled buses, and computerized route information enable Portland residents to ride the bus with far more ease than ever before.

Built to reduce core area auto congestion and to improve environmental quality, Portland's Transit Mall has supported rapid growth in downtown office space. Amazingly, over 1 million square feet of office space has been added in the central city since 1976 and over 700,000 square feet of new space is underway. Most of this office construction has taken place between the Transit Mall and another major city project, Waterfront Park.

The response from downtown merchants to Portland's public investments has been outstanding. The construction of a new full-block Nordstrom's department store provided the incentive for other renewed retail activity. J.C. Penney's, which planned to leave town, moved into a new, larger building instead. The old Nordstrom building is now occupied by the Broadway Department Store, bringing Portland its first new retail outlet in recent years. The city's oldest store, Meier & Frank, undertook a \$2 million exterior and interior remodeling. Completing the full spectrum of retail activities is the Galleria, a vacated department store that now houses over 40 shops and restaurants.

Denver, Colorado is following Portland's example and will soon start construction of a downtown transit mall. The Denver project, called the Transitway/Mall, will involve closing the city's main business artery, 16th Street, to automobile traffic. Only public shuttle buses and pedestrians will be given access to the newly created mall. The shuttle buses will operate between two transfer facilities that will also serve as hubs for commuter buses from suburban areas.

Denver's need for major public transit improvements has been heightened by a resurgence in downtown office development. As the focal point for energy resource activity in the Rocky Mountains, Denver has become the location for headquarters and field offices of companies in the energy business. Besides energy-related growth, Denver's position as the largest city in an 8-state area has made it a natural center for business. As a result, the city has more than doubled its office space in downtown between 1970 and 1978, with no end to the present boom in sight.



The Market Street transfer facility of Denver's Transitway/Mall will be a single-story, at-grade structure that will provide protection from the weather. The Regional Transportation District's offices will be in renovated structures along Blake Street. (Drawing courtesy of Denver RTD.)

This extensive office growth is taxing Denver's transportation network to the limit. Automobile congestion in the downtown is already a serious problem. By 1985, however, there will be at least 75 percent more office workers downtown than in 1975, increasing the demand for regional access beyond capacity. Given Denver's severe air pollution conditions, escalating demand for downtown auto travel presents a major challenge to public officials.

The present bus system cannot meet Denver's rising demand for downtown mobility. To accommodate 1985 peak hour traffic, Denver's main streets would have to become virtual streams of buses. With the Transitway/Mall, Denver officials hope to reduce downtown congestion and provide better transportation services. The bus transfer facilities will reduce congestion by terminating commuter buses before they enter the central business district. Service within the core area will be greatly enhanced by the use of exclusive bus lanes.

The Transitway/Mall will also be used to extend the period of downtown activity beyond the working day. Toward this goal, the mall's designers have paid careful attention to street furniture, paving, lighting, and planting. A key element in bringing balanced growth to downtown Denver will be the mall's impact on retail sales. According to a report by Gladstone Associates for RTD and Downtown Denver, Inc., a group of business and civic leaders, the mall could increase retail sales 7 to 10 percent above normal trends. New restaurants and entertainment facilities could also be supported by pedestrian activity along the mall, creating a new image for downtown Denver.



Artist's rendering of the downtown people mover along Figueroa Street in Los Angeles. The DPM will connect the Convention Center with Union Station and should serve as an impetus for more commercial development in the Bunker Hill urban renewal area behind the cylindrical Bonaventure Hotel. (Photo courtesy of the Los Angeles Community Redevelopment Agency.)

Coordinating Development And Transportation

These seven cities illustrate a wide range of strategies for using public transportation improvements as a supportive tool of urban revitalization. In response to intensifying urban activity and increasing demands for downtown mobility, these cities have tailored their transportation systems not only to present travel needs but also to emerging patterns of urban development. Those cities that have been most successful in realizing land use benefits from their transit investments have done so through the careful coordination of land use and transportation planning.

Many planners, developers, and public officials have learned that achieving such coordination can be a long and arduous process. For planners, transit improvements require the revision of comprehensive and land use plans in cooperation with transit engineering and design. Moreover, an effective system of development controls and incentives must be produced, reflecting current development economics, the impact of the transit system, and the desires of the community. For developers, a new transit system can present exciting

opportunities but can also involve tedious negotiations with public officials. And, finally, transportation improvements are forcing urban decision makers to tackle the conflicts of growth management. How can cities attract new development without augmenting neighborhood instability? Should public resources be used for projects that enhance and accelerate development? The land use potential of urban transportation systems carries with it some of the major planning, development, and political challenges inside urban areas today.

Large strides have been made in meeting these challenges. Cities are using new technologies, bold strategies, and improved market conditions to breathe new life into urban cores once thought obsolete. They have benefited from past experience. The successes of Montreal and Toronto no longer seem quite so wonderful, nor the failures of BART so surprising. With this knowledge comes the opportunity to benefit more fully from large public investments in urban transportation systems.

Mary E. Lovely, a student in Harvard University's Department of City and Regional Planning, completed this project while working as a summer intern in ULI's Research Division. The internship program is supported by the J. C. Nichols Foundation.

LAND USE ABSTRACTS...

A Realistic, Thought-Provoking Appraisal

Strong, Ann Louise
LAND BANKING
 The Johns Hopkins University Press,
 Baltimore, Maryland 21218
 1979. 312 pp. Illustrated, index. \$22.50

In recent times there has been a substantial increase in the discussion of land banking in the United States. Land banking, the public purchase of land to be held in reserve for future use, is common in many Western European countries; but, with the exception of a large-scale land bank program in Puerto Rico, there is almost no land banking program currently underway in the United States. Ann Strong has given us a comprehensive look at land banking which should be most helpful as the discussions and proposals for land banking in the United States continue to increase.

The book is well organized and well written, presenting the land banking concept as it is practiced in Western Europe, and the problems and potentials in implementing land banking within the United States. The first chapter explores the sources of western attitudes toward land from the American Revolution to the present. By focusing on three European countries, land banking experience is reviewed and well illustrated in specific examples of how it has been applied over the years.

Private land ownership in America is a value of the highest order. After tracing the concepts of land ownership and western traditions from Plato and Aristotle to the present day issues of "taking," "compensation," and "equity," Strong states that "we may be moving from a system that rewards speculation and protects land owners from losses based on public actions toward a system that defines public purpose more broadly and judges its equitability for society to retain values resulting from its investment." If this is so, it is suggested that land bank-

ing is an appropriate and prudent activity of government to be turned to in the United States.

Sweden has had land banking as an integral part of government activities throughout the 20th century. Stockholm County, where 27 percent of the 1,606,000 acres is in public ownership, is reviewed as an example of the Swedish experience with land banking. Complete new towns have been built on land from the Stockholm land bank. The Swedish political climate has been fully supportive of land banking from the beginning.

Befitting a nation where extensive lands have been reclaimed from the sea through major public efforts and expenditures, the Netherlands also has had a supportive political climate for land banking and a long history of using land banking. In 1971, 83 percent of the land offered for development was acquired from municipal land development enterprises. Numerous specific examples of land banking activities of various agencies within the Netherlands are reviewed in the book.

In France the attitude toward private ownership of land is far closer to that in the United States. With land development problems arising from rural out-migration, heavy urbanization in large metropolitan areas, and over-centralization in Paris and economic depressed areas, there has been increased public participation in regulating development through land banking activities. The number and variety of land banking and use regulating activities and programs has proliferated. This shows the growing public concern of and acceptance of public approaches to the programs brought about by unregulated speculative growth. The French experience with land banking is a good study for the United States, which is faced with many similar problems and attitudes.

The final chapter in the book is on the potential for land banking in the United States and reviews fully and objectively the lessons from Europe and possible applications to the United States. The current situation in the United States is reviewed, which documents an increasing receptivity to land banking. Strong's discussion of critical land bank issues brings into sharp focus the difficulties facing any large-scale implementation of the land banking program in the United States. However, Strong is optimistic that land banking is a program which will be resorted to in the United States in the next few years as we face continued struggles between development and preservation efforts. Included in the book is a model land development code as well as the Land Administration Act of Puerto Rico.

Geographers, political scientists, and urban planners, as well as those involved in the legal aspects of land use planning, will find Strong's book a realistic, thought-provoking appraisal of the future of land banking programs in the United States. Also, conservationists, developers, and others interested in the land development activities in the United States should find the book of interest. The book is realistic, readable, well documented, and well illustrated with examples of land banking activities and with many photographs of projects involving land banking in Europe. In her book, Ann Strong has given us a major work on land banking which is both thought-provoking reading and a valuable reference work.

Roscoe H. Jones

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Chapin, F. Stuart Jr. and Edward J. Kaiser
URBAN LAND USE PLANNING, Third Edition
University of Illinois Press, Box 5081, Station A. Champaign, IL 61820
1979. 656 pp. Tables, bibliographic references, index. \$22.50

A major revision of Chapin's 1957 and 1965 text on land use planning. *Urban Land Use Planning* emphasizes approach since the current "acceleration of history" is "too rapid for any textbook to be a valid source of specifications on 'how to do it' . . . This book outlines an approach to urban land use planning in which the practitioner has a creative role in extending what is set down and adapting it to the turn of events." Theories of urban planning with differing perspectives have evolved in response to recent rapid change. Chapin and Kaiser seek to provide a planning framework which uses features from all the differing perspectives, a framework which emphasizes both means and ends aspects, both goal-oriented and market-oriented perspectives, both short-range and long-range time perspectives, and both local and regional approaches to planning and implementation.

Part I, "Conceptual Background," pictures local land use policies as a political amalgam of federal and state program influences from above and of the concerns of pluralistic constituencies from below; presents a summary view of theoretical work on urban spatial structure; and discusses how the land use plan and guidance system can be framed to bring market influences and public goals into balance.

Part II, "Tooling-up Studies," is methodologically oriented. It deals with the establishment of an urban information system; methods of analyzing the urban economy and projecting employment; methods of population analysis and projections; methods of identifying patterns of activity and space quality choices of persons, households, firms, and institutions; methods of inventorying existing land use patterns and assess-

ing the quality of and potential for development; approaches to inventorying and appraising environmental resources and determining the use suitabilities of land; and problem/needs analysis, the definition of goals, and the identification of plausible "futures."

Part III, "Plan Formulation and Evaluation," focusing on the 20- to 25-year land use plan, describes "the procedures by which the planning program seeks to fashion a balanced and integrated set of proposals for the future use of land and the future governmental course of action to achieve it and other objectives. . . . In recommending that the action or implementation aspects of the plan be included from the start, the approach advocated here represents a shift from the traditional content of the land use plan." Five elements of land use planning are emphasized: (1) the formulation of desirable location and space alternatives for future land use patterns; (2) formulation of a course of action in the form of development controls, capital improvements, development incentives/disincentives, and other devices; (3) the projection of consequences through market-oriented simulation models; (4) the evaluation of consequences; and (5) plan coordination, adjustment, and synthesis.

Hypothetical City Exercise, a student workbook to accompany this text, is available (1979, 14 pp. \$6.95). It simulates a land use planning situation in a community of 12,000.

Lake, Robert W.
REAL ESTATE TAX DELINQUENCY: PRIVATE DISINVESTMENT & PUBLIC RESPONSE
Center for Urban Policy Research, Building 4051—Kilmer Campus, New Brunswick, NJ 08903
1979. 263 pp. Tables, bibliographic references. \$17.95

Argues that central city tax delinquency—"a serious, deep-rooted, and growing problem in American cities"—has its roots in national as well as local trends. The "nonpayment of

real estate taxes is only one component of a broad trend in which private capital and resources are being drawn out of the nation's older central cities." One dimension of the problem is the private sector's abdication of responsibility for ownership of property in central cities; a second dimension is the inability of the public sector to fill in the gap by either assuming a large landlord role or by administering and disposing of a large number of acquired properties.

Lake's analysis begins with a theoretical framework for the study of tax delinquency. An analysis of both real estate tax delinquency and an adequate municipal response "must be based on an understanding of: (1) the changing relationship between public and private sectors over the recent course of American urban evolution; and (2) the manner in which this changing relationship has affected the respective roles assumed by the public and private sectors in meeting the needs of the urban residential population. Only after these crucial relationships have been confronted can we adequately address the question of whether, and to what extent, municipalities should become involved in the acquisition and administration of tax delinquent properties."

The experience of a group of 48 U.S. cities is used to explore the magnitude and characteristics of tax delinquency. The problem is demonstrably grave, but "little empirical evidence is currently available as to its true scope and even less is known about the environmental and demographic factors associated with high rates of tax delinquency." The bulk of this book is devoted to a case study of Pittsburgh, where tax delinquency is an old, chronic, and serious problem.

The case study findings and theoretical analysis suggest a number of changes that would be made in standard public policy responses to the tax delinquency problem. Standard municipal policy commonly takes three forms: (1) disincentives and sanctions against nonpayment of taxes; (2) incentives for continued owner commitment to the property;

and (3) public acquisition of title as a last recourse. But a strategy based on facilitating private investment is questionable, especially in light of market weaknesses and inadequate public mechanisms for achieving this. Lake maintains that municipal ownership should be considered a resource rather than a liability: "Large-scale municipal land holdings resulting from private abandonments provide an incentive for a new policy initiative aimed at breaking the cycle of delinquency resulting from the ebb and flow of private investment interest. To break this cycle of delinquency, the basic objective of public policy must move from facilitating private ownership to maximizing the efficiency of public ownership. The city must have the ability to manage and develop its real estate holdings to benefit itself directly as a social collectivity, rather than indirectly through support of private ownership." A public program should focus on consolidation of municipal land holdings, maximization of the value of public holdings to ensure that public investment in acquired property is returned to the public purse, and retention of control over city owned land in the event of a resurgence of private demand.

Quarles, John
FEDERAL REGULATION OF NEW INDUSTRIAL PLANTS
New Plants Report, P.O. Box 998, Ben Franklin Station, Washington, D.C. 20044
1979. 241 pp. \$5.00

"This is a report for people concerned over the future of industrial development in the United States. In particular, it is a report intended for the use of chief executives, plant managers, corporate counsel, and other officials who may be responsible for industrial expansion projects. It describes the regulatory approvals required for the siting and construction of new industrial plants or expansions of existing plants." New federal requirements—most importantly those under the Clean Air Act, but also those under the Clean Water Act, the Resource Conservation and Recovery Act, the

Coastal Zone Management Act, the Powerplant and Industrial Fuel Use Act, and the National Environmental Policy Act—are complicated and in some cases still highly ambiguous. New federal requirements are likely to add 2 to 3 years to the total lead time for major industrial expansion projects. Moreover, added risks of project rejection mean that companies must develop contingency plans for their production requirements.

Quarles' goal in preparing this report was "to discuss the requirements with as much objectivity as humanly possible. Thus, [it] is designed neither to attack the regulatory controls nor to defend them. . . . It is hoped that this report may contribute to [examining the regulatory framework, identifying weaknesses, and working toward improvement] merely by pointing out that a totally new, profoundly important regulatory system has come into existence and by helping to describe what this system currently is."

The first four chapters of the report are devoted to the terms of the Clean Air Act and its implementing regulations, with permit requirements in Prevention of Significant Deterioration areas and in nonattainment areas receiving the lion's share of attention. Requirements affecting industrial development under the Clean Water Act, the Resource Conservation and Recovery Act, federal wetlands and coastal zone legislation, federal policies on coal use, and environmental impact statements are discussed in separate chapters. A final chapter sums up the impacts of this expanding body of federal regulation on corporate decision making, management, and planning. The dominant impact is regulatory uncertainties and lengthened project lead times. "The experience of companies in obtaining necessary approvals to commence construction on new projects in even the recent past may be entirely misleading as to the prospects for obtaining similar approval on future projects." Advance environmental planning is certainly necessary, and corporations will find that environmental considerations may change the plant itself. Companies will have to learn to

deal more creatively with local officials and with public opinion; intentions to expand will have to be disclosed early in the planning process.

U.S. Congress, Office of Technology Assessment
RESIDENTIAL ENERGY CONSERVATION, Volume I
Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 (Stock Number 052-003-00691-0)
1979. Illustrated, tables, bibliographic references. 355 pp. \$7.00.

Analyzes the potential for conserving energy in homes in terms of existing and promising technologies (excluding active solar)—their use, effectiveness, and costs. The goal of increasing residential energy efficiency is "a problem that at first appears simple, but proves to contain many economic, behavioral, and motivational variables, many technical and human unknowns, and many possible policy paths."

The rate of growth of energy use in the residential sector has been declining; what growth there is (an average of 2.6 percent per year in the 1970s) is mainly attributable to growth in the number of households, with the amount of energy used per household remaining constant. "The rapidity of the slowdown suggests that actions taken to reduce consumption so far are primarily changes in the ways people use their existing energy equipment—for example, turning down thermostats and insulating. A longer time frame is normally required to bring about widespread replacement or improvement of capital stock, including heating equipment and housing units." The main factor in reduced residential energy consumption appears to be rising energy prices. "The level of energy use in a given home is greatly influenced by the attitude, choices, and behavior of its occupants, within a range circumscribed by the limitations of the structure itself. Energy consumption in identical houses may vary by as much as a factor of two depending solely on these variables."

DID YOU KNOW THAT...

The Urban Land Institute has inaugurated a new program in community growth policy, to be funded in large part by the Urban Land Research Foundation. The aim of the program is to formulate and disseminate ULI policy regarding local and state growth policies and land development regulations. Policy positions will be backed up by a systematic program of research and education in community growth issues. The new program will extend and focus ULI activities in this field over recent years. It expresses the strong belief of the Institute in the importance of growth policy for the development of American communities.

After an intensive analysis of issues and trends, five projects have been selected for initiation in the first year of the program:

- vesting and certainty in the development approval process;
- justification for setting development fees;
- requirements and procedures in development exactions (such as mandatory dedication);
- effects and effectiveness of growth management techniques; and
- survey of ULI Members' priorities in growth policy.

Other projects will be scheduled upon completion of these. In each policy area, research will be carried

out, policy positions will be reached, and findings will be disseminated to the public through publications and other means. One of the key ingredients of the program will be intensive ULI member involvement in providing information and guidance for specific projects and in formulating ULI policy positions regarding the issues.

Work on the program has gotten underway with the mailing of questionnaires for two surveys and with background research in the project on vesting and certainty. The effort is being managed by Douglas Porter, Associate Director of Research for Growth Policy, who welcomes ideas and recommendations for the direction and content of the program.

LETTERS...

Editor:

The article entitled "California Proposition 13: a One-Year Assessment" by Roger L. Kemp in the July/August issue of *Urban Land* is an excellent statistical survey of impacts of Proposition 13. In rereading the article it was not clear to me as to whether or not the impact on school districts was included in the statements in the text pertaining to the impact on local governments and private employee jobs.

As a local school board member, I should like to point out two factors that seem to have been omitted from the article:

- The peculiarities of the California Education Code require that any classroom personnel to be terminated must be notified by March 15 prior to commencement of the next school year in September. The battle is just now being joined. Indeed, the entire faculty of the San Francisco schools are still on strike over just that issue. The point is that the reduction in school district employees caused by Proposition 13 will not be calculable until the current rounds of labor negotiations are completed.

- The most important impact of Proposition 13 has been the shift of policy control and fiscal responsibility from the local level to the relatively unresponsive large bureaucracy of Sacramento. In the long run, this is going to create more constituency frustration as local governments use state policy edicts or funding restrictions as reasons for reducing local services.

In short, the full impact of Proposition 13 has yet to be felt at the local level.

Paul P. Shepherd
Daly City, California

UDAG NEIGHBORHOOD MARKETPLACE

The Urban Land Institute will be conducting the second of two UDAG Marketplaces on February 28th and 29th. Jointly sponsored by HUD and UMTA, the UDAG Neighborhood Marketplace will bring together cities, neighborhood based organizations, private sector developers, and consultants to assess the potential and problems of UDAG-assisted neighborhood projects. A neighborhood project is defined as any project, be it residential, commercial, or industrial, undertaken in a predominantly residential area.

The UDAG Marketplace is part of ULI's ongoing effort to promote better development through improved communication between the public and private sectors. The conference format will: 1) promote the general exchange of ideas; 2) offer peer group project review and evaluation; 3) provide a setting for those with services to offer to meet with those in need of technical assistance; 4) expose participants to innovative project design; and 5) analyze the problems faced by neighborhood-based organizations in putting together UDAG eligible projects.

Marketplace brochures and registration materials will be sent to ULI members in a forthcoming issue of *Environmental Comment*. For further information, call Elizabeth Baker, ULI Research Assistant, at (202) 331-8500.

Statement of Condition

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After Printing			
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Total	8500	8500	

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Ronald R. Rumbaugh
Executive Vice President