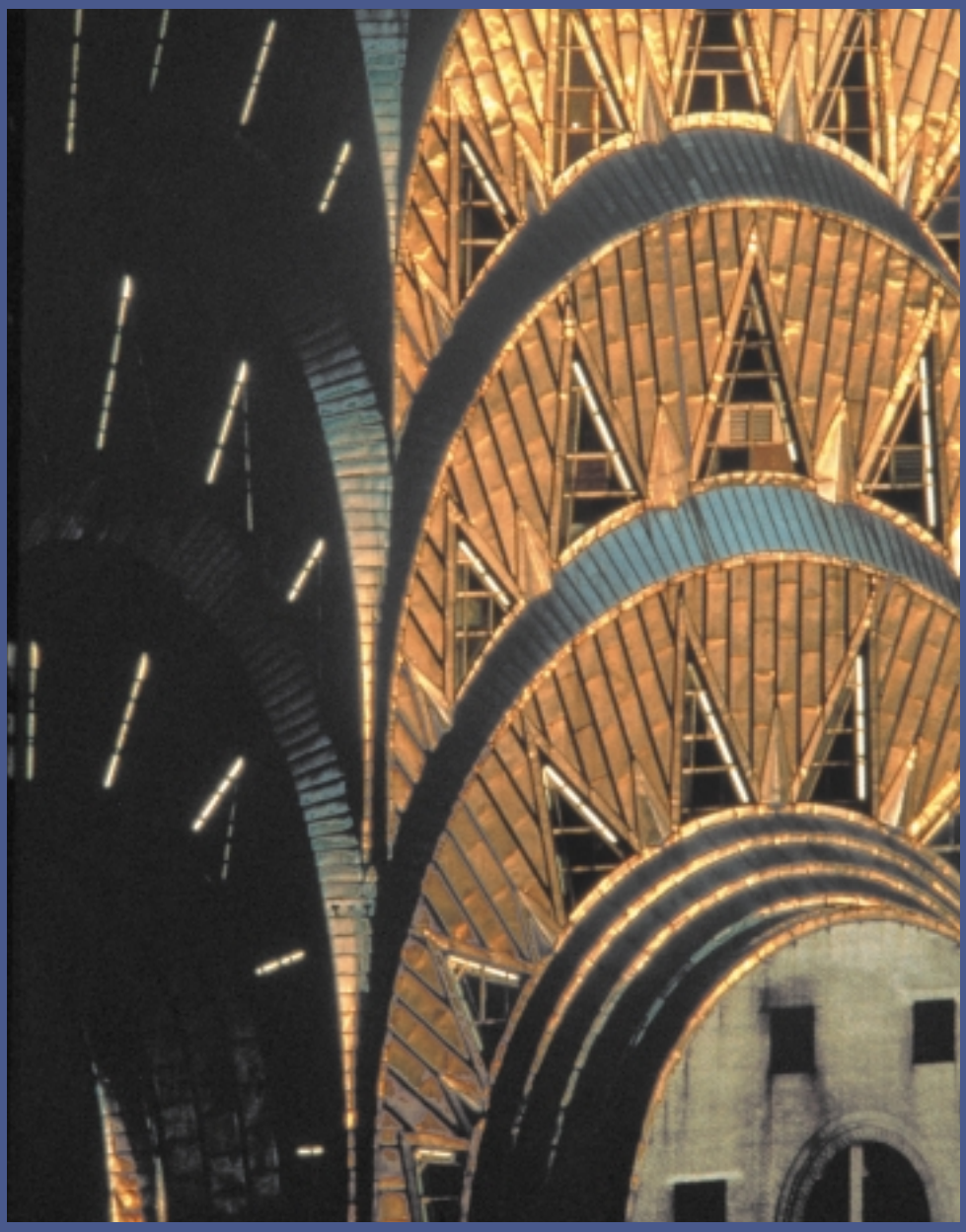
PRICEWATERHOUSECOOPERS

Korpacz Real Estate Investor Survey®



Fourth Quarter 1999

PRICEWATERHOUSECOOPERS

Dear Reader:

Welcome to the final 20th Century issue of the Korpacz Real Estate Investor Survey®. We at PricewaterhouseCoopers are excited about entering a new millennium and what it has in store for us.

Since joining PricewaterhouseCoopers in July of 1999, the Korpacz Real Estate Investor Survey® has undergone a cosmetic change. Now, we are pleased to announce that our content is expanding. We have added a the Boston office market to the list of cities already covered in our office market survey. Also, we now have an "Economic News" section to give our readers a better insight into the national economic perception of the time period covered. Expanded coverage of the capital markets is in the works.

In the coming quarters of the 21st Century, we hope to include a National Net Lease Market, which will be published on a recurring basis, and special industry reports on the national healthcare and golf course real estate markets. The coverage of the Korpacz Real Estate Investor Survey® will also be expanded to contain global real estate markets.

As the end of 1999 approaches, along with the end of a century, we at PricewaterhouseCoopers wish you a healthy and prosperous 2000.

Sincerely,

Patrick A. Leardo
Global FAS Real Estate Leader

Robert K. Ruggles, III
Global Leader Valuation/Consulting

Peter F. Korpacz
Director
Global Strategic Real Estate Group

PRICEWATERHOUSECOOPERS

Korpacz Real Estate Investor Survey

Making News This Quarter

National Highlights

Real Estate Industry Pauses as Y2K Approaches

While the real estate industry remains very healthy as the new millennium approaches, there has been a noticeable slowdown in activity. Although most investors believe that Y2K will be a nonevent, there is enough uncertainty to warrant caution. The usual investor rush to complete deals by year's end is not evident this year. Investors are expecting a surge of real estate activity after Y2K has become the "Y2K what" that most anticipate.

While there were some fears in the beginning of the fourth quarter about financial instruments coming due early in the new year, the Federal Reserve has taken appropriate steps to provide adequate liquidity. As a result, the financial markets have apparently rebounded, rates for short-term instruments have retreated, and most concerns have eased.

Despite the slowdown and some Y2K jitters, the fundamentals of the real estate industry remain very solid. In most markets vacancy rates remain low and new construction starts are down. Rental rates are at or near record levels and climbing in several markets. Although it is a good time to sell, prices are still high, especially for deals that are between $15 and $30 million, the current sweet spot in the market. While it appears that most investors are using less aggressive cash flow forecast assumptions, a number of investors are concerned about unrealistic cash flow forecasts that continue to increase already high rents at levels above current inflation.

The most active players in the market are pension funds, and include JP Morgan, Clarion, Lend Lease, and Teachers Insurance. REITs, if active at all, are completing deals in partnerships with pension funds. While warehouse distribution buildings comprise a top property choice for investors, most investors are limiting their exposure to retail product. Urban residential properties in "24-hour" cities, such as San Francisco, Chicago, Boston, and New York, are also generating good returns. For all property types, investors are buying new product as well as older product that can be renovated to a higher class.

Overseas investments represent a relatively small portion of the total dollars invested by U.S. investors worldwide. Yet, several foreign countries offer good investment opportunities. Although fragmented, Europe is expected to provide future growth for local and foreign investors in large part through privatization of government-owned real estate. This is especially true in Germany where a large portion of multifamily real estate is owned by the government. While European investments are considered relatively safe, some exchange risk is present. Also, investing in existing European product is much easier than creating new supply. Major U.S. investors in Europe include Morgan Stanley, JP Morgan,

and Goldman Sachs.

In Asia the deal flow has been disappointing. While there are opportunities because of financial distress and bankruptcies, especially in Japan, the Japanese government has provided the necessary financial support to help failing financial entities instead of allowing foreign capital, such as U.S. dollars, into the market. As a result, very few deals have been completed.

While residential demand is strong in Germany, retail demand is strong in Spain, Portugal, and Poland. Currently, numerous regional malls are being built in Poland suburbs, reminiscent of the early development of malls in the U.S. in the 1950s. These malls range from 400,000 to 600,000 square feet and include large hyper markets, big-box retailers, and gallery (in-line) space. Malls are also being developed in Turkey.

Latin America provides opportunities, but not for the faint of heart. Brazil is on everyone's unfavorable list, while Buenos Aires and Chile provide better opportunities, but at a risk level that deters many investors.

PUBLIC MARKET TRENDS

As real estate buyers, REITs continue to be sluggish. Those that attempt to participate in the market are teaming up with pension funds or other partners since their access to capital is still limited. Instead of buying properties, many REITs are developing a variety of property types, including office, industrial, and apartment. Demand for new product is high in several markets and can be more lucrative. One of the largest industrial REITs, First Industrial Realty Trust Inc., expects their development volume for 1999 to be three times that of 1998.

Since it is not likely that REIT shares will recover to their peak levels anytime soon, many REITs continue to focus on internal operations. Some might even look for opportunities to merge with other REITs, such as Equity Residential Properties Trust's recent merger with Lexford Residential Trust.

REIT stock prices declined an average of 2.58% during the month of October 1999, according to the National Association of Real Estate Investment Trusts' (NAREIT) Composite REIT Index. This follows a drop of 3.72% in September 1999.

Total REIT industry market capitalization decreased in September according to NAREIT. As of September 30, 1999, the marker was $130.76 billion. This is down $8.21 billion (5.91%) from July 31, 1999's total of $138.97 billion and is $7.54 million (5.45%) below the year-end 1998 total of $138.30 billion.

The number of existing REITs totaled 209 as of October 29, 1999, two less than three months ago. Retail facilities represent the largest portion of existing REITs at 49 (allocated between 28 for strip centers, 11 for regional malls, 7 freestanding, and 3 outlet centers).

As of September 30, 1999, the amount of capital raised through initial public offerings (IPOs), secondary offerings, and unsecured debt was $15.16 billion. This is down significantly from the year-end 1998 total of $39.13 billion. This year, as of September 30, 1999, only two IPOs were issued. The total value was $292 million.

CASH FLOW FORECAST ASSUMPTIONS

Commercial Markets

Cash flow forecast assumptions this quarter continue to indicate stable to rising values in most surveyed markets. The composite average overall cap rate (OAR) decreased 1 basis point from last quarter to 9.13%. While the average OAR decreased up to 8 basis points in nine markets this quarter, it increased up to 28 basis points in three markets. No change was reported in five markets.

The average discount rate (IRR) increased up to 9 basis points in six markets and decreased up to 8 basis points in seven markets. The average IRR remained unchanged in four markets.

Aggressive market rent growth rates are being used less by investors. This quarter the average initial market rent change rate decreased at or above 10 basis points in five markets, while it increased in only one market. The largest decrease was in the national CBD office market, which dropped 20 basis points from 3.68% to 3.48%. Other large decreases were reported in the national suburban, Los Angeles, Southeast Florida, and Washington, DC office markets. In the national regional mall market, it inched up 4 basis points. There was no change in seven markets.

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E-mail: info@korpacz.com
Web site: www.korpacz.com

Editor-in-Chief: Peter F. Korpacz, MAI
Associate Editor: Susan Smith
Production Manager: Bernadette T. Korpacz

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Survey inquiries: (301) 897-4637; FAX (301) 897-4620 (8:30 AM to 5:30 PM EST).

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Table 1
Yield Comparisons
OCTOBER 1, 1999

YIELD INDICATORS	1994 AVERAGE	1995 AVERAGE	1996 AVERAGE	1997 AVERAGE	1998 AVERAGE	1999 JANUARY	1999 APRIL	1999 JULY	1999 OCTOBER
Korpacz Yield Indicator (KYI)[a]	12.18%	11.96%	11.82%	11.59%	11.35%	11.27%	11.29%	11.28%	11.27%
Long-Term Mortgages[b]	9.00%	8.61%	7.86%	7.94%	6.93%	7.14%	7.54%	8.15%	8.20%
10-Year Treasuries[c]	6.92%	6.86%	6.33%	6.48%	5.34%	4.69%	5.27%	5.85%	6.00%
Consumer Price Index Change[d]	2.61%	2.78%	2.96%	2.07%	1.48%	0.73%	4.63%	1.20%	3.60%
SPREAD TO KYI (Basis Points)									
Long-Term Mortgages	317	335	396	366	442	413	375	313	307
10-Year Treasuries	525	510	549	511	602	658	602	543	527
Consumer Price Index Change	957	918	886	952	987	1054	666	1008	767

a. A composite IRR average of the markets surveyed.
b. 10-year or longer term for commercial and industrial property. Source: Research Department, Appraisal Institute and Federal Reserve; beginning October 1994, Crittenden Publishing, Inc.; compiled by PricewaterhouseCoopers LLP.
c. Source: Federal Reserve.
d. Source: U.S. Department of Commerce; quarterly changes are annualized based on the index change from the prior quarter; the year-end change is based on the index change from the prior-year fourth quarter.

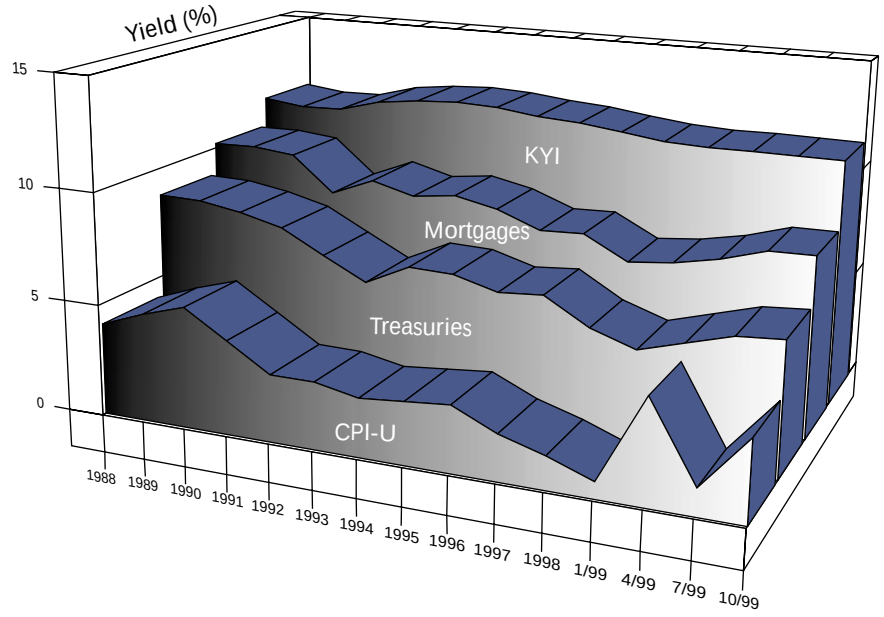
YIELD COMPARISONS:
Real Estate vs. Alternative Investments

The Korpacz Yield Indicator (KYI) decreased 1 basis point to 11.27% (see Table 1). The current rate is 8 basis points lower than the 1998 average. The KYI peaked at 12.29% in fourth quarter 1993. For the most part, it has trended downward since.

The average long-term mortgage rate is 8.20%, 5 basis points higher than the rate last quarter. The current rate is 127 basis points higher than the 1998 average. This reflects the continuing upward push on interest rates.

The 10-year treasury rate increased 15 basis points to 6.00%. The current rate is 66 basis points higher than the 1998 average.

Figure 1
Comparative Yields
OCTOBER 1, 1999



The relationship between real estate yields and inflation is noted by comparing yields to the CPI. From July to October the CPI change rate increased 240 basis points from 1.20% to 3.60% (annualized). The spread between the KYI and CPI change rate is 767 basis points.

The spread between the KYI and long-term mortgage rates decreased 6 basis points from last quarter's 313 basis points to 307. The current spread is 135 basis points lower than the 1998 average.

The spread between the KYI and 10-year treasuries decreased 16 basis points to 527. The current spread is 75 basis points below the 1998 average. The tightening of the spreads between the KYI and interest rates is typical during periods of rising interest rates. Although real estate yields are sensitive to interest rate changes, they do not move precisely in concert.

DIVIDEND COMPARISONS:
Public vs. Private Markets

REIT dividend yields can be compared with stock dividend yields, although they are not exactly comparable. As Merrill Lynch cautions: AP/E ratios for most companies incorporate measures of earnings after depreciation, whereas

REIT earnings are measured as a function of funds from operation (FFO), which basically amount to earnings before depreciation. Adjustments to FFO for recurring capital expenditures still do not result in adjusted FFO (AFFO) measures which are readily comparable to GAAP [generally accepted accounting principles] earnings in other sectors.

The REIT dividend yield is somewhat comparable to the going-in cap rate (OAR) on an all-cash sale. The OAR is the dividend rate that a direct real estate investor receives upon a cash purchase of a property. However, caution must be exercised here as well. The Korpacz Dividend Indicator (KDI) is a composite OAR (initial rate of return in an all-cash transaction) average of the 18 commercial markets surveyed. The average annualized equity REIT dividend yield is for all companies, including for example, health care and manufactured homes, which are not tracked in this survey.

As a result of such differences among dividends for equity REITs, the S&P 500, and OARs, the comparisons are not perfect. However, they do show trends among these three types of investments.

The KDI, average dividend yields for equity REITs, and the S&P 500, as well as spreads between the KDI and the other investments, are set out in Table 2. From 1994 through 1996, the annual average KDI consistently increased. At the same time, the spread between average annual IRRs and OARs consistently decreased. The narrowing spread is indicative of investors' diminished anticipation of both income growth and property appreciation.

In 1997 the annual average KDI decreased slightly. The spread between average IRRs and average OARs narrowed in most of the quarters of 1997 and widened slightly in 1998. This quarter the spread is 214 basis points, the same as the prior quarter. Since prices are expected to remain stable for the balance of the year, the relationship between average OARs and average IRRs is unlikely to change significantly.

Average annualized equity REIT dividends have fluctuated considerably during the 1990s, due primarily to fluctuations in their stock prices. The spread between the KDI and REITs climbed from the 1991 annual average of 38 basis points to the historical high of 382 basis points, reached September 30, 1997. This quarter the spread is 86 basis points.

Changes in the spread between the KDI and the average S&P 500 from 1991 through present range from a low of 545 basis points in third quarter 1991 to last quarter's high of 794. This quarter the spread is 783 basis points.

Average annual real estate dividends, as expressed by the KDI, are higher than REIT dividends and S&P 500 dividends in every year shown in Table 2. The likely reasons that the private market real estate dividends are higher than public market dividends are the burden of management and the lack of liquidity in direct private ownership of real estate. In the public market, there is no management burden, and the opportunity for liquidity is present daily.

Historically the return on stocks, as represented by the S&P 500, has been considerably lower than the return from all forms of real estate ownership. Stocks have consistently provided the bulk of their return in appreciation of the stock over time.

INSTITUTIONAL vs. NONINSTITUTIONAL RATES

EDITOR'S NOTE: Table 3 shows non-institutional-grade property discount rates (IRRs) and overall cap rates (OARs) for the surveyed markets for which sufficient data are available.

As with the rates published for institutional-grade property, we do not represent that the survey is statistically accurate for each surveyed market. Analysts are cautioned to test rates in local markets to verify spreads and relationships between institutional-grade

Table 2
Dividend Comparisons
OCTOBER 1, 1999

DIVIDEND INDICATORS	1994 AVERAGE	1995 AVERAGE	1996 AVERAGE	1997 AVERAGE	1998 AVERAGE	1999 JANUARY	1999 APRIL	1999 JULY	1999 OCTOBER
Korpacz Dividend Indicator (KDI)[a]	9.29%	9.31%	9.39%	9.35%	9.08%	9.11%	9.12%	9.14%	9.13%
Equity REITs[b]	7.25%	7.75%	7.09%	6.06%	6.01%	7.47%	7.96%	7.34%	8.27%
S&P 500[c]	2.85%	2.41%	2.11%	1.83%	1.57%	1.32%	1.28%	1.20%	1.30%
SPREAD TO KDI (Basis Points)									
Equity REITs	204	156	230	329	307	164	116	180	86
S&P 500	644	690	728	752	751	779	784	794	783

a. A composite OAR (initial rate of return in an all-cash transaction) average of the markets surveyed.
b. Source: National Association of Real Estate Investment Trusts; average annualized dividend yield calculated by PricewaterhouseCoopers LLP; dividend yields are as of the last day of the prior quarter.
c. Source: S&P 500 Analysts' Handbook Office Series–Monthly Supplements; average annual dividend yield calculated by PricewaterhouseCoopers LLP; dividend yields are quarterly yields as of the last day of the prior quarter.

Table 3
Rates: Institutional-Grade vs. Noninstitutional-Grade Property
FOURTH QUARTER 1999

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	INSTITUTIONAL				NONINSTITUTIONAL				SPREAD TO INSTITUTIONAL	
	IRRs		OARs		IRRs		OARs		AVERAGE IRR	AVERAGE OAR
Market	Range	Average	Range	Average	Range	Average	Range	Average	Basis Points	Basis Points
National Regional Mall	9.75%-14.00%	11.28%	6.60%-14.50%	8.69%	11.00%-15.00%	13.19%	8.00%-12.00%	9.75%	191	106
National Power Center	10.25%-12.50%	11.28%	8.00%-10.50%	9.58%	NA	NA	NA	NA	NA	NA
National Strip Shopping Center	10.00%-14.00%	11.57%	8.00%-12.00%	9.75%	10.50%-18.00%	13.93%	9.00%-15.00%	11.67%	236	192
National CBD Office	9.75%-15.00%	11.24%	7.00%-11.00%	8.79%	11.00%-18.00%	13.28%	8.00%-14.00%	10.50%	204	171
National Suburban Office	9.75%-12.50%	11.07%	7.50%-10.50%	9.14%	10.75%-14.50%	12.44%	9.50%-12.50%	10.79%	137	165
Atlanta Office	9.75%-12.00%	11.08%	8.00%-10.50%	9.29%	11.00%-13.50%	12.13%	10.00%-11.00%	10.63%	105	134
Boston Office	10.00%-13.00%	11.08%	7.50%-11.00%	8.95%	11.00%-16.00%	13.25%	9.00%-13.00%	10.56%	217	161
Chicago Office	9.29%-13.00%	10.84%	8.00%-10.00%	9.06%	10.04%-14.75%	12.37%	8.50%-12.00%	10.28%	153	122
Dallas Office	9.00%-13.00%	11.31%	7.50%-12.00%	9.42%	11.50%-15.50%	13.75%	9.00%-14.50%	11.63%	244	221
Houston Office	9.00%-13.50%	11.53%	8.00%-12.00%	9.60%	13.00%-14.25%	13.31%	10.50%-11.50%	11.00%	178	140
Los Angeles Office	10.00%-15.00%	11.70%	7.00%-10.50%	8.85%	11.00%-20.00%	14.53%	8.50%-13.00%	10.20%	283	135
Manhattan Office	9.75%-13.00%	11.36%	7.50%-10.50%	9.03%	10.25%-15.00%	13.00%	8.50%-13.00%	10.71%	164	168
Pacific Northwest Office	10.50%-13.00%	11.36%	8.00%-11.00%	9.20%	11.50%-18.00%	13.94%	9.25%-13.00%	10.90%	258	170
San Francisco Office	10.00%-13.00%	11.02%	7.00%-11.00%	8.53%	10.25%-14.50%	12.90%	7.50%-11.50%	9.72%	188	119
Southeast Florida Office	10.00%-12.00%	11.06%	8.00%-12.00%	9.39%	11.25%-15.00%	13.20%	9.00%-14.00%	10.70%	214	131
Washington, DC Office	10.00%-14.00%	11.53%	7.00%-11.00%	9.14%	13.50%-18.00%	15.00%	10.50%-14.00%	11.50%	347	236
National Industrial	9.50%-12.50%	11.09%	7.50%-10.00%	9.09%	10.50%-16.00%	12.44%	8.75%-12.00%	10.35%	135	126
National Apartment	10.00%-15.00%	11.52%	7.50%-11.00%	8.84%	11.00%-17.00%	12.88%	8.25%-12.00%	9.83%	136	99

and noninstitutional-grade property rates. Despite the survey findings that rates are higher for noninstitutional-grade property, in our appraisal work we have found that the reverse is true in some cases in some markets.

As is typical, the IRRs in our Survey are higher for noninstitutional-grade property than for institutional-grade property, reflecting the greater risk in owning noninstitutional-grade real estate.

The composite average noninstitutional-grade IRR for all markets is 13.27%, 1 basis point below the average from the prior quarter. By comparison, the composite average institutional-grade IRR is 11.27%. For all the markets surveyed, average noninstitutional-grade IRRs range from 12.13% (Atlanta office market) to 15.00% (Washington, DC office market).

Like the IRRs, the OARs in our Survey are higher for noninstitutional-grade property than for institutional-grade property. Average noninstitutional-grade OARs range from 9.72% (San Francisco office market) to 11.67% (national strip shopping center market). The composite average noninstitutional-grade OAR for all markets is 10.63%. This is 1 basis point above the average from last quarter. By comparison, the composite average institutional-grade OAR is 9.13%.

MARKETING TIME

Commercial Markets

Marketing time, the period from putting a property on the market to closing, has remained relatively stable since last quarter. Marketing time estimates for retail, office, industrial, and apartment properties are included in the Investor Survey Response tables in the back of our Survey. Averages for the 18 commercial markets are shown in Table 4. Last quarter and year-ago averages are also included.

This quarter the average marketing period for all surveyed commercial markets is 6.92 months. This is a

Table 4
Average Marketing Time (months)
FOURTH QUARTER 1999

MARKET	CURRENT QUARTER	LAST QUARTER	YEAR AGO
National Regional Mall	8.11	8.11	9.55
CHANGE	—	0.00%	–15.08%
National Power Center	7.13	7.13	7.50
CHANGE	—	0.00%	–4.93%
National Strip Shopping Center	6.68	6.68	6.66
CHANGE	—	0.00%	+0.30%
National CBD Office	8.36	8.36	8.64
CHANGE	—	0.00%	–3.24%
National Suburban Office	7.53	7.75	8.08
CHANGE	—	–2.92%	–6.81%
Atlanta Office	6.50	6.50	6.50
CHANGE	—	0.00%	0.00%
Boston Office	4.50		
CHANGE	—		
Chicago Office	7.17	7.50	7.50
CHANGE	—	–4.60%	–4.40%
Dallas Office	7.14	7.14	6.69
CHANGE	—	0.00%	+6.73%
Houston Office	7.06	7.19	6.61
CHANGE	—	–1.84%	+6.81%
Los Angeles Office	5.61	5.56	6.06
CHANGE	—	+0.89%	–7.43%
Manhattan Office	9.33	9.33	7.86
CHANGE	—	0.00%	+18.70%
Pacific Northwest Office	7.13	7.13	7.29
CHANGE	—	0.00%	–2.19%
San Francisco Office	5.63	5.63	6.25
CHANGE	—	0.00%	–9.92%
Southeast Florida Office	8.07	8.07	8.07
CHANGE	—	0.00%	0.00%
Washington, DC Office	6.83	7.17	7.33
CHANGE	—	–4.98%	–6.82%
National Industrial	6.56	6.47	7.03
CHANGE	—	+1.37%	–6.69%
National Apartment	5.26	5.43	4.88
CHANGE	—	–3.23%	+7.79%
All Markets Surveyed (Simple Average)	6.92	7.13	7.21
CHANGE	—	–2.95%	–3.99%

2.95% decrease from last quarter and a 3.99% drop from one year ago. The decrease in marketing time reflects the real estate industry's healthy climate.

At 9.33 months, the Manhattan office market continues to have the highest average marketing time. However, this is more a reflection of a decline in the quality of the buildings on the market than of the fundamentals of the market. The Boston office market, which many participants believe offers some of the best investment opportunities in the country, has the lowest average marketing time at 4.50 months.

GEOGRAPHIC PREFERENCES

Regional mall buyers prefer properties located in metropolitan areas with high population density and above-average income levels, such as Washington, DC, New York, and Los Angeles. While power centers and neighborhood and community center investors prefer the top MSAs nationwide, many are refocusing on infill locations around major cities, including Atlanta, Seattle, and San Francisco.

The popularity of CBD office markets continues to increase among tenants and investors. Although several major cities boast vacancy rates below 10.0%, top CBD office markets mentioned by participants include Boston, Seattle, San Diego, and San Francisco. Investor interest in Denver is also increasing. These preferred markets have solid employment bases, good population growth, and limited new construction.

There are mixed views on which suburban office markets offer the best investment opportunities. Many cities consist of submarkets with diverse vacancy rates, construction levels, and demand. While some investors like Dallas, other investors have "redlined" that market. The same is true for Atlanta. Preferred markets – those where proposed construction is typically less than projected demand in the near term – include Phoenix, Boston, Chicago, Minneapolis, and New York. The Northern Virginia office market, particularly the Dulles submarket, also impresses participants.

For industrial properties investors prefer cities with excellent transportation networks, including Atlanta and Nashville. Chicago is also favored, especially the southern and western sections.

Choice areas for apartment investing include Seattle, Houston, Atlanta, Boston, and Washington, DC. Other geographic preferences include Florida, Arizona, Kentucky, and Colorado.

VALUATION ISSUES

Vacancy Assumptions

Current and year-ago vacancy assumptions are presented in Exhibit 1. Since apartment vacancy is treated differently than other property types – investors include a total vacancy assumption – the apartment market is not included in the exhibit. Comparisons between the current and year-ago information do not include the Boston office market, since it was only introduced this quarter.

An examination of the vacancy assumptions used in analyzing potential acquisitions indicates that investors are more confident for eight of the markets surveyed that space can be released when leases roll over than they were a year ago. Although the remaining markets show increases in the number of months vacant from a year ago, they are offset by improvements in the tenant retention and/or the underlying vacancy and credit loss assumptions.

The greatest percentage decrease in the average months vacant assumption (18.94%) is in the national regional mall market. Underlying vacancy and credit loss for this market also declined, and at 3.56% is the lowest of all the markets surveyed. However, tenant retention in the national regional mall market increased to 66.95%, one of the highest tenant retention changes in our Survey.

The Houston office market had the greatest percentage increase in the average months vacant assumption (13.11%); months vacant increased from 5.55 one year ago to 6.28 this quarter. Even though this market appears to be recovering from the negative effects of corporate mergers and low oil prices, investors are still not comfortable using aggressive vacancy assumptions. While tenant retention declined to 64.72%, underlying vacancy and credit loss increased to 5.22%.

Due to high rental rates and low vacancy rates in most markets, tenants are more likely to remain in existing spaces at lease expiration. As a result, tenant retention percentage increased in 11 of the surveyed markets. The increases ranged from 31 basis points in the Southeast Florida office market to 200 basis points in the national regional mall market. The largest decrease of 413 basis points occurred in the Dallas office market. Apparently, the recent slowdown in new construction has not boosted investors' confidence in this market. Both months vacant and underlying vacancy and credit loss also increased in this market.

Underlying vacancy and credit loss assumptions declined in 12 surveyed markets. The largest decrease (133 basis points) was in the Atlanta office market. Investors are impressed at how absorption in this market is outpacing new construction.

For the national apartment market, the current total vacancy assumption ranges from 3.00% to 10.50%; the range was from 3.00% to 10.00% one year ago. The current average is 6.39%, unchanged from the average one year ago. ■

Exhibit 1. Vacancy Assumptions — FOURTH QUARTER 1999

	MONTHS VACANT		TENANT RETENTION		UNDERLYING VACANCY & CREDIT LOSS	
MARKET	CURRENT	YEAR AGO	CURRENT	YEAR AGO	CURRENT	YEAR AGO
National Regional Mall						
RANGE	2-12	2-12	50.0%-75.0%	50.0%-75.0%	0.0%-10.0%	1.0%-10.0%
AVERAGE	5.35	6.60	66.95%	64.95%	3.56%	4.20%
CHANGE[a]		–18.94%		+200		–64
National Power Center						
RANGE	2-12	2-12	30.0%-80.0%	50.0%-80.0%	0.0%-10.0%	0.0%-10.0%
AVERAGE	5.29	5.00	61.69%	62.67%	5.25%	5.30%
CHANGE[a]		+5.71%		–98		–5
National Strip Shopping Center						
RANGE	2-12	2-12	50.0%-75.0%	30.0%-75.0%	1.0%-20.0%	1.0%-20.0%
AVERAGE	5.76	5.64	63.55%	62.78%	5.39%	5.42%
CHANGE[a]		–2.18%		+77		–3
National CBD Office						
RANGE	3-12	4-12	50.0%-75.0%	50.0%-75.0%	1.0%-10.0%	1.0%-10.0%
AVERAGE	7.75	8.13	64.54%	63.08%	4.54%	4.58%
CHANGE[a]		–4.67%		+146		–4
National Suburban Office						
RANGE	2.5-12	2.5-12	50.0%-80.0%	50.0%-80.0%	0.0%-10.0%	0.0%-10.0%
AVERAGE	6.59	6.47	65.79%	64.62%	4.75%	4.78%
CHANGE[a]		+1.83%		+117		–2
Atlanta Office						
RANGE	0-9	0-9	60.0%-75.0%	60.0%-75.0%	2.0%-10.0%	4.0%-10.0%
AVERAGE	4.92	4.58	66.17%	67.83%	5.42%	6.75%
CHANGE[a]		+7.35%		–166		–133
Boston Office Market						
RANGE	3-9		50.0%-70.0%		1.0%-10.0%	
AVERAGE	6.00		64.50%		5.79%	
CHANGE[a]						
Chicago Office						
RANGE	2-6	2-12	50.0%-75.0%	50.0%-75.0%	1.0%-10.0%	1.0%-10.0%
AVERAGE	4.83	5.11	63.61%	64.44%	5.22%	4.83%
CHANGE[a]		–5.41%		–83		+39
Dallas Office						
RANGE	4-9	3-9	50.0%-75.0%	60.0%-80.0%	2.0%-15.0%	2.0%-10.0%
AVERAGE	6.38	5.89	62.81%	66.94%	5.75%	4.89%
CHANGE[a]		+8.23%		–413		+86
Houston Office						
RANGE	3-10	3-9	60.0%-75.0%	60.0%-75.0%	1.0%-12.0%	1.0%-10.0%
AVERAGE	6.28	5.55	64.72%	66.75%	5.22%	4.70%
CHANGE[a]		+13.11%		–203		+52
Los Angeles Office						
RANGE	2-12	2-12	50.0%-75.0%	50.0%-75.0%	3.0%-10.0%	3.0%-10.0%
AVERAGE	6.27	5.95	68.18%	67.25%	6.05%	6.64%
CHANGE[a]		+5.42%		+93		–59
Manhattan Office						
RANGE	2-18	2-18	50.0%-75.0%	50.0%-75.0%	1.0%-14.0%	1.0%-14.0%
AVERAGE	7.28	7.80	65.00%	64.00%	5.47%	5.53%
CHANGE[a]		–6.70%		+100		–6
Pacific Northwest Office						
RANGE	3-9	3-9	50.0%-80.0%	50.0%-80.0%	0.0%-10.0%	0.0%-10.0%
AVERAGE	6.00	6.07	67.50%	67.14%	5.25%	5.50%
CHANGE[a]		–1.15%		+36		–25
San Francisco Office						
RANGE	2-18	2-18	60.0%-75.0%	60.0%-75.0%	1.0%-8.0%	0.0%-6.0%
AVERAGE	5.88	6.67	69.69%	67.50%	4.53%	3.71%
CHANGE[a]		–11.92%		+219		+82
Southeast Florida Office						
RANGE	3-9	2-9	50.0%-80.0%	50.0%-80.0%	4.0%-13.0%	4.0%-13.0%
AVERAGE	5.94	5.50	69.06%	68.75%	6.81%	6.88%
CHANGE[a]		+7.95%		+31		–7
Washington, DC Office						
RANGE	2-18	2-18	55.0%-75.0%	50.0%-75.0%	1.0%-14.0%	1.0%-10.0%
AVERAGE	7.05	7.50	66.00%	65.00%	4.80%	4.82%
CHANGE[a]		–6.00%		+100		–2
National Industrial						
RANGE	2-12	3-12	50.0%-75.0%	50.0%-80.0%	1.0%-8.0%	1.0%-8.0%
AVERAGE	6.34	6.50	64.69%	63.53%	4.53%	4.81%
CHANGE[a]		–2.40%		+116		–28
All Markets (Simple Average)	6.11	6.19	65.56%	65.43%	5.20%	5.21%
CHANGE[a]		–1.27%		+13		–1

a. Tenant Retention and Underlying Vacancy & Credit Loss changes are reported in basis points.

ECONOMIC NEWS

Interest Rates Inch Up Again

Marking the third time this year that interest rates increased, the Federal Reserve (Fed) raised interest rates 25 basis points on November 16. Immediately following the announcement, stocks soared, and both the Nasdaq and Standard & Poor's 500 index hit record levels closing at 3293.05 and 1419.83, respectively.

While many investors are predicting that the Fed will not raise interest rates again until well into the year 2000, others speculate that more increases may occur sooner rather than later since the economy is still growing at a fast pace. If, as many believe, the current rapid pace of the economy is tied to Y2K, then the economy will likely slowdown on its own following the first of the year without any more government intervention.

In preparation for the unknown aspects of Y2K, demand for certain types of products has increased substantially. While this defensive stockpiling has had a positive impact on the economy, it will likely slow the pace of the economy following January 1 after Y2K issues, if any, are resolved. As illustrated in Exhibit E-1, the Gross Domestic Product (GDP) for the second half of 1999 is well above that projected for the first half of 2000. The chart suggests that the GDP will decline over 300 basis points after the new year.

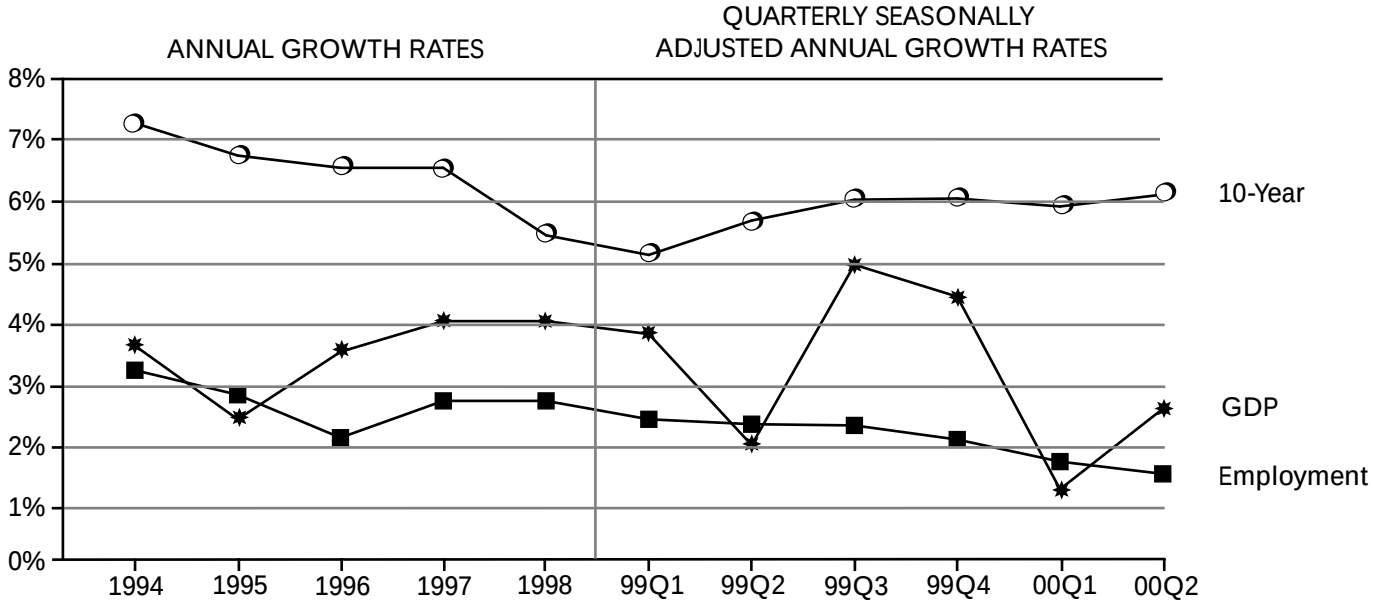
As a result of a decline in the GDP, employment growth is also expected to dip during the first half of the new year. During the first two quarters of 2000, employment growth is projected to average 1.51%, 66 basis points below the quarterly average of 1999. Growth rates for ten-year treasuries are expected to remain relatively stable, but will continue to be much lower than in prior years.

The Effect of Higher Interest Rates on Real Estate

In addition to impeding real estate financing and thus limiting the number of transactions, the recent increase in interest rates will likely put upward pressure on overall cap rates. Yet, real estate yields do not move precisely in concert with interest rate changes. Prior increases in interest rates during 1999 did not result in dramatic changes in cap rates. Furthermore, changes in interest rates do not affect all property types with the same magnitude. Second-tier property classes are generally more affected than top-tier property classes.

Most real estate investors are impressed by the Fed's reaction to the economy. "They are doing a good job of keeping things in check," comments a participant. Even with the latest up tick in interest rates, investors are optimistic about the future health of the real estate industry. Although the thought of a recession lies in the back of many investors' minds, it is not a focal point. "You cannot plan your business around a recession that may or may not happen," says a participant. Still, investors continue to keep a close eye both on the stock market and on international economies. Significant shifts in either one will likely bring about the next major economic downturn. ■

Exhibit E-1
Growth Rate Comparisons
OCTOBER 1, 1999



Source: RFA

National Regional Mall Market

Top-tier regional malls continue to be the preferred property type of regional mall investors. "Most Class-A malls continue to retain their value or appreciate in value," comments a participant. "The market for Class-B malls, and below, is very soft."

Buyers in the market, including well-capitalized REITs and pension fund/REIT partnerships, are interested in Class-A malls that have strong credit tenants and that are situated in high-growth markets with high barriers to entry. However, there are not many of these properties for sale.

Instead of waiting for preferred properties to be put up for sale, investors are developing their own products. Simon Property Group recently opened Mall of Georgia at Mill Creek. Current anchors at this 1.7-million-square-foot regional mall include Dillards, JCPenney, and Lord & Taylor. Keeping with the current trend for entertainment-related retail, this mall also includes a 20-screen theater and a seven-story IMAX theater. Another mall developer, Mills Corp., recently started construction of Arundel Mills, a 1.4-million-square-foot retail and entertainment center, in Baltimore, Maryland.

High barriers to entry, a lack of sufficient mall sites, and existing competition in strong markets are causing regional mall developers and investors to refocus their strategies. Older malls throughout the country, which are struggling to survive, are being purchased for redevelopment. One such property, Mission Viejo Mall in Orange County, California, recently reopened with a new look and a new name.

Most cash flow assumptions shifted this quarter. The largest shift occurred for the average overall cap rate (OAR) which increased 28 basis points to 8.69%. The average discount rate (IRR) inched up only 9 basis points, but the high end of the range jumped to 14.00%.

Investors expect trophy properties to generate the highest growth in income and value. Accordingly, top-tier malls are trading at cap rates considerably lower than the average OAR in the national regional mall market. For A+ malls, the range of cap rates is from 7.00% to 9.00%; the average is 7.75%. For A malls, the range is from 7.00% to 9.50%; the average is 8.15%. For B+ malls, cap rates range from 7.50% to 10.00%; the average is 8.65%. For B malls, the range is from 8.25% to 11.00%; the average is 9.71%.

The majority of regional malls are priced near replacement cost. Participants indicate that prices in the national regional mall market range from 80.00% to 120.00% of replacement cost. The average is 97.50% of cost. The average estimate of value change over the next 12 months is 3.50%.

In an attempt to capture additional market share, traditional mall tenants are flocking to the Internet to set up web sites or to purchase existing ones. "If you're not on board now, you will be left behind," comments a participant. Walt Disney recently announced that it is purchasing a majority interest in Toysmart.com, an online toy retailer. Larger department stores, such as Target and Nordstrom, are also online now.

Regional mall owners are trying to attract Internet-only retailers, such as Amazon.com and eToys, as tenants. Since many consumers are wary of Internet security and feel that Internet-only retailers lack customer relations, it is likely more advantageous for businesses to provide both retailing options. Placing Internet-only retailers in malls could have a positive influence by alleviating occupancy problems and enabling recapture of some percentage rental revenue that has been lost to e-commerce. This is an interesting trend which bears watching. ■

Table 5
National Regional Mall Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	9.75%–14.00%	9.75%–12.50%	10.00%–13.00%
AVERAGE	11.28%	11.19%	11.28%
CHANGE (Basis Points)	—	+9	0
Overall Cap Rate (OAR)[a]			
RANGE	6.60%–14.50%	7.00%–10.50%	7.00%–11.00%
AVERAGE	8.69%	8.41%	8.45%
CHANGE (Basis Points)	—	+28	+24
Market Rent Change Rate[b]			
RANGE	0.00%–4.00%	0.00%–4.00%	0.00%–4.00%
AVERAGE	3.25%	3.21%	3.00%
CHANGE (Basis Points)	—	+4	+25
Expense Change Rate[b]			
RANGE	3.00%–4.00%	3.00%–4.00%	3.00%–4.00%
AVERAGE	3.28%	3.28%	3.60%
CHANGE (Basis Points)	—	0	–32
Residual Cap Rate			
RANGE	7.50%–10.50%	7.50%–10.50%	7.50%–11.00%
AVERAGE	8.63%	8.55%	8.76%
CHANGE (Basis Points)	—	+8	–13

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

National Power Center Market

The overwhelming popularity of e-retailing and its long-term effect on power centers is a hot topic among investors. The Internet is quickly changing the makeup of retailing, and investors are unsure of its prolonged impact on power centers. "It is an unknown, and that is as much of a risk as the known," comments a participant.

Nobody knows for sure exactly what impact the Internet is going to have on traditional retailers. Everyone, though, is in agreement that it will have one. Some speculate that e-retailing will reduce overall space requirements and thus will result in more store closures and consolidations. "The stronger players will get stronger, and the weaker players will get weaker," says a participant.

While there is fear that e-retailing will decrease space demand, there is also hope that it will increase demand. Some Internet-based retailers that are not active in traditional retail environments are scouting shopping centers throughout the country for locations that will complement and expand their e-stores.

Not all big-box retailers will be negatively affected by e-commerce. There are several well-established retailers, such as Target, Wal-Mart, and Home Depot, which seem to do no wrong. "It seems like they will always be around," adds a participant. Many dominant big-box retailers are setting up their own web sites to compete with online retailers and to further their stronghold on the market. Others are likely to follow.

After being the fastest growing retail sector for the past five years, the pace of new construction and tenant expansions within the national power center market has slowed. "Deals are not getting easier, but they are not getting harder," says a participant. Despite the slowdown, the construction of new centers continues. Investors caution that Los Angeles, Phoenix, and Atlanta may be overstored.

Some investors prefer to acquire power centers located within high-growth markets, such as Florida and California. Others prefer markets with slower growth, such as the Northeast and Midwest. The choice depends on one's strategy. Strong growth areas, while typically providing more revenue growth, are usually saturated with competition. Market areas with less dominant economic and demographic growth typically have less competition, but may offer less potential for income growth.

Most cash flow assumptions had minor changes this quarter. The average discount rate (IRR) and average overall cap rate (OAR) each increased 8 basis points. According to participants, power centers are priced slightly above replacement cost. Prices range from 80.00% to 125.00% of replacement cost. The average price is 101.67% of cost. Values are expected to remain steady over the next 12 months.

Investors are seeing a longer downtime between leases, as the number of strong credit-rated tenants is diminishing. Several tenants that were once highly sought after by landlords are experiencing financial difficulties. After growing at record levels over recent years, several big-box retailers are on the verge of bankruptcy. New big-box concepts, like Dave & Busters and Just For Feet, are suffering the effects of moving too fast.

As the retail landscape changes, owners of current and future power centers need to rethink their tenant mix. To compete successfully with online retailers and other center, power centers need to create a special niche and enhance one's shopping experience. "The days of just acquiring land and building ordinary big-box stores are over," says a participant. ■

Table 6
National Power Center Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	10.25%–12.50%	10.25%–12.50%	10.00%–12.50%
AVERAGE	11.28%	11.20%	11.29%
CHANGE (Basis Points)	—	+8	–1
Overall Cap Rate (OAR)[a]			
RANGE	8.00%–10.50%	8.00%–10.50%	8.00%–10.50%
AVERAGE	9.58%	9.66%	9.77%
CHANGE (Basis Points)	—	–8	–19
Market Rent Change Rate[b]			
RANGE	0.00%–4.00%	0.00%–4.00%	0.00%–4.00%
AVERAGE	2.84%	2.88%	2.83%
CHANGE (Basis Points)	—	–4	+1
Expense Change Rate[b]			
RANGE	2.00%–4.00%	2.00%–4.00%	3.00%–4.00%
AVERAGE	3.16%	3.19%	3.38%
CHANGE (Basis Points)	—	–3	–22
Residual Cap Rate			
RANGE	9.00%–10.50%	9.00%–10.50%	9.00%–10.50%
AVERAGE	9.75%	9.75%	9.79%
CHANGE (Basis Points)	—	0	–4

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

National Strip Shopping Center Market

Not only has the slowdown of acquisitions by REITs put pressure on the prices of strip shopping centers, it has reduced the number of buyers as well. Although this is good news for investors who were unable to acquire strip shopping centers while REITs dominated the market 15 to 18 months ago, it comes at a time when an increase in interest rates has decreased the number of properties that are up for sale.

When the high prices offered by REITs began to fade from the market, so did many prospective sellers. "Properties are still available for sale, but they are just not as widely marketed," comments a participant. Although not actively marketing properties for sale as they did when REIT acquisitions were at their peak, some shopping center owners are still open to qualifying offers.

Based on projected gains in personal income per household over the next 18 months, the top three cities for consumer demand are thought to be San Francisco, Boston, and Seattle-Everett, as indicated in a recent Donaldson, Lufkin & Jenrette (DLJ) report. The lowest ranked cities are Atlanta, Raleigh-Durham-Chapel Hill, and Las Vegas.

Land continues to be acquired for the development of strip shopping centers. Developers favor areas with low levels of existing and planned construction and with strong economic and demographic projections. According to DLJ, the top markets to best absorb new supply are Boston, New Orleans, and Seattle. Riskier markets include Sacramento, Denver, and Atlanta.

Although the majority of new development is focused in suburban areas, development is also occurring in inner cities. Urban locations that have recently been improved with new centers include Harlem in New York and Hartford, Connecticut. Developers are primarily attracted by the inner-city's dense population and lack of competition due to high barriers to entry. Although the reward is high, it is not without risk and cost. Land prices and construction costs are typically much higher for inner-city development, and it requires more government approval and community involvement.

The majority of strip shopping centers are priced near replacement cost. Prices range from 88.00% to 120.00% of replacement cost. The average price is 98.68% of cost. Values are expected to appreciate an average of 2.21% over the next 12 months.

All cash flow assumptions shifted this quarter. The largest mover was the average market rent change rate, which dropped 15 basis points to 3.02%. The spread between the average residual cap rate and the average OAR has remained relatively stable for the strip center market, averaging 27 basis points for 1999. This is just 1 basis point below the annual average for all the markets surveyed.

Going forward, investors expect to see little, if any, additional movement in cap rates. The change in the number of buyers and sellers has created a more balanced market. In turn, there will likely be no significant change in pricing, either. "I believe the market is very healthy, and we are where we should be," says a participant.

Although strip shopping centers are still perceived as a riskier investment than regional malls, the gap between average IRRs declined 12 basis points this quarter to 30 basis points. The spread between the average strip center OAR and the average regional mall OAR also declined this quarter by 31 basis points to a premium of 106 basis points. The statistics suggest that investors are a bit more optimistic about investing in strip shopping centers. ■

Table 7
National Strip Shopping Center Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	10.00%–14.00%	10.00%–14.00%	10.00%–14.00%
AVERAGE	11.57%	11.61%	11.53%
CHANGE (Basis Points)	—	–4	+4
Overall Cap Rate (OAR)[a]			
RANGE	8.00%–12.00%	8.25%–12.00%	8.00%–12.00%
AVERAGE	9.75%	9.78%	9.73%
CHANGE (Basis Points)	—	–3	+2
Market Rent Change Rate[b]			
RANGE	0.00%–5.00%	0.00%–6.00%	0.00%–7.00%
AVERAGE	3.02%	3.17%	3.17%
CHANGE (Basis Points)	—	–15	–15
Expense Change Rate[b]			
RANGE	2.00%–5.00%	2.00%–5.00%	2.50%–5.00%
AVERAGE	3.24%	3.22%	3.33%
CHANGE (Basis Points)	—	+2	–9
Residual Cap Rate			
RANGE	8.50%–12.00%	8.75%–12.00%	8.50%–12.00%
AVERAGE	10.01%	10.03%	9.95%
CHANGE (Basis Points)	—	–2	+6

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

National CBD Office Market

While landlords continue to control most of the major national CBD office markets, the moderation of rental rate growth is welcome news to tenants. New additions to supply and renovations of older buildings are not only causing rental rates to stabilize or to decline, but they are also providing tenants with alternatives when leasing space. Tenants who once considered relocating out of CBD markets due to the high cost of space may instead relocate within the CBD.

Top CBD office markets mentioned by participants include Boston, San Diego, and San Francisco. "Seattle is still looking good," comments a participant. "If I were picking cities, I would pick Chicago," states another participant. Denver's downtown interests one participant. "It seems to be coming back better and better," says the participant. "There is no new construction occurring in the Denver CBD, and absorption has been very steady." Participants are a bit cautious about Atlanta and Dallas.

Leasing activity in the national CBD office market throughout 1999 has been impressive. Nearly 68.6 million square feet of office space have been leased since the start of 1999, according to Cushman & Wakefield; most of it during the third quarter. And while mergers and acquisitions dumped space back into several markets, strong gains in employment kept many CBD markets out of trouble. Much of the recent leasing activity downtown has been from Internet, media, and telecommunication firms.

The migration of tenants to CBD office markets caused the overall national office vacancy rate for third quarter 1999 to decline to 9.5%, according to Cushman & Wakefield. This is a 60-basis-point decrease from midyear 1999.

The majority of cash flow assumptions held steady this quarter. With a drop of 20 basis points, the average market rent change rate incurred the largest shift. This is likely a reaction to the onset of additional space in the market. As a result, investors are a bit more cautious when analyzing investments. The only other assumption that changed this quarter was the average expense change rate, which slipped 4 basis points to 3.29%.

As a percentage of replacement cost, the average sale price in the national CBD office market increased slightly from the prior quarter. Participants estimate that sale prices range from 65.0% to 110.0% of replacement cost. The average is 91.25% of cost. Over the next 12 months, property values are expected to increase from 2.00% to 10.00%. The average expected appreciation is 4.93%.

Although low vacancy rates and pent-up demand prompted new construction in most major office markets from midyear 1998 to midyear 1999, including Chicago, Seattle, Portland, Washington, DC, San Francisco, and New York, the total volume of new space under construction has declined. A report on 40 major metropolitan areas throughout the country prepared by Merrill Lynch indicates that new building starts dropped 8.0% during that period. Merrill Lynch estimates that construction starts could decline an additional 5.0% to 10.0% by year-end 1999. The decline is due in part to increased preleasing and to higher loan-to-value requirements by lenders. A lack of prime available sites and costly and timely government procedures are also deterring developers.

Another deterrence for building new projects in CBD markets is the lack of adequate parking. While development and growth is a positive aspect for downtown areas, surface parking lots are typically purchased as development sites. Even cities that provide mass transportation options, such as Washington, DC and San Francisco, are concerned about parking shortages and may need to limit future development. ■

Table 8
National CBD Office Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	9.75%–15.00%	9.75%–15.00%	9.50%–15.00%
AVERAGE	11.24%	11.24%	11.22%
CHANGE (Basis Points)	—	0	+2
Overall Cap Rate (OAR)[a]			
RANGE	7.00%–11.00%	7.00%–11.00%	7.00%–11.00%
AVERAGE	8.79%	8.79%	8.72%
CHANGE (Basis Points)	—	0	+7
Market Rent Change Rate[b]			
RANGE	0.00%–8.00%	0.00%–8.00%	0.00%–8.00%
AVERAGE	3.48%	3.68%	4.00%
CHANGE (Basis Points)	—	–20	–52
Expense Change Rate[b]			
RANGE	2.00%–4.00%	2.00%–4.00%	2.00%–4.00%
AVERAGE	3.29%	3.33%	3.38%
CHANGE (Basis Points)	—	–4	–9
Residual Cap Rate			
RANGE	7.50%–11.00%	7.50%–11.00%	7.50%–11.00%
AVERAGE	9.31%	9.31%	9.32%
CHANGE (Basis Points)	—	0	–1

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

National Suburban Office Market

Sale prices are fairly high in the national suburban office market; a market often described by investors as static, balanced, and at a plateau. Nonetheless, there is a lot of interest for properties put up for sale. "I have found no shortage of buyers," says a participant. Buyers, however, represent different groups from last year. REITs by themselves are purchasing some assets, but the main players are private investor groups.

Not many transactions will be completed during the fourth quarter of 1999. Many investors and lenders have met their quotas for the year and are out of funds. Also, investors want to make certain that there are no negative issues relating to Y2K that may jeopardize transactions. After the start of the new millennium, an increase flow of money is expected to hit the market.

There are mixed views on which suburban office markets offer the best investment opportunities. Many markets consist of submarkets that have diverse vacancy rates, construction levels, and demand. While some investors like Dallas, other investors have "redlined" that market. The same is true for Atlanta. Other preferred markets – those where proposed construction is typically less than projected demand in the near term – include Phoenix, Boston, Chicago, Minneapolis, and New York. The Northern Virginia office market, particularly the Dulles submarket, also impresses participants. "That market just keeps absorbing space," comments a participant. In addition, investors feel positively about the suburban markets of Houston. "Our buildings there are all doing well," says a participant.

Despite the amount of development over the past few years, the underlying fundamentals of the market are still good. For third quarter 1999, the overall vacancy rate in suburban markets declined to 11.7%, according to Cushman & Wakefield. And year-to-date leasing activity in the national suburban office market was well above construction completions, too. Although nearly 52 million square feet of suburban office space were delivered to the market since the start of 1999, almost 130 million square feet of gross leasing occurred.

Even though suburban projects totaling approximately 63 million square feet are under construction, occupancy rates should continue to benefit from a tightening of construction lending and from a preference by corporations to be in suburban markets where there are typically large skilled labor pools.

While some suburban office buildings are trading at prices in excess of replacement cost, the average sale price in the national suburban office market is 98.55% of cost. Participants estimate that sale prices range from 80.0% to 110.0% of cost. The average projected price increase over the next 12 months declined over 100 basis points this quarter to 3.75%. The average increase ranges from 0.0% to 10.0%.

All cash flow assumptions shifted this quarter. With a drop of 30 basis points, the average market rent change rate incurred the largest change. This is a 65-basis-point drop from a year ago. Rent spikes in most suburban markets are a thing of the past, and investors are being less optimistic in their cash flow forecasts. The average discount rate (IRR) and average overall cap rate (OAR) slipped 2 basis points to 11.07% and 1 basis point to 9.14%, respectively. ■

Table 9
National Suburban Office Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	9.75%–12.50%	9.75%–12.50%	9.50%–12.50%
AVERAGE	11.07%	11.09%	11.06%
CHANGE (Basis Points)	—	–2	+1
Overall Cap Rate (OAR)[a]			
RANGE	7.50%–10.50%	7.50%–10.50%	7.50%–10.50%
AVERAGE	9.14%	9.15%	9.03%
CHANGE (Basis Points)	—	–1	+11
Market Rent Change Rate[b]			
RANGE	0.00%–8.00%	0.00%–8.00%	0.00%–8.00%
AVERAGE	3.37%	3.67%	4.02%
CHANGE (Basis Points)	—	–30	–65
Expense Change Rate[b]			
RANGE	2.00%–4.00%	2.00%–4.00%	2.00%–4.00%
AVERAGE	3.04%	3.09%	3.25%
CHANGE (Basis Points)	—	–5	–21
Residual Cap Rate			
RANGE	8.00%–11.00%	8.00%–11.00%	8.00%–11.00%
AVERAGE	9.46%	9.48%	9.47%
CHANGE (Basis Points)	—	–2	–1

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

Atlanta Office Market

The fear that Atlanta's office market is overbuilt may be a misperception. Amid all the construction activity, strong demand outpaced supply during third quarter 1999 resulting in a drop in vacancy rates. Those closely tied to the market believe that there is still enough demand to warrant even more construction. One problem is that Atlanta's road network is not expanding fast enough to support the area's growth.

Traffic congestion and air pollution are not keeping investors at bay. Many are looking to expand their investments in the market through acquisitions and development. In an effort to control growth and to minimize congestion and pollution, there has been an increased interest in renovating and in adding buildings to infill locations, such as midtown, where vacancy rates are extremely low. Many of these infill locations are served by Atlanta's MARTA rail system and are located near an abundance of housing.

While sales activity throughout Atlanta is down, sale prices are holding steady. Although both the number of buyers and the number of sellers have declined, top buildings are being well received. The Equitable Building, with a target sale price of $95.00 per square foot, is generating interest. This property sold in 1997 for about $61.00 per square foot. Participants warn to exercise caution when making investments in Atlanta because the market is very submarket specific. "Some areas are good and some are oversupplied," says a participant.

Congestion in the suburbs and the current revitalization of downtown are bringing tenants to the CBD. BellSouth, Time Warner, and HUD recently signed leases ranging from 100,000 to 275,000 square feet. The CBD's new appeal is expected to attract other tenants, and investors are predicting that it will become one of the leading submarkets going forward in terms of absorption.

The renewed interest downtown has prompted the construction of a 650,000-square-foot speculative office building. The property, Suntrust Plaza Gardens, is reportedly 50.0% preleased. Announcements for additional projects downtown have been made, but will likely not break ground until significant preleasing occurs.

Most cash flow assumptions shifted this quarter. The largest changes occurred in the average market rent change rate and in the average expense change rate, each decreasing 8 basis points. At 1.88%, the average market rent change rate is the lowest of all markets surveyed. In fact, Atlanta has continuously had the lowest average market rent change rate during 1999. Hence, investors are analyzing investments cautiously.

Most office buildings in Atlanta are fully priced. Participants report a range of prices from 90.00% to 110.00% of replacement cost. The average is 100.00% of cost. Prices are expected to increase up to 6.00% over the next 12 months; the average projected increase is 1.92%.

A couple of top real estate investment companies are looking to expand their presence in Atlanta through mergers and acquisitions. Lend Lease Corp. of Australia is considering buying Amresco Inc., one of the nation's largest commercial loan providers. In addition, The Blackstone Group of New York may purchase a majority stake in M.D. Hodges Enterprises Inc., one of Atlanta's top real estate developers.

Although absorption is outpacing construction in Atlanta, the rate of absorption has declined in comparison to prior years. However, tenants are slowly but surely being placed into new buildings. Though not readily apparent, even the most optimistic investors are expecting that constant additions to supply will negatively affect the market at some time. Investors are just hopeful that now is not the time. ■

Table 10
Atlanta Office Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	9.75%–12.00%	9.75%–12.00%	9.50%–13.50%
AVERAGE	11.08%	11.08%	11.17%
CHANGE (Basis Points)	—	0	–9
Overall Cap Rate (OAR)[a]			
RANGE	8.00%–10.50%	8.00%–10.50%	8.00%–10.50%
AVERAGE	9.29%	9.23%	9.21%
CHANGE (Basis Points)	—	+6	+8
Market Rent Change Rate[b]			
RANGE	0.00%–3.50%	0.00%–3.50%	0.00%–3.50%
AVERAGE	1.88%	1.96%	2.29%
CHANGE (Basis Points)	—	–8	–41
Expense Change Rate[b]			
RANGE	3.00%–3.00%	3.00%–3.50%	3.00%–4.00%
AVERAGE	3.00%	3.08%	3.35%
CHANGE (Basis Points)	—	–8	–35
Residual Cap Rate			
RANGE	9.00%–11.00%	9.00%–11.00%	9.00%–11.00%
AVERAGE	9.46%	9.46%	9.44%
CHANGE (Basis Points)	—	0	+2

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

Boston Office Market

When asked to name top real estate markets throughout the country, participants repeatedly mention the Boston office market as a favorite. This is neither a surprise, nor a coincidence. The Boston office market is red hot, and both buyers and sellers are trying to reap the benefits of near record-low vacancy rates and ongoing absorption.

The strength of the market, particularly in the CBD, is further enhanced by the lack of any significant construction. "There are very few places to build in the CBD," says a participant. Although there are four office projects totaling 3.1 million square feet planned for the CBD, neighborhood opposition and lack of city approvals are delaying the projects. It could be at least two years before new supply is added to the CBD.

The absence of any new additions to the CBD is keeping upward pressure on rental rates and is creating tenant apprehension about signing leases. As a result, new projects are also experiencing problems with preleasing. "It is absolutely a landlord's market, and tenants have sticker shock," comments a participant. Tenants are hoping that rental rates will come down, even slightly, before signing lease renewals or completing new deals. Although it doesn't look like rental rates will be declining any time soon, the rental condition will likely get to a point at which either something will have to happen, or tenants will be forced to leave the market.

Boston's suburban office markets are also performing well. The Route 128 Corridor that encircles Boston is extremely tight, especially the western and northern portions. As of third quarter 1999, the overall vacancy rate in the Route 128 submarket was 4.10%, according to Cushman & Wakefield. The Class-A vacancy rate was 3.50%. The tremendous demand for space near Route 128 is prompting additional building. Developers are buying land for both build-to-suit and speculative projects. Land prices are not cheap. A 15-acre site in Needham recently sold for $25 million-plus to a high-tech firm planning to build a new 400,000-square-foot headquarters complex. Once opportunities in the Route 128 Corridor are gone, development will likely stretch out to Route 495.

Since this is the first quarter we are reporting on the Boston office market, an historic comparison of the key indicators cannot be made. However, in comparison to the other office markets in our Survey, the average discount rate (IRR) reported for Boston (11.08%) is the third lowest. Lower IRRs are reported for San Francisco (11.02%) and Chicago (10.84%). The average overall cap rate (OAR) for Boston (8.95%) is also the third lowest of all the office markets surveyed. Lower OARs are reported for San Francisco (8.53%) and Los Angeles (8.85%).

Sale prices for Boston office properties continue to strengthen and are close to replacement cost. Participants report prices ranging from 80.00% to 100.00% of replacement cost. The average price is 95.00% of cost. Prices are expected to increase an average of 2.20% over the next 12 months.

Some investors view the prices in the suburban markets as too high, while others feel they are appropriate given Boston's low vacancy rates, diverse and stable economy, and job growth. Although prices in the suburbs are not much below prices downtown, investors are more comfortable making deals in the CBD where they perceive overbuilding to be less risky.

Buyers are interested in acquiring Class-A office buildings downtown, as well as Class-B product. Unlike other CBD markets, most of the Class-B buildings in Boston have already been renovated and are occupied by tenants paying close to market rent. "Buyers are buying properties based on the market's stability, not on the potential for upside," states a participant. ■

Table 11
Boston Office Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	10.00%–13.00%		
AVERAGE	11.08%		
CHANGE (Basis Points)	—		
Overall Cap Rate (OAR)[a]			
RANGE	7.50%–11.00%		
AVERAGE	8.95%		
CHANGE (Basis Points)	—		
Market Rent Change Rate[b]			
RANGE	2.50%–5.00%		
AVERAGE	3.08%		
CHANGE (Basis Points)	—		
Expense Change Rate[b]			
RANGE	2.50%–5.00%		
AVERAGE	3.25%		
CHANGE (Basis Points)	—		
Residual Cap Rate			
RANGE	8.00%–10.50%		
AVERAGE	9.42%		
CHANGE (Basis Points)	—		

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

Chicago Office Market

Despite affirmations that the city's economy is going strong, investors are a bit hesitant about making deals in the Chicago office market. The main reason for caution is the large amount of new space that is either under construction or planned for the market. Although there has been a slowdown in construction, leasing has slowed, too. With about two million square feet of space scheduled for completion through 2000, the office market could be heading for trouble. Weak leasing activity could put supply well ahead of demand. Many investors are waiting to see if Chicago's economy is strong enough to keep vacancy rates from rising too high, too fast.

Even without significant preleasing, new projects are being built. Union Tower, a 333,000-square-foot office building, was just completed, and is reportedly 70.00% vacant. At 550 W. Washington, virtually none of the space in this 372,000-square-foot office building under construction is preleased. The 260,000-square-foot office portion of a mixed-use project under construction at 401 N. Dearborn has low preleasing as well. In addition, construction of the 1.3-million-square-foot tower at One North Wacker resumed even without an anchor tenant signed. As if this wasn't enough speculative space, plans for a one-million-square-foot office building at 181 North Clark Street were recently submitted for city approval.

Investors are wondering where all the tenants will come from to fill the new space that is likely to command some of the highest rental rates in the market. Tenants in downtown Chicago are already reacting to increases in rental rates by relocating to less pricey submarkets, such as the East Loop. The key leader in this migration is Aon Corp., which is trading in its North Wacker Drive address to sublease 500,000 square feet of vacant space in the Amoco Building.

Other recent mergers and acquisitions have left an abundance of sublease space in the market creating other cost efficient alternatives for tenants shopping for space. Class-B buildings that have been renovated also offer affordable leasing options. Although the market is still considered a landlord's market, the onset of additional space without sufficient demand may create a drop in rental rates and/or an increase in concessions.

The search for lower rents is prompting Blue Cross Blue Shield (BCBS) to expand its 28-story building upward an additional 20 stories. Although BCBS will not begin construction until a significant portion of the expansion space is leased, BCBS is proposing rental rates nearly 30.00% below those offered at newly constructed buildings. With rental rates so appealing, BCBS may not wait very long before securing tenants and moving ahead with its expansion.

All cash flow assumptions shifted this quarter. The average discount rate (IRR) and the average overall rate (OAR) each slipped 8 basis points to 10.84% and 9.06%, respectively. The IRR for Chicago is the lowest of all the office markets surveyed. The next lowest is San Francisco which has an average IRR of 11.02%. Participants feel that investments in Chicago's office market provide good upside potential.

Prices for Chicago office properties are 85.00% to 110.00% of replacement cost. The average price is 95.56% of cost. Prices are expected to increase an average of 1.88% over the next 12 months.

Construction woes are not limited to downtown Chicago. Absorption also has not kept pace with construction in Chicago's suburban office market, and vacancy rates are starting to rise. Some markets, such as the O'Hare submarket, are still very tight. However, vacancy rates are inching up in most suburban submarkets. ■

Table 12
Chicago Office Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	9.29%–13.00%	9.29%–13.00%	9.50%–13.00%
AVERAGE	10.84%	10.92%	10.79%
CHANGE (Basis Points)	—	–8	+5
Overall Cap Rate (OAR)[a]			
RANGE	8.00%–10.00%	8.00%–10.25%	8.00%–10.00%
AVERAGE	9.06%	9.14%	9.05%
CHANGE (Basis Points)	—	–8	+1
Market Rent Change Rate[b]			
RANGE	0.00%–6.00%	0.00%–6.00%	0.00%–9.00%
AVERAGE	3.36%	3.44%	4.38%
CHANGE (Basis Points)	—	–8	–102
Expense Change Rate[b]			
RANGE	2.00%–4.00%	2.00%–4.00%	3.00%–4.00%
AVERAGE	3.06%	3.09%	3.25%
CHANGE (Basis Points)	—	–3	–19
Residual Cap Rate			
RANGE	8.00%–10.00%	8.00%–10.50%	8.00%–10.25%
AVERAGE	9.25%	9.28%	9.18%
CHANGE (Basis Points)	—	–3	+7

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

Dallas Office Market

Were it not for the surge of construction activity that is still delivering new space to the market, the Dallas office market would be in generally good health. But, as it stands, most investors and lenders have "redlined" the market for now. "There is probably two to three times as much space in the market than is necessary," comments a participant. Even in the dominant submarkets, such as Far North Dallas, Dallas North Tollway, and Las Colinas, there is more space than needed.

Although year-to-date absorption for 1999 has surpassed 1998's full-year record breaking total, it has not outpaced construction. In the suburbs, where all the new space is being built, less than favorable leasing activity caused vacancy rates to inch up during third quarter 1999. In the CBD, market conditions are becoming more favorable. Low construction activity and continued demand pushed the vacancy rate down 62 basis points from last quarter. According to CB Richard Ellis, the vacancy rate in suburban Dallas is 14.8%; however, the vacancy rate for the CBD is 25.9%, one of the highest in the country.

Investors are hopeful that the excess space will be absorbed over time. Job growth in Dallas is expected to remain relatively strong. According to *Demographics Journal*, employment in Dallas increased 10.32% from 1996 to 1998, the seventh highest gain in the country. Dallas has also made steady population gains since 1990 and is ranked the ninth largest city in the United States. Participants expect structural vacancy to be reached in one to six years. The average structural vacancy is three years. This assumes that speculative building is held to a minimum.

The market is not without big-name tenants that are looking to expand in or to relocate to it. Bank One, PricewaterhouseCoopers, and Sprint Communications recently signed leases for space in the market. Charles Schwab and E-Trade Group are reportedly scouting the market for large blocks of space. Also, The Chase Manhattan Corp., which is planning to relocate its private banking division to Dallas, is looking for up to 800,000 square feet in the market.

Realizing that the market cannot sustain the large volumes of space added over the past few years, developers are showing signs of restraint. Some projects have been put on hold until vacancy rates decline. Other projects have been cancelled. Since the returns on office development in the market have slipped, some local developers are starting to build other property types, such as industrial buildings, while others are switching to build-to-suit projects.

Most cash flow assumptions shifted this quarter. The average discount rate (IRR) incurred the largest gain with an increase of 8 basis points to 11.31%. The average overall cap rate (OAR) increased 6 basis points to 9.42% and is now the second highest OAR of all of the office markets surveyed.

Landlords are feeling the negative effects of overbuilding. Although rental rates have generally held steady, they have dipped in some areas. "There are more concessions in the market," states a participant. Not liking the term "free rent," landlords are providing tenants with "early move-ins" without receiving additional rent.

The number of sale transactions is way down from the peak levels of 18 months ago. "Volume is probably a third to a quarter of what it was," says a participant. Overbuilding in the market has weakened sale prices, and properties can be purchased at large discounts to replacement cost. Participants report prices ranging from 50.00% to 110.00% of replacement cost. The average price is 92.92% of cost. Prices are expected to increase from –5.00% to 10.00% over the next 12 months. The average appreciation is 2.42%. ■

Table 13
Dallas Office Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	9.00%–13.00%	9.00%–13.00%	10.00%–14.00%
AVERAGE	11.31%	11.23%	11.40%
CHANGE (Basis Points)	—	+8	–9
Overall Cap Rate (OAR)[a]			
RANGE	7.50%–12.00%	7.50%–12.00%	6.50%–11.00%
AVERAGE	9.42%	9.36%	8.97%
CHANGE (Basis Points)	—	+6	+45
Market Rent Change Rate[b]			
RANGE	0.00%–10.00%	0.00%–10.00%	0.00%–10.00%
AVERAGE	2.36%	2.36%	4.06%
CHANGE (Basis Points)	—	0	–170
Expense Change Rate[b]			
RANGE	2.50%–4.00%	2.50%–4.00%	3.00%–4.00%
AVERAGE	3.13%	3.13%	3.47%
CHANGE (Basis Points)	—	0	–34
Residual Cap Rate			
RANGE	8.00%–12.00%	8.00%–12.00%	8.00%–11.00%
AVERAGE	9.69%	9.66%	9.44%
CHANGE (Basis Points)	—	+3	+25

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

Houston Office Market

Investors are intrigued by Houston's renewed vibrancy. After battening down the hatches at the end of 1998 and early 1999 to prepare for the negative effects of large corporate mergers and cheap oil prices, Houston's economy is coming back fairly strong and so are investors. Over the past few months, there has been a tremendous increase in leasing activity, and oil prices have risen dramatically. Participants are enthusiastic that pent-up demand will help to further stabilize the market.

Although year-to-date sales volume is down significantly, investors are realizing that there are investment opportunities in Houston. The Tractebel Building on West Loop is selling for just above $100.00 per square foot. "Houston is still one of the cheapest major markets in the country," comments a participant. Most buyers are short-term investors who are hoping to score on a quick resale. Participants report that sale prices are between 50.0% and 110.0% of replacement cost. The average price is 85.83% of cost.

Since the gap between asking prices and bidding prices is larger than it has ever been, many properties put up for sale are not sold. "Sellers are still trying to get the prices of 18 months ago," says a participant. REITs are not driving prices up anymore because they are out of the market. Current buyers, including individual investment companies, pension funds, foreign investors, and some life insurance companies, are not willing to pay the high prices of early last year.

There is no speculative construction occurring in the CBD. New construction is limited to Enron Corporation's built-to-suit project. The lack of new speculative space, and continued leasing activity, caused the vacancy rate for the CBD to drop 140 basis points from last quarter. According to Cushman & Wakefield, the overall vacancy rate in the CBD as of third quarter 1999 was 12.3%. Despite the large amount of space dumped on the market from past mergers and consolidations, the CBD is doing well. Many large corporations are being drawn there, where park-n-ride and other mass transit options provide effective ways for employees to get to their workplaces.

The biggest competition in the CBD market exists between Class-A and renovated Class-B buildings. Although rental rates are generally averaging about $22.00 to $23.00 per square foot, a number of top-tier buildings with high occupancy levels are seeing rental rates between $25.00 and $26.00 per square foot. In an effort to attract tenants, some renovated Class-B buildings are offering above-standard improvement allowances and modest rental rates. "Tenants are left to decide which is more important, prestige or cost," adds a participant.

Few cash flow assumptions changed this quarter. The largest change occurred in the average market rent change rate, which dropped 14 basis points to 3.22%. This is a 148-basis-point decline from a year ago. The average discount rate inched up 2 basis points to 11.53%. The majority of participants are expecting values to rise 3.0% to 15.0%. The average appreciation is 6.43%.

The overall vacancy rate in suburban Houston increased 100 basis points from last quarter to 14.5%. With a little over four million square feet of space being built, more space is probably being delivered than is required in the near term. "The years to reach structural vacancy are going backwards fast," says a participant. With companies refocusing on the CBD, it may be some time before the excess space in the suburban markets is absorbed. ■

Table 14
Houston Office Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	9.00%–13.50%	9.00%–13.50%	10.00%–14.00%
AVERAGE	11.53%	11.51%	11.66%
CHANGE (Basis Points)	—	+2	–13
Overall Cap Rate (OAR)[a]			
RANGE	8.00%–12.00%	8.00%–12.00%	6.50%–11.00%
AVERAGE	9.60%	9.60%	9.10%
CHANGE (Basis Points)	—	0	+50
Market Rent Change Rate[b]			
RANGE	0.00%–8.00%	0.00%–8.00%	2.00%–10.00%
AVERAGE	3.22%	3.36%	4.70%
CHANGE (Basis Points)	—	–14	–148
Expense Change Rate[b]			
RANGE	3.00%–4.00%	3.00%–4.00%	3.00%–4.00%
AVERAGE	3.22%	3.22%	3.45%
CHANGE (Basis Points)	—	0	–23
Residual Cap Rate			
RANGE	8.00%–12.00%	8.00%–12.00%	8.00%–11.00%
AVERAGE	9.81%	9.81%	9.53%
CHANGE (Basis Points)	—	0	+28

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

Los Angeles Office Market

Despite the presence of numerous leasing deals and an absence of new construction, many investors still perceive downtown Los Angeles as being soft. Landlords still need to offer free rent and excessive tenant improvement allowances to entice tenants, even though rents downtown are much lower than they are in most surrounding submarkets. Still, tenants continue to migrate to suburban locations. "Every time a new tenant comes into downtown, there is one that leaves," comments a participant. With such limited gains in absorption, the market recovery will be a slow process.

Vacancy rates downtown are improving, but the uncertainty of one of the market's largest tenants, ARCO, is dampening enthusiasm for a near-term revival. ARCO's recently announced merger with BP Amoco could dump an excessive amount of sublease space on the market. Nevertheless, because of demand from a diverse employment base, including high-tech and telecommunication companies, much of the space will likely be absorbed. Users associated with the entertainment and cultural attractions being built downtown will hopefully absorb some of the available space too.

West Los Angeles is one of the hottest submarkets. As vacancy rates fall, rental rates are rising steadily. Preleasing was less than vigorous while new space was being built, but newly completed projects are leasing well. Grubb & Ellis estimates that another 1.35 million square feet will be built in West Los Angeles by year-end 2000. This number would likely be much higher, but restraints on capital and on the area's timely and expensive entitlement process are keeping developers away.

Investors are paying high prices for properties in West Los Angeles. 1888 Century Park East is reportedly trading for $228.00 per square foot, while a neighboring property at 1801 Century Park East recently sold for $219.00 per square foot.

All cash flow assumptions changed this quarter. The largest change was in the average market rent change rate, which declined 14 basis points to 4.25%, a drop of 153 basis points from a year ago. Even though the average discount rate (IRR) declined 3 basis points to 11.70%, it continues to be the highest IRR of all the office markets surveyed. It is 46 basis points above the average national CBD office market IRR (11.24%) and 63 basis points above the average national suburban office market IRR (11.07%).

Office buildings in Los Angeles can be purchased at discounts of up to 25.0%. Across the market, prices range from 75.0% to 100.0% of replacement cost. The average is 87.81% of cost. Participants see more appreciation in the market over the next 12 months. Prices are expected to increase up to 15.0%; the average is 5.69%.

Buyers in the market include private real estate companies, pension funds, and opportunity funds. Sanwa Bank Plaza located downtown was recently acquired by Hines Interests, a privately owned real estate firm, for $215.00 per square foot. Life insurance companies are also actively pursuing top-quality assets. "REITs are purchasing, but at less aggressive yields," comments a participant.

Now that the REITs are pretty much out of the market, the number of investors bidding on properties is down. Buyers are trying to take advantage of a decline in the buying pool by negotiating less aggressive deals. As a result, sellers are finding it much tougher to close deals near their asking prices. "Without buyers lined up to close at a seller's price, buyers think that sellers will reduce prices," says a participant. Instead, deals are falling apart, and marketing times are increasing. "Deals are getting done, but they are taking longer," adds the participant. ■

Table 15
Los Angeles Office Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	10.00%–15.00%	10.00%–14.00%	10.00%–15.00%
AVERAGE	11.70%	11.73%	11.64%
CHANGE (Basis Points)	—	–3	+6
Overall Cap Rate (OAR)[a]			
RANGE	7.00%–10.50%	7.00%–10.50%	7.00%–10.25%
AVERAGE	8.85%	8.86%	8.71%
CHANGE (Basis Points)	—	–1	+14
Market Rent Change Rate[b]			
RANGE	2.00%–6.00%	3.00%–6.00%	2.50%–10.00%
AVERAGE	4.25%	4.39%	5.78%
CHANGE (Basis Points)	—	–14	–153
Expense Change Rate[b]			
RANGE	2.00%–4.00%	3.00%–4.00%	3.00%–4.00%
AVERAGE	3.18%	3.25%	3.44%
CHANGE (Basis Points)	—	–7	–26
Residual Cap Rate			
RANGE	8.00%–11.00%	8.00%–11.00%	8.00%–11.00%
AVERAGE	9.30%	9.25%	9.28%
CHANGE (Basis Points)	—	+5	+2

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

Manhattan Office Market

The Manhattan office market is riding high, and participants do not expect the fundamentals to change dramatically anytime soon. Accelerating demand from new tenants, as well as existing tenants, is keeping vacancy rates extremely low. Rental rates are again on the rise, and there is talk of speculative construction. "There seems to be no bad elements in the market right now," comments a participant.

Investment opportunities exist throughout Manhattan for those who can raise enough capital to win deals. Although most sale prices are lower than they were prior to last year's credit crunch, office buildings in Manhattan are commanding high prices. In Midtown, 780 Third Avenue sold for $330.00 per square foot, and there is a preliminary purchase agreement for 1211 Sixth Avenue for $300.00 per square foot. 1325 Avenue of the Americas, located at West 53rd Street, recently sold for $390.00 per square foot. A neighboring property, 1301 Avenue of the Americas, may be close to a deal at a price tag of $450.00 per square foot. Investors who are not able to raise funds for pricey deals in Midtown may find Downtown prices more suitable. The Equitable Building, located at 120 Broadway, recently traded for a reported $117.00 per square foot.

Participants expect that sales activity will continue, and that the number of properties up for sale will increase at the start of the new millennium. One of the most anticipated transactions is the transfer of the World Trade Center. The current owner (Port Authority of New York and New Jersey) recently accepted bids from potential buyers. After reviewing each buyer's credentials, the owner will select candidates to submit offers. This transaction, which will be structured as a 99-year lease, is not expected to close before September 2000.

All cash flow assumptions held steady this quarter. Manhattan office properties are priced below replacement cost. Discounts range from 10.00% to 40.00%, with Class-B properties receiving the greatest discount. Overall, participants estimate that the average price of Class-A and Class-B office buildings together is 82.00% of replacement cost. Prices are expected to increase from 3.0% to 10.0% over the next 12 months; the average projected increase is 6.63%.

Class-B properties are increasingly popular with investors. Since limited new supply is entering the market, Class-B buildings are being purchased and renovated to accommodate the spillover from Class-A properties. As a result, the defined lines between neighborhoods in Manhattan are fading. The renovation of Class-B space is transforming neighborhoods and creating additional desirable locations.

Aside from high rental rates, a problem facing tenants looking for space is that much of the available space is too small. There are several companies with minimum space requirements of 400,000 square feet. The lack of large blocks of contiguous space is prompting new speculative construction. The Durst Organization plans to construct another office building at 42nd Street and Sixth Avenue. In such a tight market, preleasing requirements should be easily achieved.

A lack of space and soaring rent growth are prompting tenants to relocate out of Manhattan. Neighboring Jersey City is already seeing the benefits of Manhattan's tight market conditions. There is significant new construction and renovation occurring in Jersey City. With rental rates for Class-A space nearly 40.0% below the average rent in Manhattan, Jersey City offers an attractive alternative for tenants. American Express and CIGNA Insurance recently relocated out of Manhattan. Due to the amount of pent-up demand in Manhattan, the effect of tenants moving out of the market, if any, should be minimal. ■

Table 16
Manhattan Office Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	9.75%–13.00%	9.75%–13.00%	9.75%–13.00%
AVERAGE	11.36%	11.36%	11.06%
CHANGE (Basis Points)	—	0	+30
Overall Cap Rate (OAR)[a]			
RANGE	7.50%–10.50%	7.50%–10.50%	7.50%–10.00%
AVERAGE	9.03%	9.03%	8.84%
CHANGE (Basis Points)	—	0	+19
Market Rent Change Rate[b]			
RANGE	0.00%–6.00%	0.00%–6.00%	0.00%–6.00%
AVERAGE	3.50%	3.50%	3.56%
CHANGE (Basis Points)	—	0	–6
Expense Change Rate[b]			
RANGE	3.00%–4.00%	3.00%–4.00%	3.00%–5.00%
AVERAGE	3.44%	3.44%	3.61%
CHANGE (Basis Points)	—	0	–17
Residual Cap Rate			
RANGE	8.00%–10.00%	8.00%–10.00%	7.00%–10.50%
AVERAGE	9.17%	9.17%	9.08%
CHANGE (Basis Points)	—	0	+9

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

Pacific Northwest Office Market

The Pacific Northwest office market is one of the best performing office markets in the country. Seattle's economy is flourishing, and sellers are asking high prices for premier buildings that are reportedly fully leased while still under construction. Portland's economy is also strong, and new construction is at its highest level since the start of the decade.

Fueling Seattle's robust economy are overwhelming gains in employment. Although Seattle is ranked as the 22nd largest city in the United States, according to *Demographics Journal*, it is ranked 8th for employment growth. From 1996 to 1998, employment increased 10.25%. Portland's employment gains, while less dramatic, are still strong. The city is ranked 26th in terms of size, and recorded an employment increase of 6.78% from 1996 to 1998.

Since more tenants are seeking space in the market, construction is underway in the CBD and suburban markets of both cities. Preleasing requirements have been easily met in both markets in the past, but the onset of more space may bring trouble if the economy cools. In downtown Seattle, there were 2.3 million square feet under construction at midyear 1999, according to Colliers International. The largest project in the CBD is the 850,000-square-foot Madison Financial Center. Pioneer Square, with eight buildings, had the most projects under construction at midyear. The projects ranged from 68,500 to 350,000 square feet and totaled a little over 1.8 million square feet. In Portland, ODS Tower recently opened, and the 590,000-square-foot Fox Tower is slated for delivery in late 2000. At midyear 1999, this project was 25.0% preleased.

Brisk absorption throughout 1999 is breaking records in Portland. In Seattle, the pace of absorption has been slower, simply due to a lack of available space. The CBD markets in both cities are boasting extremely low vacancy rates. As of third quarter 1999, Portland's vacancy rate was 6.5%, according to Cushman & Wakefield. For Seattle, the rate was a mere 2.2%.

Most cash flow assumptions incurred minor changes this quarter. The largest movers were the average discount rate (IRR) and the average expense change rate; each moved 6 basis points. The average IRR inched up to 11.36%, while the average expense change rate fell to 3.13%. The average overall cap rate (OAR) decreased only 1 basis point to 9.20%. The market rent change rate held steady at 4.29% and is the highest change rate of all the office markets surveyed; it is 11 basis points above the average a year ago.

Despite solid market fundamentals, the majority of participants (62.50%) do not use rent spikes when analyzing potential investments. The remaining participants (37.50%) use rent spikes ranging from 4.00% to 8.00% and averaging 6.17%. The rent spikes are typically used between years one and five.

On average, office properties in the Pacific Northwest are priced close to replacement cost. Participants report that sale prices range from 85.0% to 110.0% of replacement cost. The average is 97.93% of cost. Over the next 12 months, values are expected to appreciate up to 5.0%; the average projected increase is 3.21%.

Investors remain optimistic about the future of the Pacific Northwest office market. "We are at a regional plateau that seems healthy," a participant comments. "It is hard to see what will hurt us over the next few months." Any downturn is likely to be a function of a slowdown in demand. For now, the market fundamentals are still looking good, and there is no shortage of companies looking to relocate or to expand within the market. ■

Table 17
Pacific Northwest Office Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	10.50%–13.00%	10.00%–13.00%	10.00%–15.00%
AVERAGE	11.36%	11.30%	11.41%
CHANGE (Basis Points)	—	+6	–5
Overall Cap Rate (OAR)[a]			
RANGE	8.00%–11.00%	8.00%–11.00%	8.00%–11.00%
AVERAGE	9.20%	9.21%	9.18%
CHANGE (Basis Points)	—	–1	+2
Market Rent Change Rate[b]			
RANGE	2.50%–8.00%	2.50%–8.00%	0.00%–8.00%
AVERAGE	4.29%	4.29%	4.18%
CHANGE (Basis Points)	—	0	+11
Expense Change Rate[b]			
RANGE	2.00%–4.00%	2.00%–4.00%	3.00%–4.00%
AVERAGE	3.13%	3.19%	3.41%
CHANGE (Basis Points)	—	–6	–28
Residual Cap Rate			
RANGE	8.50%–10.50%	8.50%–10.50%	8.50%–10.50%
AVERAGE	9.44%	9.44%	9.43%
CHANGE (Basis Points)	—	0	+1

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

San Francisco Office Market

Sale prices at or above $300.00 per square foot or higher are almost commonplace in the San Francisco office market. And while there are a variety of buyers in the market, German investors appear to be involved in the most recent and highest priced acquisitions. After German investors paid a record-breaking sale price of $340.00 per square foot for 345 California Street, a German fund (Despa) purchased 600 California Street for $291.00 per square foot. Another property, 333 Bush Street, was purchased for nearly $295.00 per square foot by German investors as well.

REITs, while considerably less aggressive than in the past few years, are still active. Boston Properties Inc. recently acquired two development sites in San Francisco. One site has entitlements for a 275,000-square-foot, Class-A office building. Pension funds are much more active than they were in 1998, and may be interested in some of the properties currently up for sale, including the Chevron Building, 201 Spear Street, and 100 Pine Street.

The market is saturated with Internet and telecommunication firms looking for space, especially in Multimedia Gulch within the South of Market Street (SOMA) submarket. Vacancy rates in SOMA are extremely tight, and re-leasing is occurring very quickly. Users that cannot find adequate space in SOMA are venturing further south to less established areas, such as Potrero Hill and the Mission District. For now, rental rates are more affordable in these neighborhoods, and there is more space available for future growth. Some of the overflow from SOMA is also spilling into the North of Market Street (NOMA) submarket, and buyers are readily responding. 300-320 California Street was purchased in March 1999 and redesigned to meet the needs of Internet-related tenants.

Since most multimedia tenants prefer to be in the SOMA submarket, developers are trying to accommodate demand for space by renovating obsolete office and industrial buildings. IRP Yerba Buena Associates recently purchased a series of buildings along Howard Street to renovate and retenant.

Most cash flow assumptions held firm this quarter. With an average discount rate (IRR) of 11.02%, San Francisco has the second lowest IRR of all of the office markets surveyed. Chicago has the lowest at 10.84%. For the second consecutive quarter, San Francisco has the lowest overall cap rate (8.53%) of all the surveyed office markets.

While the majority of participants see prices for office buildings in San Francisco close to replacement cost, some office properties are priced up to 30.00% below replacement cost. According to participants, prices range from 70.00% to 110.00% of replacement cost. The average is 96.25% of cost. Price changes over the next 12 months may be as low as minus 5.0% and as high as 10.00%. The average value increase expected over the next 12 months is 3.94%.

High rental rates are driving some tenants out of the market to downtown Oakland and to business parks in the I-680 suburban submarket. Cushman & Wakefield reports that the average rental rate for Class-A space downtown was $47.76 per square foot as of third quarter 1999. By comparison, suburban Class-A rental rates averaged $36.36 per square foot.

Five new office buildings under construction in downtown San Francisco are scheduled for delivery over the next 12 months. The buildings total nearly 1.6 million square feet and are, on average, 50.00% preleased. The smallest building, 275 Sacramento Street (60,000 square feet), remains vacant and is scheduled for completion in June 2000. The largest building, 250 The Embarcadero (540,000 square feet), will be fully occupied by The Gap. ■

Table 18
San Francisco Office Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	10.00%–13.00%	10.00%–13.00%	9.25%–12.50%
AVERAGE	11.02%	11.02%	10.83%
CHANGE (Basis Points)	—	0	+19
Overall Cap Rate (OAR)[a]			
RANGE	7.00%–11.00%	7.00%–11.00%	7.00%–11.00%
AVERAGE	8.53%	8.53%	8.38%
CHANGE (Basis Points)	—	0	+15
Market Rent Change Rate[b]			
RANGE	0.00%–10.00%	0.00%–10.00%	0.00%–11.00%
AVERAGE	4.28%	4.28%	5.50%
CHANGE (Basis Points)	—	0	–122
Expense Change Rate[b]			
RANGE	3.00%–4.00%	3.00%–4.00%	3.00%–4.00%
AVERAGE	3.28%	3.31%	3.58%
CHANGE (Basis Points)	—	–3	–30
Residual Cap Rate			
RANGE	8.00%–10.00%	8.00%–10.00%	8.00%–10.00%
AVERAGE	8.91%	8.94%	8.96%
CHANGE (Basis Points)	—	–3	–5

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

Southeast Florida Office Market

Southeast Florida's flourishing economy is generating a thriving real estate market. Both buyers and sellers are active in the market, hoping to cash in on the area's job growth, low vacancy rates, and increasing rental rates. Sales activity, while somewhat milder than in recent months, is holding steady. Sellers are receiving numerous bids, especially on properties that offer opportunity for upside.

A relatively small market, the Southeast Florida office market is spread over three counties – from the middle of Palm Beach County, through Broward County, to the end of Dade County. The major office markets are West Palm Beach, Boca Raton, Fort Lauderdale, and Miami. Miami-Dade County contains more than 26 million square feet of institutional-grade office properties. There is not a significant supply of institutional-grade office space outside of Miami; Broward County contains approximately 13.5 million square feet, and Palm Beach has just under 12.5 million square feet.

Prices are heating up in the hot Boca Raton submarket. A 30,000-square-foot office building recently traded for nearly $200.00 per square foot. This is one of the highest prices paid for an office building throughout the entire region. With rental rates increasing, other high prices are likely to follow. Investors warn, however, that parts of Boca Raton are a bit soft due to some large blocks of sublease space resulting from mergers and acquisitions.

It is no surprise that new construction is occurring in West Palm Beach and Boca Raton. The area is ranked number one in the nation for job growth. According to *Demographics Journal*, job growth in West Palm Beach-Boca Raton was 13.21% from 1996 to 1998. This is well above Orlando, which was ranked second with a 12.02% increase.

Despite the difficulty of obtaining construction financing, developers are managing to construct both large and small speculative projects. Larger projects typically have strong preleasing, while the preleasing of smaller projects are thought to be exaggerated. "It is good marketing hype," says a participant.

Developers need to exercise caution. If space is added too quickly, the market could take a downturn. For developers who are concerned that the steady additions of speculative space will soften rental rates, build-to-suit projects present an attractive alternative. In fact, many developers are chasing after the opportunity to build IBM's new 190,000-square-foot hub.

Most cash flow assumptions shifted this quarter. The largest change occurred in the average market rent change rate, which declined 12 basis points to 3.38%. This is a 31-basis-point drop from a year ago. The average discount rate (IRR) reported a change of 2 basis points to reach 11.06%. This is 14 basis points below the average a year ago.

For Southeast Florida, participants report that sale prices are between 80.00% and 110.00% of replacement cost. The average price is 98.93% of cost. Most participants expect values to increase between 2.00% and 3.00% over the next 12 months. The average expected increase is 1.50%.

Although the job growth in Miami from 1996 to 1998 (4.31%) was well below that of West Palm Beach and Boca Raton, there are 1.3 million square feet of new office space planned for Miami. The majority of the new space is in the Brickell Avenue corridor, a hot submarket where most office buildings are nearly 100.00% leased. The Biscayne Boulevard corridor north of downtown Miami is another strong submarket, and land prices are soaring. A 72,000-square-foot parcel recently sold for $151.00 per square foot. A 17-story, 200,000-square-foot office building is planned for the site. ■

Table 19
Southeast Florida Office Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	10.00%–12.00%	10.00%–12.00%	10.00%–13.50%
AVERAGE	11.06%	11.08%	11.20%
CHANGE (Basis Points)	—	–2	–14
Overall Cap Rate (OAR)[a]			
RANGE	8.00%–12.00%	8.00%–12.00%	8.00%–12.00%
AVERAGE	9.39%	9.39%	9.39%
CHANGE (Basis Points)	—	0	0
Market Rent Change Rate[b]			
RANGE	2.00%–7.00%	2.00%–7.00%	2.00%–7.00%
AVERAGE	3.38%	3.50%	3.69%
CHANGE (Basis Points)	—	–12	–31
Expense Change Rate[b]			
RANGE	2.00%–4.00%	2.00%–4.00%	2.00%–4.00%
AVERAGE	3.09%	3.09%	3.19%
CHANGE (Basis Points)	—	0	–10
Residual Cap Rate			
RANGE	9.00%–11.00%	9.00%–11.00%	9.00%–11.00%
AVERAGE	9.77%	9.72%	9.72%
CHANGE (Basis Points)	—	+5	+5

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

Washington, DC Office Market

There is no shortage of bidders when properties go up for sale in the Washington, DC office market. Buildings are changing hands at a rapid pace, and average marketing time is decreasing. Investors are jumping at opportunities to buy fully occupied buildings, as well as buildings close to being fully leased where there is potential for upside. No immediate slowdown is expected. The area's robust economy is supporting solid job growth, steady absorption, and rising rents.

Buyers in the market include private real estate companies, REITs, such as Mack-Cali Realty Corporation, and pension funds, such as California Public Employees Retirement System (CALPERS).

The bulk of the recent sales occurred in the CBD and East End submarkets. CALPERS, through a joint venture with Hines, purchased 1776 G Street NW for $255.00 per square foot. The Blackstone Group acquired 1225 Connecticut Avenue for $250.00 per square foot. Select buildings in prime suburban markets are commanding even higher prices. In Arlington, Lend Lease Real Estate Investments bought a 544,000-square-foot office complex for $300.00 per square foot. As in other markets, high prices for Class-A buildings are pushing institutional investors to acquire Class-B properties. Renovation can add value to these properties.

High prices result from strong market conditions. Steady absorption combined with the absence of any new building during third quarter 1999 prompted the overall vacancy rate in Washington, DC to decrease to 6.8%, according to Cushman & Wakefield. The overall vacancy rate in Northern Virginia was 6.1%. While this is much higher than the rate a year ago (4.3%), it remains one of the lowest vacancy rates in the country.

In Northern Virginia, investors prefer the areas west and north of Washington, DC. Properties are being sold, but volume is down. "There are not as many opportunities in Northern Virginia to make gains on resale," comments a participant. "The market has been at a prolonged peak for quite a while." In addition, new construction is relieving upward pressure on rental rates. Increasing opportunities exist for investments; however, some Maryland submarkets, such as Bethesda, are becoming tighter and stronger.

All cash flow assumptions changed this quarter. The largest mover was the average market rent change rate, which decline 10 basis points to 2.83%. Although the average discount rate (IRR) declined only 1 basis point this quarter to 11.53%, it marks a 22-basis-point increase from a year ago. The average overall cap rate (OAR) and average expense change rate each declined 3 basis points. The average residual cap rate inched up 4 basis points to 9.40%.

Depending on property characteristics and location, a broad range of sale prices exists for office buildings in the Washington, DC office market. Participants report that sale prices range from 75.0% to 110.0% of replacement cost. The average is 92.78% of cost. Participants' expectations of value appreciation increased this quarter. Over the next 12 months, values are expected to increase up to 10.0%; the average projected increase is 4.0%. This is up 80 basis points from last quarter.

There are several projects under construction throughout Washington, DC, particularly in the East End submarket. Much of the new space is scheduled for delivery over the next several months. Reportedly, only about 50.00% of the 3.6 million square feet under construction are preleased. Investors are not concerned that the additions to supply will leave excessive space in the market and push up vacancy rates. Large space users, who are not finding adequate blocks of space in such a tight market, will likely absorb much of the remaining space. ■

Table 20
Washington, DC Office Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	10.00%–14.00%	10.00%–13.00%	10.00%–13.00%
AVERAGE	11.53%	11.54%	11.31%
CHANGE (Basis Points)	—	–1	+22
Overall Cap Rate (OAR)[a]			
RANGE	7.00%–11.00%	7.00%–11.00%	7.00%–11.00%
AVERAGE	9.14%	9.17%	8.88%
CHANGE (Basis Points)	—	–3	+26
Market Rent Change Rate[b]			
RANGE	0.00%–10.00%	0.00%–10.00%	0.00%–10.00%
AVERAGE	2.83%	2.93%	2.98%
CHANGE (Basis Points)	—	–10	–15
Expense Change Rate[b]			
RANGE	2.00%–4.00%	2.00%–4.00%	3.00%–4.00%
AVERAGE	3.20%	3.23%	3.43%
CHANGE (Basis Points)	—	–3	–23
Residual Cap Rate			
RANGE	8.00%–11.00%	8.00%–11.00%	8.00%–11.00%
AVERAGE	9.40%	9.36%	9.33%
CHANGE (Basis Points)	—	+4	+7

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

National Industrial Market

While the national industrial market is relatively balanced, transaction activity has been slow, especially for high-end products. The majority of the properties up for sale tend to be low-end buildings. Although they are providing investors with lower returns than Class-A products, sellers are receiving numerous bids. "Many buyers are accepting lower returns because they just want to buy real estate, and that is all they can afford to buy," comments a participant. After the properties are acquired, some buyers are spending capital to renovate them, but others are not. The rent differential in most markets is not sufficient to justify too much capital spending.

Buyers in the market include REITs, pension funds, and private companies. Sabey Corp. acquired Boeing's 798,000-square-foot, six-building industrial campus in Seattle for $35.00 per square foot in September. Also, California Industrial Properties bought four industrial parks totaling 438,000 square feet for $50.00 per square foot. AMB, a REIT, purchased the leased fee interest in a 416,000-square-foot warehouse in Atlanta for nearly $19.25 per square foot. "Most REITs are being very selective with their acquisitions," says a participant. "Some REITs are developing properties instead."

"There are not many markets that are either very tight or excessively oversupplied," adds a participant. In some markets, however, the fundamentals of supply and demand are such that there is potential for overbuilding. The weakest markets – those with the greatest exposure to oversupply – include Nashville, Fort Lauderdale, and Denver, according to Donaldson, Lufkin & Jenrette research. The most promising markets – those where proposed construction is less than projected demand in the near term – include Orlando, Phoenix, and Raleigh-Durham-Chapel Hill.

Table 21
National Industrial Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	9.50%–12.50%	9.50%–12.50%	9.50%–12.50%
AVERAGE	11.09%	11.13%	11.15%
CHANGE (Basis Points)	—	–4	–6
Overall Cap Rate (OAR)[a]			
RANGE	7.50%–10.00%	8.00%–10.00%	8.00%–10.25%
AVERAGE	9.09%	9.15%	9.09%
CHANGE (Basis Points)	—	–6	0
Market Rent Change Rate[b]			
RANGE	1.50%–6.00%	1.50%–6.00%	2.00%–6.00%
AVERAGE	3.29%	3.29%	3.54%
CHANGE (Basis Points)	—	0	–25
Expense Change Rate[b]			
RANGE	1.50%–5.00%	1.50%–5.00%	1.50%–5.00%
AVERAGE	3.23%	3.25%	3.43%
CHANGE (Basis Points)	—	–2	–20
Residual Cap Rate			
RANGE	8.00%–10.50%	8.50%–10.50%	8.50%–11.50%
AVERAGE	9.48%	9.50%	9.55%
CHANGE (Basis Points)	—	–2	–7

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

The majority of key value indicators had minor changes this quarter. The average discount rate (IRR) slipped 4 basis points to 11.09%, while the average overall cap rate (OAR) slipped 6 basis points to 9.09%. The average market rent change rate is still 3.29%, but is 25 basis points lower than a year ago. Although the average residual cap rate declined only 2 basis points this quarter to 9.48%, the range has widened. Some investors are now using residual cap rates as low as 8.00%.

When comparing rates between R&D/flex properties and warehouse/distribution facilities, it is apparent that participants perceive R&D/flex properties as riskier investments. The range of IRRs for warehouses is from 9.50% to 12.50; the average is 11.00%. The range of OARs is from 8.00% to 10.00%; the average is 9.03%. For R&D/flex buildings, the range of IRRs is from 8.00% to 13.00%; the average is 11.54%. The range of OARs is from 8.00% to 12.00%; the average is 9.77%.

Participants report that prices for industrial buildings throughout the country range from 80.00% to 110.00% of replacement cost. The average price is 98.50% of cost. Prices are expected to increase up to 10.00% over the next 12 months. The average increase in value is 2.17%.

During third quarter 1999, gross leasing activity in the national industrial market totaled 265.6 million square feet. There were 75.5 million square feet under construction and 96.9 million square feet added to the market, according to Cushman & Wakefield.

Internet merchants are responsible for a large portion of industrial space under construction. E-commerce giants, such as Amazon.com, Peapod, Barnesandnoble.com, and eToys, are building warehouse facilities. ■

National Apartment Market

While the national apartment market contains a steady flow of investment opportunity, buyers are becoming increasingly apprehensive about it. The deceleration and flattening out of revenue growth is becoming a major problem in an increasing number of markets. With several markets experiencing revenue growth below 3.00%, investors are finding it much harder to achieve minimum rates of return. For investors who are not satisfied with current and expected future returns, investing in other property types, such as industrial, becomes a serious alternative to consider.

For markets where revenue growth is eroding, excess supply is to blame. "There are too many developers; everyone wants to be a developer," comments a participant. Investors that have been predicting overbuilding in numerous markets are seeing their predictions coming true. Yet, builders keep building. High-risk markets, which are providing lower returns on deals, include Albuquerque, Tucson, Austin, San Antonio, Charlotte, and Atlanta. Participants are also cautious about New Orleans, Orlando, Seattle, and Portland. Better markets – those with the least exposure to oversupply – include Las Vegas, Riverside-San Bernardino, Detroit, and Phoenix, according to Donaldson, Lufkin & Jenrette research.

Despite declines in revenue growth in some existing markets, not all investors are shying away from making deals. The abundance of recent transactions suggests that many lenders and investors still prefer investing in apartments. Properties are trading at a variety of prices. Principal Capital Management acquired a 359-unit apartment complex in Alexandria, Virginia for $109,000 per unit. Charles E. Smith Residential Realty purchased a 1,339-unit apartment complex in South Beach, Florida for $63,480 per unit. Bascom Group acquired the 474-unit Tennis Club Apartments in the San Fernando Valley for approximately $86,500 per unit. And Archstone Communities Trust acquired three complexes totaling 781 units in Illinois for $92,702 per unit.

Most key indicators had minor changes this quarter. Although the average market rent change rate held steady at 3.08%, it is 21 basis points lower than the average a year ago. The average discount rate (IRR) inched up 1 basis point to 11.52%. The average overall cap rate (OAR) slipped 2 basis points to 8.84%. As the number of sellers continues to exceed the number of buyers, participants expect OARs to increase. Also, "Current cap rates are not reflective of the lower returns in the market now," says a participant. "We are looking for cap rates to go up."

In relation to replacement cost, sale prices in the national apartment market have declined. Participants say that sale prices range from 75.0% to 110.0% of replacement cost. The average price is 94.5% of replacement cost. This is a drop of 136 basis points from last quarter. Projected increases in value over the next 12 months have declined, too. The range is from -7.0% to 5.0%; the average is 2.17%. This is down 47 basis points from last quarter.

Offers for high-end apartment properties are within a very tight range, suggesting that buyers are using similar underwriting standards and assumptions. "It's a very competitive environment," says a participant. All-cash buyers, such as pension funds, are driving the market. High interest rates are limiting the buying capability of private companies and individual buyers. REITs are more active as sellers and developers than as buyers.

Top-tier apartments are not the only property types sought after by investors. Some investors are buying, renovating, and repositioning older Class-B and Class-C projects. Many of these properties are located in solid markets, but have become displaced due to newer competition. ■

Table 22
National Apartment Market
FOURTH QUARTER 1999

KEY INDICATORS	CURRENT QUARTER	LAST QUARTER	YEAR AGO
Discount Rate (IRR)[a]			
RANGE	10.00%–15.00%	10.00%–15.00%	10.00%–13.00%
AVERAGE	11.52%	11.51%	11.36%
CHANGE (Basis Points)	—	+1	+16
Overall Cap Rate (OAR)[a]			
RANGE	7.50%–11.00%	7.50%–11.00%	7.00%–11.00%
AVERAGE	8.84%	8.86%	8.77%
CHANGE (Basis Points)	—	–2	+7
Market Rent Change Rate[b]			
RANGE	0.00%–6.00%	0.00%–6.00%	0.00%–7.00%
AVERAGE	3.08%	3.08%	3.29%
CHANGE (Basis Points)	—	0	–21
Expense Change Rate[b]			
RANGE	2.00%–5.00%	2.00%–5.00%	2.00%–5.00%
AVERAGE	3.14%	3.18%	3.29%
CHANGE (Basis Points)	—	–4	–15
Residual Cap Rate			
RANGE	8.00%–10.25%	8.00%–10.25%	8.00%–10.00%
AVERAGE	9.19%	9.21%	9.20%
CHANGE (Basis Points)	—	–2	–1

a. Rate on unleveraged, all-cash transactions
b. Initial rate of change

National Land Development Market

Developers in all segments of the real estate industry are steadily acquiring more land, planning projects, and building a variety of property types. In most markets throughout the country, demand is outpacing supply. As a result, land prices are rising. "Good sites are hard to find and even harder to afford," comments a participant. Many developers are surprised that land prices did not decline when public capital sources backed away from the real estate market last year. Still, an abundance of private money is flowing into the land development market, and with the right set of economics, financing is easily available.

With land prices high and still rising, developers need to exercise patience and use good judgement when acquiring land. Although sellers have the upper hand for now, developers are noticing that some potential deals for high-priced sites are not materializing. "Buyers initially indicate that they can pay the high price, but then after completing their feasibility analysis find out that they cannot," comments a participant. Developers are hopeful that as the number of capable bidders declines, sellers will be more receptive to lower offers. However, in a market crowded with buyers, price adjustments, if any, will occur slowly. "It only takes one better offer to outbid you and keep prices high," adds a participant.

GEOGRAPHIC PREFERENCES

Although most developers are willing to acquire land throughout the country, locations are selected based on certain characteristics that support each property type. Residential developers prefer cities in the Midwest and along the western coast of the United States, such as San Francisco, San Diego, Phoenix, and El Paso, where population growth is especially strong. Hotel and office developers prefer healthy employment areas, such as Dallas, Orlando, and Houston.

Industrial property developers prefer cities with excellent transportation networks, including Atlanta and Nashville.

In addition to U.S. cities, some participants are interested in international markets, such as Canada and Mexico.

PROPERTY TYPES

Retail

The enthusiasm for retail development is dampened by the popularity of e-retailing. In an attempt to maximize returns, traditional retail developers are placing emphasis on unique, entertainment-oriented retail facilities. Also, neighborhood shopping centers, which are expected to be less affected by e-retailing due to their tenant mix of convenience-oriented retailers, are a preferred property type for retail developers.

Although the majority of new retail development is focused in suburban areas, development is also occurring in inner cities. Developers are lured by population density and land supply constraints that minimize competition.

Office

The brisk pace of office development in many suburban markets has prompted lower returns, causing some developers to switch to alternative property types, such as industrial. Unless there is significant preleasing in speculative suburban projects, build-to-suit projects remain the preference for developers.

CBD office development has increased over recent years. Although high barriers to entry generally keep developers from CBD markets, many local cities are offering developers incentives to participate in revitalizing downtown areas. Cities with extremely low vacancy rates, such as New York, Boston, and Seattle, should provide some of the best opportunities for good returns.

Industrial

Industrial development continues to provide some of the best returns for developers. Overall, the industrial market is relatively balanced, and land is being acquired for build-to-suit and speculative development, especially for bulk warehouses with high ceilings. An interesting emerging trend is the positive effect on warehouse development by internet retailing. Large facilities are being developed for several e-commerce giants, including Amazon.com and eToys.

Apartment

Due to concerns that too much apartment construction is occurring, developers are less active in the apartment market. There are some exceptions, most notably in Las Vegas, Detroit, and Phoenix. Overall, demand for apartment land has diminished, and increased competition will likely lower returns going forward.

FORECAST ASSUMPTIONS

Although we have previously reported on the national land development market, both our participant base and the level of assumption detail reported have changed in such a way that any historic comparisons with the key indicators shown in the exhibits are not useful. Therefore, we have elected to omit prior-quarter and year-ago information.

Discount Rates

The majority of participants, 62.50%, use a discounted cash flow (DCF) analysis as their primary method of valuation. When including those who use DCF analysis as a secondary method of valuation, the percentage of

participants that use DCF analysis increases to 75.00%. The remaining participants rely on a sales comparison approach.

In their DCF analyses, 50.00% of participants prepare them free and clear of financing, 38.89% prepare them subject to financing, and 11.11% prepare them both ways.

While some developers include developer profit in their discount rate, others represent it as a separate line item that is based on a percentage of gross revenue or project costs (see Exhibit L-1).

The IRRs represent a diverse mix of property types and locations. IRRs toward the low end of the range are typically for commercial build-to-suit projects, where development risks have been lessened or eliminated. Higher risk projects, such as large-scale or speculative development with long-term absorption horizons, tend to reflect the higher expected returns. The IRRs presented assume that entitlements are in place. IRRs for projects that lack entitlements are typically increased between 350 and 1,000 basis points; the average increase is 580 basis points.

Lot Price Growth Rates

Growth rates used for lot pricing in DCF analyses vary due to local market conditions. The range indicated by the participants is from 0.00% to 15.00% with a median of 2.25%. The majority of participants, 53.85%, forecast lot prices to increase below inflation. The remaining participants, 46.15%, project increases above inflation. The highest growth rates of 12.00% and 15.00% were reported by participants who are active in rapidly developing Midwestern communities, including suburban Chicago.

Expense Growth Rates

When forecasting development expenses in DCF analyses, the majority of participants use specific amounts for each expense category increasing annually. The average annual growth rates for specific development expenses are shown in Exhibit L-2.

OUTLOOK

Over the next 12 months, land values are expected to increase up to 25.00%. The average expected appreciation is 5.84%. Until land prices start to stabilize or decline, developers are more likely to work with their accumulated land portfolios than to expand their inventories drastically. The abundance of capital in the market and increasing competition could lead to overbuilt markets and lower returns. Developers who will persevere through this sellers' market are those who acquire sites smartly, concentrating on generating adequate returns, not on increasing their inventory. ■

Exhibit L-2
Average Annual Growth Rates for Development Expenses
FOURTH QUARTER 1999

EXPENSES	ANNUAL AVERAGE GROWTH RATES
Infrastructure	
RANGE	3.00%–5.00%
AVERAGE	4.21%
Amenities	
RANGE	2.00%–4.00%
AVERAGE	3.21%
Advertising	
RANGE	1.00%–4.00%
AVERAGE	2.86%
Real Estate Taxes	
RANGE	3.00%–4.00%
AVERAGE	3.67%
Administrative	
RANGE	2.00%–4.00%
AVERAGE	3.00%
Contingency	
RANGE	1.00%–4.00%
AVERAGE	3.00%
Other	
RANGE	3.00%–4.00%
AVERAGE	3.75%

Exhibit L-1
Discount Rates (IRRs)
FOURTH QUARTER 1999

	INCLUDING DEVELOPER PROFIT			EXCLUDING DEVELOPER PROFIT		
	Current Quarter	Last Quarter	Year Quarter	Current Quarter	Last Quarter	Year Quarter
Free & Clear						
RANGE	11.00%–15.00%			8.00%–20.00%		
AVERAGE	12.75%			12.08%		
CHANGE	—			—		
Subject to Financing						
RANGE	12.00%–25.00%			8.00%–25.00%		
AVERAGE	18.00%			14.13%		
CHANGE	—			—		
Developer Profit as % of Gross Revenue						
RANGE				10.00%–30.00%		
AVERAGE				20.83%		
CHANGE						
Developer Profit as % of Cost						
RANGE				1.00%–6.00%		
AVERAGE				3.00%		
CHANGE				—		

National Regional Mall Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
INVESTMENT ADVISOR ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes cash flow after TIs, leasing commissions, and capital replacement reserve. .	3.0%	3.0%	3.0%	7.75% to 8.75%	2.0% to 3.0%	9.75% to 11.00%	7.50% to 8.75%	6	70.0% to 75.0%	Varies	$0.05 to $0.20	Varies
INVESTMENT BANKER ■ Forecast Period: 10 years Relies on DCF (IRR) and direct capitalization (initial cap rates); does extensive sensitivity analysis on residual cap rates, growth rates, and initial market rents; retail sales based on historical and market analysis; typical sales growth per market per year is at the inflation rate (CPI); analysis of TIs is an important cash flow forecast item.	2.0% to 4.0%	3.0%	3.0%	7.75% to 8.75% (best); 8.75% to 10.25% (most)	1.5%	10.00% to 11.00% (best); 11.00% to 12.50% (most)	7.00% to 8.50% (best); 8.50% to 10.50% (most)	3 to 4	70.0% to 75.0%	2.0% to 5.0%	Varies	6 to 9
DOMESTIC PENSION FUND ■ Forecast Period: 10 to 12 years Buys free and clear; average IRR consists of a 6.5% to 7.0% real rate of return plus the inflation rate; the indicated growth scenarios help to determine sensitivity of investment to inflation; relies on DCF (IRR) and overall cap rates equally; uses face rents and reflects concessions when they are scheduled to occur.	Years 1-3 varies per market; thereafter at inflationary rate	2.0%/ 4.0%/ 6.0%	2.0%/ 4.0%/ 6.0%	7.50% to 8.00%	1.0%	10.50% to 11.00%	7.00% to 8.00%	3 to 4	70.0% to 75.0%	1.0% to 3.0%	$0.15	3 to 4
PENSION FUND ADVISOR ■ Forecast Period: 10 years Looks at DCF (IRR), direct capitalization (initial cap rates), and price per square foot; uses face rents and reflects concessions when they are scheduled to occur.	3.0% to 4.0%	3.0%	3.0%	9.00% to 10.50%	2.0%	11.50% to 12.50%	9.50%	6	50.0%	5.0%	$0.25	9 to 18
REIT ■ Forecast Period: 5 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve; applies rollover vacancy of 1.5%; replacement reserve is dollar amount.	4.0%	3.0%	3.0%	8.00%	2.0%	12.00%	8.75%	2	75.0%	0.0%	—	3
REAL ESTATE ADVISOR ■ Forecast Period: 10 to 15 years Retail sales are based on historical and market analysis; typical sales growth initially flat, then increasing 3.0% to 5.0% per year in typical markets; relies on DCF (IRR), direct capitalization (initial cap rates), and price per square foot; strives for realistic cash flow forecast; relationship of price to retail sales (1.0 to 1.5 times sales) is carefully analyzed; uses face rents.	2.0% to 3.0% initially; varies thereafter	3.5%	3.0% to 4.0%	8.50% to 9.50%	1.0% to 2.0%	10.75% to 12.25%	8.25% to 9.25%	4 to 6	60.0% to 70.0%	2.0% to 5.0%	$0.25 to $0.75	9
INVESTMENT ADVISOR ■ Forecast Period: 10 years Retail sales growth is based on historical performance and market analysis; very strong evidence is required to exceed 5.0% per year; spreads between A and B properties getting wider; prefers free and clear properties; uses all valuation techniques and correlates; does not rely on any one technique; looks for sale price to be 100% to 125% of sales volume; looks at components of NOI growth; uses face rents.	0.0% to 4.0%	3.5%	3.5%	7.50% to 9.00%	1.5%	10.00% to 11.00%	7.00% to 9.00%	2	60.0%	3.0% to 10.0%	$0.10	6 to 10

National Power Center Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
REAL ESTATE ADVISOR ■ Forecast Period: 10 years Uses both DCF and direct capitalization; initial growth rates typically are between 0.0% and 3.5%; preference for infill locations with minimum land available and high barriers to entry; seeks very strong leases with "going dark" protection; 80.0%+ of overall return component should be generated by current income.	0.0% to 3.5%	3.5%	—	9.50%	2.0% to 2.5%	10.50% to 11.50%	10.00%	6 to 9 (nonanchors); 9 to 12 (anchors)	40.0% to 60.0%	0.0% to 3.0% (anchors); 6.0% (nonanchors)	$0.10 to $0.15	6 to 12
INVESTMENT BANKER ■ Forecast Period: 10 years Considers power center investments "coupon clipper" deals; uses both DCF and direct capitalization; focuses on West Coast; prefers urban areas with easy access and good anchor tenancy; credit is key; IRR is 11.00% on centers with good credit tenants.	4.0%	3.0% to 4.0%	4.0%	9.00% to 10.00%	2.0%	11.00% to 12.50%	8.00% to 10.00%	3 to 6	65.0% to 75.0%	5.0% to 10.0%	$0.10	6
INSTITUTIONAL INVESTOR ■ Forecast Period: 10 years Primarily interested in high-credit deals; uses both DCF and direct capitalization but focuses on IRR; develops IRR using tenants' bond rate plus 200 to 400 basis points for real estate related risks; lower IRRs are for high-credit deals with "bond" leases; uses present value analysis of effective rents.	2.0% to 3.0%	2.0% to 3.0%	2.0% to 3.0%	9.50% to 10.00%	2.0% to 2.5%	10.50% to 11.25%	8.75% to 9.50%	3 to 6	55.0% to 60.0%	1.0% (anchors); 4.0% to 6.0% (nonanchors)	$0.10 to $0.20	6 to 9
INVESTMENT ADVISOR ■ Forecast Period: 10 years Uses both DCF and direct capitalization; credit of tenants is major determinant of rate; consolidations among anchors will cause continuing fallout vacancies; sees a smaller pool of investors for power centers than for regional malls.	0.0% to 4.0%	3.5%	3.5%	10.00% to 10.50%	1.5%	11.00% to 12.00%	9.75% to 10.50%	2 to 6	60.0%	5.0% to 10.0%	$0.10	6 to 12
INVESTMENT ADVISOR ■ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; applies OAR to NOI after capital replacement reserve deduction but before TIs and leasing commissions; views as credit deal; some growth assumed in cap rate; focuses on acquisitions in Florida.	3.0% to 4.0%	3.0% to 3.5%	3.0% to 3.5%	9.50% to 10.50%	2.0%	11.00% to 12.50%	8.75% to 10.00%	4 to 8	70.0% to 80.0%	3.0% to 5.0%	$0.15 to $0.25	4 to 8
INVESTOR-DEVELOPER ■ Forecast Period: 11 years Uses both DCF and direct capitalization; in direct cap, capitalizes cash flow after TIs, leasing commissions, and capital replacement reserve; in analyzing power centers with greater percentage of in-line space compared with big-box space, would likely apply a lower overall cap rate due to potential for increased income.	3.0%	3.0%	3.0%	10.00%	2.0%	12.00%	10.50%	3	66.0%	Actual; 5.0% noncredit tenants	$0.10 to $0.25	6 to 9
REALTY ADVISOR ■ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; typically does not invest in power centers due to low yields and no upside.	3.0%	3.0%	3.0%	9.00% to 9.50%	1.5% to 3.0%	10.25% to 10.50%	8.25% to 8.75%	Does not use	65.0%	5.0% to 8.0%	$0.10 to $0.25	6

National Strip Shopping Center Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
REIT ■ Forecast Period: 10 years Georgraphic concentration is east of the Mississippi River; uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve deduction but before TIs and leasing commissions; uses face rents and reflects concessions when they are scheduled to occur.	3.0%	4.0%	3.0%	10.00% to 11.00%	2.0% to 3.0%	11.00% to 14.00%	—	6	75.0%	5.0%	$0.15 to $0.25	7
INVESTMENT BANKER ■ Forecast Period: 10 years Does extensive sensitivity analysis on residual cap rates, growth rates, and initial market rents; retail sales based on historical and market analysis; initial cash return is more important than the IRR; TIs are an important cash flow forecast item.	Years 1-3 varies per market; 3.5% thereafter	3.0%	3.0%	8.75% to 11.00%	2.0%	10.50% to 14.00%	8.25% to 11.00%	4 to 8	60.0%	5.0% to 10.0% (noncredit tenants)	$0.15	4 to 12
DOMESTIC PENSION FUND ■ Forecast Period: 10 to 12 years Buys free and clear; average IRR consists of a 6.75% to 7.50% real rate of return plus the inflation rate; the indicated growth scenarios help to determine sensitivity of investment to inflation; relies on DCF (IRR) and overall cap rates equally; uses face rents and reflects concessions when they are scheduled to occur.	Years 1-3 varies per market; thereafter at inflationary rate	2.0%/ 4.0%/ 6.0%	2.0%/ 4.0%/ 6.0%	9.00% to 9.75%	2.0%	10.75% to 11.50%	8.75% to 9.75%	4 to 6	60.0% to 70.0%	5.0% (noncredit tenants)	$0.10 to $0.20	4 to 6
REAL ESTATE ADVISOR ■ Forecast Period: 10 years Relies on DCF, also uses direct capitalization and price per square foot; residual cap rate may be developed through a second 10-year DCF analysis (years 11 to 20).	2.5% to 3.0%	2.5% to 3.0%	2.75% to 3.0%	9.50% to 11.00%	3.0%	10.00% to 12.00%	9.25% to 10.50%	6	50.0% to 70.0%	7.5% (nonanchor)	$0.10 to $0.20	—
REAL ESTATE ADVISOR ■ Forecast Period: 10 to 15 years Retail sales are based on historical and market analysis; typical sales growth is initially flat, then increasing 3.0% to 5.0% per year in typical markets and 7.0% per year in strong markets; relies on DCF (IRR), direct capitalization (initial cap rates), and price per square foot; strives for realistic cash flow forecast, especially in market rent growth rate, retail sales growth rate, and credit loss; greater distinction is being made between A and B centers; great concern over stability of anchors; uses face rents.	0.0% to 3.0% initially; varies thereafter	3.5%	3.0% to 4.0%	9.75% to 10.75%	2.0% to 4.0%	11.00% to 12.50%	9.50% to 10.50%	6 to 8	50.0% to 60.0%	3.0% to 5.0%	$0.50	9
INVESTMENT ADVISOR ■ Forecast Period: 10 years Dominant grocer and other anchors are a must; infill locations with true supply constraints are important.	0.0% to 4.0%	3.5%	3.5%	9.25% to 10.50%	1.5%	11.00% to 13.00%	9.00% to 10.00%	2 to 4	50.0%	5.0% to 10.0%	$0.10 to $0.20	6 to 9
INSTITUTIONAL INVESTOR ■ Forecast Period: 10 years Invests primarily in 200,000- to 400,000-square-foot well-anchored community centers and good credit quality anchored power centers; relies on DCF; market rent growth rates vary according to supply-demand balance in specific market; uses effective rents.	2.0% to 3.0%	2.0% to 3.0%	2.0% to 3.0%	9.50% to 10.00%	2.0% to 3.0%	11.00% to 11.50%	9.50% to 10.50%	4 to 6	55.0% to 65.0%	1.0% (anchor) 1.0% to 3.0% (nonanchor)	$0.10 to $0.20	6 to 9
INSTITUTIONAL INVESTOR ■ Forecast Period: 10 years Buys free and clear; interested in higher quality community centers; relies on DCF (IRR); uses direct capitalization as a check only; may apply rent spike if appropriate based on analysis of leases in place; uses face rents in model that allocates actual concessions when they are scheduled to occur; currently in reduction phase; some development interest.	3.25%	3.25%	2.5%	9.75%	3.0% + any local tariffs	11.25%	9.50% to 9.75%	6 to 8	70.0%	6.0% to 8.0%	$0.10 to $0.20	6
MORTGAGE BANKER ■ Forecast Period: 10 years Relies on direct capitalization, shifting away from DCF; in DCF focuses on first 5 years of 10-year forecast period; uses face rents.	3.0%	3.0%	4.0%	9.50%	3.0%	11.00% to 13.00%	10.00%	3 to 8	70.0%	5.0%	$0.20 to $0.25	6

National CBD Office Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
DEVELOPER ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve deduction but before TIs and leasing commissions; residual cap rate should vary based on (1) occupancy in year capped, and (2) price per square foot value result relative to replacement cost.	4.0%; 3.0% thereafter	3.0%	3.0%	9.50%	Varies	9.75% to 10.50%	8.75%	6	67.0%	7.0%	$0.20	—
INVESTMENT BANKER ■ Forecast Period: 10 years Real cash on cash (after capital expenditures) more important than IRR; real interest in newer CBD buildings at 8.0% to 10.0% cash-on-cash rates.	3.0% to 5.0%	3.0%	3.0%	8.50% to 10.50%	2.0%	10.00% to 13.00%	7.50% to 10.00%	3 to 9	60.0% to 70.0%	3.0% to 5.0%	Varies	6 to 9
DOMESTIC PENSION FUND ■ Forecast Period: 10 to 12 years Buys free and clear; average IRR consists of a 6.0% to 7.0% real rate of return plus the inflation rate; the indicated growth scenarios help to determine sensitivity of investment to inflation; relies on DCF (IRR) and overall cap rates equally; use of face or effective rents varies with market.	Years 1-3 varies per market; at inflationary rate thereafter	2.0%/ 4.0%/ 6.0%	2.0%/ 4.0%/ 6.0%	8.75% to 9.25%	2.0%	10.50% to 11.50%	8.50% to 9.25%	6 to 9	60.0% to 70.0%	2.0% to 5.0%	$0.10 to $0.15	9 to 12
INVESTMENT ADVISOR ■ Forecast Period: 5 to 10 years Seeks a discount to replacement cost in recovering markets; uses face rents; in certain markets may apply rent spike in first three years.	0.0% to 7.0%	3.5%	3.5%	9.00% to 10.00%	1.0% to 3.0%	10.75% to 12.50%	7.50% to 9.00%	6 to 12	50.0% to 75.0%	3.0% to 7.0%	$0.20 to $0.40	6
REAL ESTATE ADVISOR ■ Forecast Period: 10 to 15 years Relies on DCF (IRR), direct capitalization (initial cap rates), and price per square foot; uses face rents and reflects free rent and other concessions when they are scheduled to occur; placing additional emphasis on average cash-on-cash rates for years 1 to 5, 6 to 10, and then the average rate for 1 to 10, coupled with partitioning present values and placing greater weight on cash flow vs. residual; continuing caution.	0.0% to 5.0%	3.0% to 4.0%	3.0% to 4.0%	9.00% to 10.00%	2.0% to 4.0%	10.50% to 12.00%	8.50% to 9.50%	6 to 9	60.0% to 70.0%	3.0% to 5.0%	$0.20 to $0.50	12 to 18
INVESTMENT ADVISOR ■ Forecast Period: 10 years Prefers free and clear proprieties with joint venture partner and preferred return; uses all valuation techniques and correlates; does not rely on any one technique; looks at components of NOI growth; uses face rents.	0.0% to 8.0%	3.5%	3.5%	9.00% to 10.00%	1.5%	11.00% to 15.00%	8.00% to 11.00%	4 to 8	60.0%	5.0% to 10.0%	$0.20	6 to 12
PENSION FUND ADVISOR ■ Forecast Period: 10 years Relies on DCF (IRR), direct capitalization (initial cap rates), and price per square foot; uses face rents.	3.0% to 4.0%	3.0%	3.0%	9.00% to 10.00%	2.0%	11.00% to 12.00%	8.75% to 10.00%	6 to 8	60.0%	5.0%	$0.15	6 to 12
DOMESTIC PENSION FUND ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur.	3.0% to 3.5%	3.0% to 3.5%	3.5%	8.00% to 9.50%	—	10.00% to 12.00%	7.50% to 9.50%	6 to 12	65.0% to 75.0%	1.0% to 3.0%	$0.10 to $0.25	6 to 12
LIFE INSURANCE COMPANY ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve.	2.0% to 4.0%	2.0% to 3.0%	3.0%	9.00% to 11.00%	1.0% to 4.0%	10.00% to 12.00%	8.00% to 10.00%	3 to 12	50.0% to 70.0%	3.0% to 6.0%	$0.20 to $0.40	3 to 12

National Suburban Office Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
PENSION FUND ADVISOR ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve deduction but before TIs and leasing commissions.	5.0%	3.0%	2.5%	10.00%	3.0%	12.50%	9.75%	3	60.0%	7.0%	$0.25	6
INVESTMENT BANKER ■ Forecast Period: 10 years Real cash on cash (after capital expenditures) more important than IRR.	Years 1-3 varies; 3.5% thereafter	3.0%	3.0%	8.50% to 10.50%	2.0%	10.50% to 12.50%	8.00% to 10.50%	6 to 9	65.0%	5.0% to 7.5%	$0.10 to $0.20	6 to 9
DOMESTIC PENSION FUND ■ Forecast Period: 10 to 12 years Buys free and clear; average IRR consists of a 6.5% to 7.5% real rate of return plus the inflation rate; the indicated growth scenarios help to determine sensitivity of investment to inflation; relies on DCF (IRR) and overall cap rates equally; use of face or effective rents varies with market.	Years 1-3 varies per market; thereafter at inflationary rate	2.0%/ 4.0%/ 6.0%	2.0%/ 4.0%/ 6.0%	9.00% to 9.25%	2.0%	10.50% to 11.50%	8.75% to 9.50%	6 to 9	60.0% to 70.0%	2.0% to 5.0%	$0.10 to $0.20	9 to 12
INVESTMENT ADVISOR ■ Forecast Period: 5 to 10 years Seeks a discount to replacement cost in recovering markets; in certain markets may apply spike in first three years; uses face rents.	3.5% to 7.0%	3.5%	3.5%	9.00% to 10.00%	2.0% to 3.0%	10.75% to 12.50%	7.50% to 9.00%	6 to 12	50.0% to 75.0%	5.0% to 10.0%	$0.20 to $0.40	6
REAL ESTATE ADVISOR ■ Forecast Period: 10 to 15 years Relies on DCF (IRR), direct capitalization (initial cap rates), and price per square foot; uses face rents and reflects free rent and other concessions when they are scheduled to occur; placing additional emphasis on average cash-on-cash rates for years 1 to 5, 6 to 10, and then the average rate for 1 to 10, coupled with partitioning present values and placing greater weight on cash flow vs. residual; continuing caution.	2.0% to 5.0%	3.0% to 4.0%	3.0% to 4.0%	9.25% to 10.25%	2.0% to 4.0%	10.50% to 12.00%	8.75% to 9.75%	6 to 9	60.0% to 70.0%	3.0% to 4.0%	$0.20 to $0.50	12 to 18
INVESTMENT ADVISOR ■ Forecast Period: 10 years Prefers free and clear properties with joint venture partner and preferred return; uses all valuation techniques and correlates; does not rely on any one technique; looks at components of NOI growth; uses face rents.	0.0% to 8.0%	3.5%	3.5%	9.00% to 10.00%	1.5%	11.00% to 12.00%	8.50% to 10.00%	4 to 6	70.0%	2.0% to 5.0%	$0.10 to $0.20	6 to 9
PENSION FUND ADVISOR ■ Forecast Period: 7 years Relies on DCF (IRR), direct capitalization (initial cap rates), and price per square foot; uses effective rents.	3.0%	3.0%	3.0%	9.00% to 10.00%	2.0% to 3.0%	11.00% to 12.00%	9.00% to 10.00%	6 to 12	60.0%	5.0%	$0.15 to $0.20	6 to 12
INVESTOR ■ Forecast Period: 5 to 7 years Relies on DCF and direct capitalization; selling expense capped at $150,000; uses face rents.	3.0%	3.0%	3.0%	8.00% to 8.50%	1.5%	10.00%	8.00% to 8.50%	6 to 9	70.0%	0.5%	$0.50 to $1.00	3 to 6
REAL ESTATE ADVISOR ■ Forecast Period: 10 years Relies on DCF, also uses direct capitalization and price per square foot; residual cap rate is in part developed through a third 10-year DCF analysis.	Varies	2.5% to 3.0%	2.75% to 3.0%	9.00% to 11.00%	3.0%	10.50% to 11.50%	9.00% to 10.50%	6	60.0% to 80.0%	5.0% to 7.0%	$0.10 to $0.20	3 to 6
INSTITUTIONAL INVESTOR ■ Forecast Period: 10 years Invests primarily in newer suburban office properties with credit quality tenants; relies on DCF; uses effective rents.	2.0% to 3.0%	2.0% to 3.0%	2.0% to 3.0%	9.50% to 10.00%	2.0% to 3.0%	10.75% to 11.50%	8.75% to 9.50%	4 to 6	55.0% to 65.0%	1.0% to 3.0%	$0.15 to $0.20	6 to 7

Atlanta Office Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES
FOURTH QUARTER 1999

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
DEVELOPER ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve deduction but before TIs and leasing commissions; uses face rents and reflects concessions when they are scheduled to occur.	2.5%	3.0%	3.0%	9.00%	2.5%	9.75% to 10.50%	9.50%	6 to 9	67.0%	7.0%	$0.15 to $0.20	—
INVESTMENT ADVISOR ■ Forecast Period: 10 years Relies on DCF; does not do a true direct capitalization approach but analyzes the implied year 1 overall cap rate based on NOI divided by value conclusion.	3.0%	3.0%	3.0%	9.50%	1.5% to 2.0%	11.00%	9.50% to 10.00%	4 on weighted basis	50.0%	2.0%	$0.10	—
LIFE INSURANCE COMPANY ■ Forecast Period: 10 years Uses both DCF and direct capitalization; uses face rents and allocates concessions when they are scheduled to occur; no longer applies rent spikes.	0.0% to 3.5%	3.0%	3.0%	9.50% to 10.00%	3.0%	11.25% to 12.00%	9.25% to 9.75%	6	65.0%	5.0% to 10.0%	$0.20 to $0.25	3 to 6
INVESTMENT ADVISOR ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur; concerned that construction activity could soften market.	0.0% to 2.0%	$8.00 per square foot	3.0%	9.50%	1.0%	10.00% to 11.00%	8.75%	6	65.0%	7.0%	$0.25	—
LIFE INSURANCE COMPANY ■ Forecast Period: 5 to 8 years Uses DCF and direct capitalization; relies on DCF; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; uses face rents and reflects concessions when they are scheduled to occur.	0.0%	3.0%	3.0%	9.50% to 11.00%	2.0%	11.00% to 12.00%	8.00% to 10.50%	6	60.0%	4.0%	$0.25	6 to 9
INVESTMENT ADVISOR ■ Forecast Period: 10 years Relies on DCF; typical management fees are 4.0%; typical leasing fees are 5.0% on new leases, 2.0% on renewals; typical TIs are $5.00 for new leases, $3.25 for renewals; uses face rents; structural vacancy	3.0%	3.0%	3.0%	9.25%	2.0%	12.00%	9.25%	0	75.0%	5.0%	$1.05	6 to 9

Boston Office Market

INVESTOR SURVEY RESPONSES
FOURTH QUARTER 1999

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
LIFE INSURANCE COMPANY ■ Forecast Period: 10 years Prefers suburban properties; uses DCF and direct capitalization; also looks at average 5-year cash-on-cash returns; uses face rents and allocates concessions when they are scheduled to occur.	3.0% to 5.0%	3.0%	3.0%	9.00% to 9.50%	3.0% to 4.0%	10.00% to 11.00%	8.25% to 8.75%	3 to 6	65.0%	5.0% to 7.5%	$0.20 to $0.25	3 to 6
INVESTOR ■ Forecast Period: 3 to 5 years and 10 years Uses DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur.	3.0%	3.0%	3.0%	9.50% to 10.50%	2.5% to 5.0%	11.00% to 13.00%	9.00% to 11.00%	6	70.0%	5.0% to 10.0%	$0.15 to $0.25	3 to 4
REAL ESTATE ADVISOR ■ Forecast Period: 10 years Prefers good-quality, good occupancy properties in 24-hour metropolitan locations; uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur.	3.0%	3.0% to 5.0%	3.0%	8.00% to 9.00% (CBD); 9.00% to 10.00% (suburbs)	1.0% to 4.0%	10.50% to 11.50%	7.50% to 8.50% (Class-A, CBD); 8.50% to 9.50% (suburbs)	6	67.0%	1.0% (Class-A, CBD); 5.0% (Class B, suburbs)	$0.10 to $0.25	3
REAL ESTATE ADVISOR ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur.	3.0%	3.0%	3.0%	9.50%	2.0%	10.50%	—	6 to 9	65.0%	8.0%	$0.35 to $0.50	9
INVESTOR ■ Forecast Period: 5 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; does not use rent spikes.	2.5%	2.5%	2.5%	9.25%	2.0%	11.50%	9.00%	6	70.0%	5.0%	$0.25	4
MORTGAGE BANKER ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents; uses spikes every year.	3.0%	4.0%	—	9.50%	—	11.00%	8.75%	6	50.0%	5.0%	$0.15 to $0.20	6

Chicago Office Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
REAL ESTATE ADVISOR ■ Forecast Period: 10 years Relies on DCF; uses direct capitalization as a check only; real estate taxes are a major issue; prefers suburban markets; uses face rents and reflects concessions when they are scheduled to occur.	3.0%	3.0%	3.0%	8.00% to 10.00%	2.0% to 3.0%	9.29% to 11.80%	8.00% to 9.50%	3 to 6	60.0% to 75.0%	5.0%	$0.15 to $0.20	9 to 12
MORTGAGE BANKER ■ Forecast Period: 10 years Relies on DCF and uses direct capitalization as a test; cost, rent, and value per square foot are true "sanity tests"; real estate taxes are a big issue (usually more than 50.0% of property expenses); uses effective rents; geographic preferences are downtown and north suburban.	3.0% to 3.5%	3.0%	3.0%	9.25% to 9.50%	2.0%	11.00%	9.00%	6	70.0% to 75.0%	5.0%	$0.15	6 to 9
INSTITUTIONAL INVESTOR ■ Forecast Period: 5 years Relies on DCF; forecasts market rent at 6.0% year 1, 5.0% year 2, 4.0% year 3, and 3.0% thereafter; forecasts higher expenses in Cook County; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve.	3.0%	$7.00 to $8.00 per square foot	3.0%	9.00% to 10.00%	1.0% to 3.0%	11.00% to 13.00%	9.00% to 9.50%	6	70.0%	4.0%	$0.20	6
INSTITUTIONAL INVESTOR ■ Forecast Period: 10 years Relies on DCF; uses present value analysis of effective rents.	2.0% to 3.0%	2.0% to 3.0%	2.0% to 3.0%	9.25% to 9.75% (suburbs); 9.25% to 10.00% (CBD)	2.0% to 3.0%	10.50% to 11.50%	8.75% to 9.50%	4 to 6	55.0% to 60.0%	1.0% to 3.0%	$0.15 to $0.20	3 to 6 (suburbs); 6 to 12 (CBD)
LIFE INSURANCE COMPANY ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve.	3.0%	3.0%	3.0%	9.25%	2.0%	10.50%	9.00%	5	65.0%	3.0%	$0.20	6
LIFE INSURANCE COMPANY ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve deduction but before TIs and leasing commissions; does not use rent spikes; prefers suburbs (East and West Corridor, North Suburban, and Northwest Suburban).	3.0% to 5.0%	3.0%	3.0%	9.00% to 9.25%	3.0% to 4.0%	10.00% to 11.25%	8.50% to 9.50%	3 to 6	60.0% to 65.0%	5.0% to 10.0%	$0.20 to $0.25	3 to 6
REAL ESTATE ADVISOR ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve deduction but before TIs and leasing commissions; uses face rents.	0.0% to 3.0% (CBD); 2.0% to 5.0% (suburbs)	4.0%	—	9.25% to 9.50% (suburbs); 10.00% (CBD)	2.0% to 2.5%	10.00% to 10.75%	9.75% to 10.00%	6	50.0% to 70.0%	5.0% to 7.0% (suburbs); 7.0% to 9.0% (CBD)	$0.20 to $0.25	6 to 9

Dallas Office Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
LIFE INSURANCE COMPANY ■ Forecast Period: 10 years Relies on DCF; also uses direct capitalization and sales comparison in CBDs; properties with upside command lower going-in cap rates; uses rent spikes.	3.0% (suburbs); 0.0% years 1 and 2 (CBD); 3.0% thereafter	3.0%	3.0%	9.00% to 12.00%	1.5% to 5.0%	10.50% to 12.00% (suburbs); 11.00% to 13.00% (CBD)	8.00% to 12.00%	6	70.0% (suburbs); 60.0% (CBD)	10.0% (suburbs); 15.0% (CBD)	1.0% of EGI	12
INVESTMENT ADVISOR ■ Forecast Period: 3, 5, and 10 years Relies on DCF and direct capitalization; there are no concessions and no free rent in this market; no longer applies rent spikes.	0.0% to 2.0%	4.0%	4.0%	8.50% to 9.50%	2.0%	10.50% to 11.50%	7.50% to 9.50%	6 to 9	60.0% to 75.0%	5.0%	$0.25	9
REAL ESTATE ADVISOR ■ Forecast Period: 10 years Buys all cash; focuses on DCF analysis, then looks at cash-on-cash returns in years 2 to 5; looks at 5-year averages and cash-on-cash returns after leasing commissions, TIs, and reserves; also "goes above the line" to see true capitalization rate.	0.0% to 5.0%	3.0% to 4.0%	3.0% to 4.0%	9.25% to 10.25%	2.0% to 4.0%	11.00% to 12.50%	8.75% to 9.75%	4 to 7	60.0% to 70.0%	2.0% to 3.0%	$0.20 to $0.50	3 to 6
INVESTMENT ADVISOR ■ Forecast Period: 10 and 20 years Criteria for downtown and suburban submarkets vary widely; uses both DCF and direct capitalization; ties most expenses to CPI but projects others (e.g., utilities and real estate taxes) at higher rate; uses effective rents.	4.0% to 10.0%	3.0%	3.0%	8.00% to 10.00%	2.0%	9.00% to 10.00%	8.00% to 11.00%	8	60.0%	5.0%	3.0% to 7.0% of EGI	6
REIT ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes cash flow after TIs, leasing commissions, and capital replacement reserve.	3.0%	3.0%	3.0%	10.00%	2.0%	11.50%	9.25% to 9.50%	6	65.0%	2.0% to 3.0%	$0.10	—
LIFE INSURANCE COMPANY ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve deduction but before TIs and leasing commissions; does not use rent spikes; uses face rents and reflects concessions when they are scheduled to occur.	0.0% to 3.0%	3.0%	3.0%	9.50% to 10.00%	2.0% to 4.0%	11.50% to 12.50%	9.50% to 10.00%	6	65.0%	5.0% to 10.0%	$0.20 to $0.25	4 to 9
LIFE INSURANCE COMPANY ■ Forecast Period; 5 to 8 years Uses DCF and direct capitalization; also looks at discount to replacement cost; relies on DCF; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; there are few concessions in this market, therefore face rent equals effective rent.	0.0%	2.5%	3.0%	9.00% to 11.00%	2.0%	11.00% to 12.00%	8.00% to 10.00%	6	60.0%	4.0%	$0.25	6

Houston Office Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
LIFE INSURANCE COMPANY ■ Forecast Period: 10 years Relies on DCF; also uses direct capitalization and sales comparison in CBDs; uses effective rents; properties with upside command lower going-in cap rates.	3.0% to 3.5% (suburbs); 0.0% (CBD)	3.0%	3.0%	8.00% to 12.00%	1.5% to 5.0%	10.50% (suburbs); 11.00% to 11.50% (CBD)	8.00% to 12.00%	4 to 6	70.0% (suburbs); to 60.0% (all others)	8.0% (CBD) to 10.0% (suburbs)	1.0% of EGI	12
INVESTMENT ADVISOR ■ Forecast Period; 3, 5, and 10 years Relies on DCF and direct capitalization; there are no concessions and no free rent in this market; applies 5.0% to 8.0% rent spikes in years 1 to 3 in suburban submarkets.	4.0% to 8.0%	4.0%	4.0%	9.00% to 10.50%	2.0%	10.50% to 12.00%	8.50% to 11.00%	6 to 9	60.0% to 75.0%	5.0%	$0.25	9
REAL ESTATE ADVISOR ■ Forecast Period: 10 years Buys all cash; focuses on DCF analysis, then looks at cash-on-cash returns in years 2 to 5; looks at 5-year averages and cash-on-cash returns after leasing commissions, TIs, and reserves; also "goes above the line" to see true capitalization rate.	2.0% to 5.0%	3.0% to 4.0%	3.0% to 4.0%	9.25% to 10.25%	2.0% to 4.0%	11.25% to 12.75%	9.00% to 10.00%	4 to 7	60.0% to 70.0%	2.0% to 3.0%	$0.20 to $0.50	3 to 6
INVESTMENT ADVISOR ■ Forecast Period: 10 and 20 years Criteria for downtown and suburban submarkets vary widely; uses both DCF and direct capitalization; ties most expenses to CPI but projects others (e.g., utilities and real estate taxes) at higher rate; uses effective rents.	2.0% to 8.0%	3.0%	3.0%	8.00% to 9.50%	2.0%	9.00% to 12.00%	8.00% to 11.00%	10	60.0%	5.0%	3.0% to 7.0% of EGI	6
PRIVATE INVESTOR ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes cash flow after TIs, leasing commissions, and capital replacement reserve.	0.0% year 1; 3.0% thereafter	3.0%	3.0%	10.00%	2.0%	12.00%	10.00%	6	70.0%	1.0%	$0.10	6
LIFE INSURANCE COMPANY ■ Forecast Period: 10 years Interest is in Houston suburbs only; uses DCF and direct capitalization; applies rent spikes of 4.0% to 6.0% in years 1 to 3; uses face rents and allocates concessions when they are scheduled to occur; marketing time estimate is for properties that are "priced right"; still some concern over cyclical nature of economy.	4.0% to 6.0%	3.0%	3.0%	9.25% to 9.75%	2.0% to 4.0%	11.50% to 11.75%	9.00% to 9.50%	3 to 6	65.0%	5.0% to 10.0%	$0.20 to $0.25	4 to 9
LIFE INSURANCE COMPANY ■ Forecast Period; 5 to 8 years Uses DCF and direct capitalization; also looks at discount to replacement cost; relies on DCF; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; uses face rents and reflects concessions when they are scheduled to occur.	2.0% to 4.0%	3.0% to 4.0%	3.0%	9.50% to 11.00%	2.0%	10.50% to 13.50%	8.00% to 10.00%	6	60.0%	4.0%	$0.25	6 to 9

Los Angeles Office Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
PENSION FUND ADVISOR ■ Forecast Period: 7 to 10 years Relies on DCF; looks at value indicated by direct capitalization; uses face rents and applies concessions when projected to occur; does not tie income or expenses directly to CPI.	3.0% to 6.0%	3.0% to 4.0%; taxes 2.25%	2.5% to 3.0%	9.00% to 10.00%	1.5% to 3.0%	11.00% to 13.00%	9.00% to 10.00%	4 to 8	60.0% to 70.0%	5.0% to 8.0%	$0.10 to $0.30	6 to 8
REAL ESTATE ADVISOR ■ Forecast Period: 5, 7, and 10 years Buys turnaround situations as well as rotational plays in suburban markets; uses both DCF and direct capitalization; relies on DCF; applies 4.0% to 10.0% rent spike in years 1 to 2 in submarkets where there is evidence that they will occur; uses face rents in DCF model, net effective rents in direct capitalization.	4.0% to 6.0%	4.0%	3.0%	8.00% to 10.00%	1.5% to 2.0%	11.00% to 13.00%	8.00% to 10.00%	2 to 12	65.0%	8.0% to 10.0%	$0.30 to $1.00	6
INVESTMENT BANKER ■ Forecast Period: 10 years Uses DCF (IRR), direct capitalization (initial cap rates), and price per square foot; does extensive sensitivity analysis and correlates all value indications; uses face rents; IRRs for Class-A properties are 11.00% to 13.00%; investors looking at IRRs again; cash on cash is important, but perceived improvement in market is more important.	4.0% to 5.0%	3.0% to 4.0%	3.0% to 4.0%	9.00% to 10.00%	2.0%	11.00% to 15.00%	7.00% to 10.00%	4 to 6	65.0% to 75.0%	5.0% to 10.0%	Does not use	6 to 9
INVESTMENT ADVISOR ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; applies rent spike in years 1 and 2 in certain submarkets; uses face rents and reflects concessions when they are scheduled to occur.	5.0%	3.0%	3.0%	9.00%	2.0%	10.50% to 11.00%	9.00%	8	70.0%	5.0%	$0.20	—
INVESTMENT ADVISOR ■ Forecast Period: 3 to 7 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur.	3.0%	2.0% to 3.0%	3.0%	9.00% to 10.00%	1.0% to 5.0%	11.00% to 13.00%	9.00% to 10.50%	6 to 9	65.0% to 75.0%	3.0% to 5.0%	$0.10 to $0.15	4 to 6
INSTITUTIONAL INVESTOR ■ Forecast Period: 3 to 5 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve deduction but before TIs and leasing commissions.	3.0% to 5.0%	3.0%	4.0%	8.50% to 9.50%	2.0% to 5.0%	12.00% to 14.00%	8.00% to 9.00%	6	75.0%	5.0%	$0.15 to $0.20	3
INVESTOR ■ Forecast Period: 5 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; typically looks for Class-A, 150,000-square-foot and larger properties in Tier 1 locations; likes opportunities for turnaround, repositioning, and select renovation projects.	4.0% to 5.0%	3.0% to 3.5%	2.5%	9.50%	1.5%	12.00%	8.00%	4	70.0% to 75.0%	3.0% to 4.0%	$0.10 to $0.15	4 to 6
LIFE INSURANCE COMPANY ■ Forecast Period: 10 years Relies primarily on DCF; also uses direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve.	3.0% to 4.0%	3.0%	3.0%	8.50% to 11.00%	1.5% to 4.0%	10.50% to 12.00%	8.25% to 10.25%	6 to 12	50.0% to 65.0%	3.0% to 4.0%	$0.20 to $0.25	4 to 9

Manhattan Office Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
INVESTMENT BANKER ■ Forecast Period: 10 years Strongest interest is in Midtown; 7.0% to 10.0% rent spike in Class-A buildings in Midtown.	5.0% years 1-3; 3.5% thereafter	3.0%	3.0%	8.00% to 10.00%	2.5%	10.00% to 12.00%	7.50% to 10.00%	6 to 12	70.0%	3.5% to 7.0%	Varies	6 to 9
DOMESTIC PENSION FUND ■ Forecast Period: 10 to 12 years Buys free and clear; average IRR consists of a 6.5% to 7.5% real rate of return, plus the inflation rate used on market rent. The three indicated growth scenarios help to test the sensitivity of investment to inflation; relies on DCF (IRR); NYC reassessment at 45.0% of sale price with five-year phase-in and 2.0% tax rate increase beginning after phase-in; use of face or effective rents varies by submarket.	2.0% years 1-2; inflation thereafter	2.0%/ 4.0%/ 6.0%	2.0%/ 4.0%/ 6.0%	8.00% to 9.00%	1.0% to 6.0%	10.50% to 11.50%	8.25% to 9.25%	6 to 9	60.0% to 70.0%	2.0% to 5.0%	$0.10 to $0.20	9 to 12
PENSION FUND ADVISOR ■ Forecast Period: 10 years Reflects NYC reassessment at 40.0% to 45.0% of sale price with tax rate increases of 5.0% per year; looks at DCF, direct capitalization (initial cap rates), and price per square foot.	3.0%	3.0%	3.0%	9.00% to 10.00%	1.0% to 2.0%	11.00% to 12.50%	8.50% to 9.50%	6 to 9	60.0%	5.0%	$0.10 to $0.15	12 to 18
REAL ESTATE ADVISOR ■ Forecast Period: 10 to 12 years NYC reassessment at 38.0% to 45.0% of sale price with five-year phase-in; very concerned about NYC's assessment practices; relies on DCF (IRR), direct capitalization, and price per square foot; emphasis on cash-on-cash rates; more realistic credit loss, downtime, free rent, TIs, and annual capital reserve; uses face rents and reflects concessions when they are scheduled to occur; applies 5.0% to 7.0% rent spike in years 3 to 4 in selected Downtown submarkets; more concerned with the resale estimate.	3.0% to 4.0% (Midtown); 0.0% initially, then 2.0% to 4.0% (Downtown older product)	3.0% to 4.0%	3.0% to 4.0%	8.75% to 9.75%	2.0% to 4.0%	10.50% to 12.00%	8.50% to 9.50%	6 to 12	60.0% to 70.0%	1.0% to 3.0%	$0.20 to $0.50	6 to 12
INVESTMENT ADVISOR ■ Forecast Period: 10 years Prefers free and clear, reflects NYC reassessment at 40.0% to 45.0% of sale price with five-year phase-in and increase of tax rates at 5.0% per year; does not place primary reliance on any technique; uses all and correlates; also looks at components of NOI growth; uses face rents.	4.0%	3.5%	3.5%	8.50% to 9.50%	1.5%	11.00% to 12.00%	8.50% to 10.00%	4 to 6	65.0%	5.0% to 10.0%	$0.10 to $0.20	9 to 12
INVESTMENT ADVISOR ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital reserve; uses face rents and reflects concessions when they are scheduled to occur; foreign investors continue to have an interest in Manhattan office buildings.	3.5%	3.5%	3.5%	9.00% to 10.00%	1.0% to 3.0%	10.75% to 12.50%	8.00% to 10.00%	9 to 12	50.0% to 70.0%	3.0% to 7.0%	$0.40	9 to 12
REAL ESTATE ADVISOR ■ Forecast Period: 5, 7, and 10 years Uses both DCF and direct capitalization; relies on DCF; uses face rents in DCF model, net effective rents in direct capitalization; prefers Midtown and Times Square.	4.0% to 6.0%	4.0%	3.0%	8.00% to 10.00%	1.5% to 2.0%	11.00% to 13.00%	8.50% to 10.50%	2 to 18	60.0%	8.0% to 14.0%	$0.30 to $1.00	10
LIFE INSURANCE COMPANY ■ Forecast Period: 10 to 12 years Uses both DCF and direct capitalization; in direct cap, capitilizes NOI before TIs, leasing commissions, and capital replacement reserve.	3.0% to 4.0%	3.0%	3.0%	9.00% to 9.50%	1.0% to 2.0%	9.75% to 10.50%	8.00% to 9.00%	4 to 5	60.0% to 70.0%	5.0%	$0.15 to $0.25	4 to 6

Pacific Northwest Office Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
REAL ESTATE ADVISOR ■ Forecast Period: 10 years Uses both DCF and direct capitalization; preference for DCF; interested in both CBD and suburban properties in both Seattle and Portland; uses face rents.	5.0%	3.0%	—	9.00% to 9.50%	2.0% to 2.5%	11.50%	9.50% to 10.00%	6	60.0% to 70.0%	5.0%	$0.20 to $0.25	9 to 12
INVESTOR ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; there are no concessions in this market; rental rates continue to rise in Puget Sound market area; vacancy rate continues to drop; prefers Puget Sound area and Spokane, Washington.	8.0%	3.0%	3.0%	8.50% to 10.00%	3.0%	10.75% to 12.00%	8.50% to 11.00%	3 to 9	75.0% to 80.0%	0.0% to 4.0%	Does not use	6 to 12
INVESTMENT BANKER ■ Forecast Period: 10 years Uses DCF (IRR), direct capitalization, and price per square foot; does extensive sensitivity analysis; reliance is on projections and IRRs; uses face rents.	4.0%	3.0% to 4.0%	4.0%	9.00% to 10.00%	2.0%	11.00% to 13.00%	8.00% to 10.00%	3 to 6	65.0% to 70.0%	5.0% to 10.0%	Does not use	6 to 9
INVESTMENT ADVISOR ■ Forecast Period: 10 years Uses primarily DCF; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; applies rent spike in year 1 in certain submarkets; uses face rents and reflects concessions when they are scheduled to occur.	3.0%	3.0%	3.0%	9.00% to 9.50%	4.0%	10.50% to 11.00%	8.25%	6	65.0%	2.0% to 5.0%	$0.15 to $0.20	6
INVESTOR ■ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve deduction but before TIs and leasing commissions; does not use rent spikes; uses face rents and reflects concessions when they are scheduled to occur; prefers Puget Sound and Portland.	Varies	2.0% to 4.0%	2.0% to 2.75%	9.50% to 10.50%	3.0% to 5.0%	10.50% to 13.00%	8.50% to 10.00%	6	75.0%	5.0%	$0.20	3 to 6
REAL ESTATE ADVISOR ■ Forecast Period: 5 to 10 years Interested in Seattle, Portland, and Spokane; uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses effective rents after all concessions are extracted.	2.5%	3.0%	2.5% to 3.5%	9.25%	2.5% to 3.0%	10.50% to 11.50%	9.25%	6 to 9	50.0%	7.0% to 10.0%	$0.15 to $0.20	6 to 9
INSTITUTIONAL INVESTOR ■ Forecast Period: 10 years Buys free and clear; interested in attractive, well-located Class-A properties; relies on DCF (IRR); uses direct capitalization as a check only; may apply a 5.0% to 8.0% rent spike if justified by submarket conditions and specific property; uses face rents in model that allocates actual concessions when they are scheduled to occur; underlying vacancy and credit loss may be lower based on current occupancy, leases in place, and rollover risk; developmental preferred.	3.0%	3.0%	3.0%	9.00% to 10.00%	1.5% to 3.5%	10.50% to 12.00%	—	6	70.0%	5.0%	$0.15 to $0.25	6

San Francisco Office Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
INVESTMENT ADVISOR ■ Forecast Period: 5 to 10 years Relies on DCF; applies rent spike in years 1 to 3; typical management fees are 3.0%; typical leasing fees are $9.00 on new leases, $4.50 on renewals; typical TIs are $15.00 for new leases, $9.75 for renewals; structural vacancy has been reached in this market.	8.0%	3.0%	3.0%	8.25% to 8.75%	1.0%	10.00% to 10.50%	8.50%	2	75.0%	5.0%	$0.10 to $0.25	3 to 6
PENSION FUND ADVISOR ■ Forecast Period: 7 and 10 years Uses DCF and direct capitalization but relies on DCF; uses face rents and reflects actual concessions when scheduled to occur.	4.0% to 6.0%	3.0% to 4.0%; taxes 2.0%	3.0% to 3.5%	8.50% to 9.50%	1.0% to 2.0%	10.50% to 12.00%	8.00% to 9.00%	4 to 6	60.0% to 70.0%	5.0%	$0.10 to $0.20	4 to 8
REAL ESTATE ADVISOR ■ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; no longer applies rent spike; uses face rents and reflects concessions when they are scheduled to occur; is placing greater focus on rents in place.	1.5%	3.0%	3.0%	8.50% to 9.50%	1.0% to 1.5%	10.50% to 11.00%	7.50% to 9.00%	6	70.0%	5.0%	$0.15 to $0.25	6 to 9
REAL ESTATE ADVISOR ■ Forecast Period: 5 and 10 years Buys turnaround situations as well as rotational plays in suburban markets; uses both DCF and direct capitalization; relies on DCF; applies 4.0% to 10.0% rent spike in years 1 through 3 in submarkets where there is evidence that they will occur; uses face rents in DCF model, net effective rents in direct capitalization.	0.0% to 10.0%	4.0%	3.0%	8.00% to 10.00%	1.5% to 2.0%	10.50% to 13.00%	8.00% to 11.00%	2 to 18	60.0% to 65.0%	6.0% to 8.0%	$0.30 to $1.00	3 to 6
DOMESTIC PENSION FUND ■ Forecast Period: 10 years Prefers CBD; uses both DCF and direct capitalization; uses face rents and reflects concessions when they are scheduled to occur.	3.0% to 3.5%	3.0% to 3.5%	3.0% to 3.5%	8.00% to 9.50%	1.0% to 2.0%	10.00% to 11.50%	7.50% to 9.00%	8 to 10	65.0% to 75.0%	1.0% to 3.0%	$0.10 to $0.25	6 to 12
LIFE INSURANCE COMPANY ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; forecasts expenses at 100% of projected CPI; no longer applies a rent spike.	0.0% to 5.0%	3.0%	3.0%	9.00% to 9.50%	1.5% to 4.0%	10.00% to 11.25%	7.00% to 9.00%	3 to 10	60.0% to 70.0%	1.5% to 5.0%	$0.20 to $0.30	3 to 6
REAL ESTATE ADVISOR ■ Forecast Period: 5 to 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve deduction but before TIs and leasing commissions.	4.0% to 8.0%	3.0% to 4.0%	3.0%	8.00% to 10.00%	1.0% to 2.0%	10.00% to 11.50%	7.50% to 9.50%	3 to 8	75.0%	3.0% to 5.0%	$0.20 to $0.30	3 to 6

Southeast Florida Office Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
REIT ■ Forecast Period: 5 and 10 years Entrepreneurial buyer looking to buy going-in yield or value-added opportunities; uses price per square foot, stabilized cap, and 10-year DCF as checks; no longer uses rent spikes in this market; uses face rents and reflects concessions when they are scheduled to occur.	2.0% to 3.0%	2.0% to 3.0%	2.0% to 3.0%	10.00% to 11.00%	2.0%	11.00% to 12.00%	10.00% to 12.00%	6	65.0%	5.0%	$0.20	6
INVESTMENT ADVISOR ■ Forecast Period: 5 to 10 years Relies on DCF and direct capitalization; contract rents above market are reduced to market for pricing; market is improving; Miami's Airport West, downtown, and Brickell Class-A markets are very strong; uses effective rents.	5.0% to 7.0% years 1-3; 4.0% thereafter	3.0% to 3.5%	3.0% to 3.5%	9.50% to 10.00%	2.0%	10.50% to 12.00%	8.00% to 10.00%	4 to 8	75.0% to 80.0%	5.0% of noncredit space	$0.15 to $0.20	4
LIFE INSURANCE COMPANY ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve.	3.0%	3.0%	3.0%	9.25% to 9.50% (Class A); 9.75% to 10.25% (Class B)	2.0% to 4.0%	10.25% to 11.00% (Class A); 11.50% to 11.75% (Class B)	9.00% to 9.25% (Class A); 9.75% to 10.00% (Class B)	6	65.0% to 70.0%	7.0% to 10.0%	$0.20 to $0.30	6 to 9
DOMESTIC PENSION FUND ■ Forecast Period: 3, 5, 7, and 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve but before TIs and leasing commissions; uses effective rents after all concessions are extracted; applies 5.0% to 10.0% rent spike in early years; target IRR is 12.00%+ on development deals.	3.0% to 5.0%	3.0%	3.0%	9.00% to 10.00%	2.0%	10.50% to 12.00%+	9.00%+	6 to 9	70.0% to 75.0%	5.0%	$0.10 to $0.20	Varies
LIFE INSURANCE COMPANY ■ Forecast Period: 5 to 8 years Uses DCF and direct capitalization; also looks at discount to replacement cost; relies on DCF; uses effective rents; typical concessions still include three to six months free rent and generous TIs.	3.0%	3.0% to 4.0%	3.0%	9.50% to 11.00%	2.0%	11.00% to 12.00%	8.00% to 10.00%	6	65.0%	4.0%	$0.25	6 to 9
REAL ESTATE ADVISOR ■ Forecast Period: 10 years Interested in properties that are "value added" opportunities; uses both DCF and direct capitalization; uses face rents and reflects concessions when they are scheduled to occur.	2.0% to 3.0%	3.5%	—	9.50%	2.0% to 2.5%	10.00% to 10.50%	9.50% to 10.00%	6 to 9	50.0% to 70.0%	5.0% to 7.0%	$0.20 to $0.25	9 to 12
LIFE INSURANCE COMPANY ■ Forecast Period: 10 years Relies on DCF; also uses direct capitalization and sales comparison approaches as secondary analytical tools; uses face rents; use of rent spikes is minimal but may apply in year 1; amount of spike is determined on a case-by-case basis.	3.0%	3.0%	3.0%	9.25% (Class A) to 10.50% (Class B)	2.0% to 4.0%	10.75% to 11.75%	9.00% to 9.50%	3 to 6	70.0%	8.0% to 12.0%	$0.20 to $0.30	6 to 24

Washington, DC Office Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
INVESTMENT BANKER ■ Forecast Period: 10 years Uses face rents; underlying vacancy and credit loss includes rollover vacancy.	3.5%	3.0%	3.0%	8.00% to 9.00%	2.0%	10.00% to 11.50%	7.00% to 9.00%	8	75.0%	2.0% to 5.0%	$0.10 to $0.20	6
DOMESTIC PENSION FUND ■ Forecast Period: 10 to 12 years Buys free and clear; average IRR consists of a 7.0% to 7.5% real rate of return plus the inflation rate; the indicated growth scenarios help to determine the sensitivity of investment to inflation; relies on DCF (IRR) and cap rates equally; use of face or effective rents varies by submarket.	0.0% for period of years; then 3%, 5% spike + inflation	2.0%/ 4.0%/ 6.0%	2.0%/ 4.0%/ 6.0%	8.00% to 9.00%	1.0% to 2.0%	11.00% to 11.50%	8.00% to 9.00%	6 to 9	60.0% to 70.0%	2.0%	$0.10 to $0.20	6 to 9
INSTITUTIONAL INVESTOR ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; prefers CBD and East End.	3.0% to 3.5%	3.0%	3.0%	10.00%	2.5%	12.00% to 13.00%	10.00%	6	70.0%	5.0% to 6.0%	$0.20	6
REAL ESTATE ADVISOR ■ Forecast Period: 5 and 10 years Buys turnaround situations as well as rotational plays in the suburbs; uses both DCF and direct capitalization; relies on DCF; applies 4.0% to 10.0% rent spikes in years 1 and 2 where there is evidence that they will occur; uses face rents in DCF model, net effective rents in direct capitalization.	0.0% to 10.0%	4.0%	4.0%	8.00% to 11.00%	1.5% to 2.0%	11.00% to 14.00%	8.00% to 11.00%	2 to 18	65.0%	8.0% to 14.0%	$0.30 to $1.00	3 to 6
INVESTMENT ADVISOR ■ Forecast Period: 10 years Prefers free and clear properties with joint venture partner and preferred return; uses all valuation techniques and correlates; does not rely on any one technique; looks at components of NOI growth; uses face rents.	0.0% to 3.0%	3.5%	3.5%	8.50% to 10.00%	1.5%	11.00% to 12.50%	8.50% to 10.00%	4 to 6	60.0%	5.0% to 10.0%	$0.10 to $0.20	6 to 9
PENSION FUND ADVISOR ■ Forecast Period: 7 years Relies on DCF (IRR), direct capitalization (initial cap rates), and price per square foot.	3.0%	3.0%	3.0%	9.00% to 10.00%	2.0% to 3.0%	11.00% to 12.00%	8.75% to 9.50%	6 to 12	60.0%	2.0% to 3.0%	$0.15 to $0.20	12 to 18
INVESTOR ■ Forecast Period: 3 to 5 years and 10 years Uses DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses face rents and reflects concessions when they are scheduled to occur.	3.0%	3.0%	3.0%	9.50% to 10.50%	2.5% to 3.0%	11.00% to 13.00%	9.00% to 11.00%	6	65.0% to 70.0%	5.0% to 10.0%	$0.15 to $0.25	3 to 6
INSTITUTIONAL INVESTOR ■ Forecast Period: 10 years Relies on DCF; uses present value analysis of effective rents.	2.0% to 3.0%	2.0% to 3.0%	2.0% to 3.0%	8.75% to 10.00%	2.0% to 3.0%	10.75% to 11.50%	8.75% to 9.50%	3 to 6	55.0% to 65.0%	1.0% to 3.0%	$0.10 to $0.20	3 to 9

National Industrial Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES			RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	VACANCY ASSUMPTIONS			RESERVE	MARKETING TIME
	Market Rent	Expenses	CPI	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Months Vacant	Tenant Retention	Underlying Vacancy & Credit Loss	Per Square Foot	Months
LIFE INSURANCE COMPANY ■ Forecast Period: 10 to 15 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve.	2.0% to 5.0%	1.5% to 3.5%	3.0%	8.50% to 10.00%	2.0% to 4.0%	9.50% to 12.00%	8.50% to 10.00%	3 to 6	50.0% to 75.0%	2.0% to 6.0%	$0.10 to $0.30	3 to 9
PENSION FUND ADVISOR ■ Forecast Period: 10 years Prefers to buy free and clear; uses all valuation techniques.	3.0%	3.0%	3.0%	9.25% to 10.25%	2.0% to 3.0%	11.00% to 11.50%	8.75% to 9.50%	6 to 9	60.0%	5.0%	$0.15	6 to 9
INVESTMENT ADVISOR ■ Forecast Period: 10 years Prefers free and clear; relies on direct capitalization (initial cap rates), price per square foot, and DCF (IRR) and equity cap rates equally; hard to find in bulk (250,000 square feet or more); uses face rents.	2.0% to 4.0%	3.5%	3.5%	9.00% to 10.00%	1.5%	11.00% to 12.00%	8.50% to 9.50%	4 to 6	65.0%	4.0% to 8.0%	$0.10 to $0.15	6 to 9
DOMESTIC PENSION FUND ■ Forecast Period: 10 to 12 years Strongest market; buys free and clear only; average IRR consists of a 7.0% to 7.5% real rate of return, plus the inflation rate; the three indicated growth scenarios help to determine sensitivity of investment to inflation; relies on DCF (IRR) and initial cap rates equally; use of face or effective rents varies by market.	Years 1-3 varies per market; thereafter at inflationary rate	2.0%/ 4.0%/ 6.0%	2.0%/ 4.0%/ 6.0%	9.00% to 9.50%	2.0%	11.00% to 11.50%	9.00% to 10.00%	6 to 9	60.0%	2.0% to 5.0%	$0.10 to $0.20	6 to 9
REAL ESTATE ADVISOR ■ Forecast Period: 10 to 12 years Good market; continuing interest — more stress on supply/demand, etc.; relies on DCF (IRR), direct capitalization (initial cap rates), and price per square foot; emphasis on average cash-on-cash rates, more realistic; credit loss, downtime, free rent, TIs, and annual capital reserve; a lot of interest in this market but also very cautious; more concerned with the resale estimate — stabilized income, full selling commissions, full legal expenses, and real estate tax adjustment.	3.0% to 5.0%	3.0% to 4.0%	3.0% to 4.0%	9.25% to 10.25%	2.0% to 5.0%	10.50% to 12.00%	8.75% to 9.75%	6 to 12	50.0% to 60.0%	3.0% to 5.0%	—	6
REIT ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; uses effective rents after all concessions are extracted.	3.0%	3.0%	2.0%	—	2.0%	10.75%	8.50% to 10.25%	6	70.0%	7.0%	$0.05 $0.10	6
REIT ■ Forecast Period: 5 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve.	3.0%	3.0%	3.0%	10.25% to 10.50%	2.0% to 4.0%	12.00%	10.00%	6 to 12	70.0%	5.0%	$0.10 to $0.15	6 to 9
PENSION FUND ADVISOR ■ Forecast Period: 10 to 14 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI before TIs, leasing commissions, and capital replacement reserve; vacancy assumption is 5.0% total including lag on noncredit tenants plus 1.0% to 2.0% credit loss.	1.5% to 3.5%	3.0%	3.0%	9.00% to 10.00%	1.0% to 2.0%	10.00% to 11.00%	8.50% to 9.50%	2	70.0%	1.0% to 2.0%	$0.10 to $0.15	2

National Apartment Market

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES*
FOURTH QUARTER 1999

*Representative sample; due to space constraints, not all responses are included.

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	CHANGE RATES		VACANCY	RESIDUAL		DISCOUNT RATE (IRR)	OVERALL CAP RATE (OAR)	RESERVE	MARKETING TIME
	Market Rent	Expenses	Total Vacancy	Cap Rate	Selling Expense	Free & Clear	Free & Clear	Per Unit	Months
DOMESTIC PENSION FUND ■ Forecast Period: 10 years Strong balanced market; groups leases by expiration dates for DCF analysis; typical NOI ratio is 60.0%; uses face rents since concessions are typically minor; leasing fees are in addition to a 4.0% management fee; relies on direct capitalization; uses DCF as a test.	4.0%	2.0%/ 4.0%/ 6.0%	5.0%	8.75% to 9.50%	2.0%	11.00% to 11.50%	8.50% to 9.00%	$150 to $250	3 to 4
REAL ESTATE ADVISOR ■ Forecast Period: 10 years Continuing positive interest—people represent real demand; strong market; supply and demand in balance; groups leases by expiration dates for DCF analysis; management fee ranges from 3.0% to 5.0%; relies on DCF, direct capitalization, and sales comparison; emphasis on average cash-on-cash rates, more realistic credit loss, downtime, free rent, TIs, and annual capital reserve.	0.0% to 3.0%	3.0% to 4.0%	3.0% to 5.0%	9.00% to 10.00%	3.0%+	10.75% to 12.25%	8.50% to 9.50%	Specific by component, cost & life expectancy	6
DOMESTIC PENSION FUND ■ Forecast Period: 1 and 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve; reflects concessions as they occur; may burn off on new property during lease-up period in strong market.	3.0% to 3.5%	3.0% to 3.5%	5.0% to 10.0%	8.00% to 10.00%	—	10.00% to 12.00%	7.50% to 9.50%	$200 to $400	6 to 9
PENSION FUND ADVISOR ■ Forecast Period: 7 years Strong interest in this product nationwide; applies management fee of 3.0% to 4.0%; uses DCF and direct capitalization; emphasis is on initial returns.	2.0% to 3.0%	3.0%	5.0% to 7.0%	9.00% to 10.00%	2.0% to 3.0%	11.50%	8.50% to 9.50%	$300	6
REIT ■ Forecast Period: 10 years Specializes in this market; relies on direct capitalization; capitalizes cash flow after capital replacement reserve.	2.5% to 6.0%	2.5% to 3.5%	Varies	10.25%	3.0%	12.00%	9.50%	$200 to $350	6
REAL ESTATE ADVISOR ■ Forecast Period: 5 and 10 years Relies on DCF, also uses direct capitalization; residual cap rate is 25 basis points over the going-in cap rate on a 5-year holding period, 50 basis points over the going-in cap rate on a 10-year holding period.	3.0% to 3.5%	3.5%	6.0% to 8.0%	9.00% to 9.75%	2.5%	10.75% to 11.50%	8.75% to 9.25%	$200 to $250+ $100 to $150 for capital improvements	6
PENSION FUND ADVISOR ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve deduction; buys 150- to 400-unit apartment complexes in first-and second-tier markets nationwide.	3.0%	3.0%	5.0% to 7.0%	9.00% to 10.00%	1.5%	11.00% to 12.50%	7.75% to 9.00%	$200 to $250	3
PENSION FUND ADVISOR ■ Forecast Period: 7 to 10 years Specializes in this market; increases annual rent in lieu of lease-by-lease analysis; uses management fee of 4.0% plus leasing costs and reserve (actually funded); relies on direct capitalization primarily; also uses sales comparison and cost; more equity and debt are flowing to this market; sees signs of overbuilding of new deluxe product.	0.0% to 2.0%	3.5%	6.0% to 8.0%	8.25% to 9.00%	2.0%	10.25% to 10.75%	7.75% to 8.50%	$200 to $250	4
INVESTMENT ADVISOR ■ Forecast Period: 10 years Specializes in this market; relies equally on DCF and direct capitalization; reserve amount depends on age and/or conditions.	3.0% to 3.5%	3.0% to 3.5%	5.0% to 10.5%	8.50% to 9.50%	2.0% to 3.0%	11.00% to 11.50%	7.75% to 9.00%	$150 to $300	3
REIT ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, applies OAR to NOI after capital replacement reserve deduction; acquisitions are in the Western region of the United States.	3.0%	3.0%	5.0%	9.25%	2.0% to 3.0%	11.00% to 12.00%	8.75%	$200	4 to 8
LIFE INSURANCE COMPANY ■ Forecast Period: 10 years Uses both DCF and direct capitalization; in direct cap, capitalizes NOI after capital replacement reserve; in addition to per-unit reserve for appliances, adds 1.0% of EGI as a structural reserve.	2.5% to 3.0%	2.0% to 3.0%	6.0% to 10.0%	8.50% to 10.00%	1.5% to 4.0%	10.00% to 11.00%	8.00% to 9.50%	$150 to $300	4 to 6

Midyear 1999 National Land Yield Survey

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES
FOURTH QUARTER 1999

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	GEOGRAPHIC PREFERENCES	PROPERTY TYPES	ABSORPTION CRITERIA	CHANGE RATES		DISCOUNT RATE (IRR)		MARKETING PERIOD
			Years	Lot Prices	Development Costs	Free & Clear	Subject to Financing	Months
DEVELOPER/BROKER Primary method of pricing is DCF; analysis is prepared subject to financing; project size ranges from 3 to 100 acres.	Northwest suburban Chicago	Industrial office, hotel, multifamily	1 to 5	10.0% to 20.0%	Based on a % of revenue	—	12.00% to 25.00%	36
DEVELOPER Primary method of pricing is DCF; analysis is prepared free and clear of financing; project size varies.	United States	Multifamily	1	More than CPI; by 1.0% to 2.0%	3.0% to 5.0%	12.0% to 15.0%	15.00% to 25.00%	6
DEVELOPER Primary method of pricing is DCF; analysis is prepared both free and clear of financing; and subject to financing; project size is 8 acres.	California	Industrial	1	More than CPI	—	11.00%	12.00%	1 to 6
DEVELOPER Primary method of pricing is DCF; analysis is prepared free and clear of financing; project size ranges from .25 to 1,000 acres.	Northeast, San Francisco Bay area	Residential, office, mixed use	1 to 10	2.0%	1.0% to 3.0%	10.00% to 12.00%	—	30
HOTEL OWNER/OPERATOR Primary method of pricing is DCF; analysis is prepared subject to financing; project size ranges from 2 to 4 acres.	Mid-Atlantic	Hotel	1 to 5	3.0%	3.0%	13.50%	20.00% to 25.00%	6 to 12
DEVELOPER Primary method of pricing is DCF; analysis is prepared subject to financing; project sizes are 1,000 acres and greater.	Colorado	Residential, office, industrial	6 to 10	2.0% to 3.0%	3.0% to 4.0%	—	15.00% to 20.00%	120
OWNER/DEVELOPER Primary method of pricing is DCF; analysis is prepared free and clear of financing.	Southeast and Northeast	Office, industrial	1 to 3	0.0%	—	11.00% to 12.00%	18.00% to 20.00%	36
DEVELOPER Primary method of pricing is comparable sales; analysis is prepared free and clear of financing; project size ranges from 50 to 250 acres.	Midwest	Industrial, office, medical	1 to 20	3.0%	—	13.00%	—	240
BUILDER/DEVELOPER Primary method of pricing is DCF; analysis is prepared free and clear of financing; project size ranges from 1 to 360 acres.	Pennsylvania	Residential, commercial	3.5	0.0%	—	12.00%	—	24 to 60

Midyear 1999 National Land Yield Survey *(Continued)*

PRICEWATERHOUSECOOPERS

INVESTOR SURVEY RESPONSES
FOURTH QUARTER 1999

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	GEOGRAPHIC PREFERENCES	PROPERTY TYPES	ABSORPTION CRITERIA	CHANGE RATES		DISCOUNT RATE (IRR)		MARKETING PERIOD
			Years	Lot Prices	Development Costs	Free & Clear	Subject to Financing	Months
DEVELOPER Primary method of pricing is comparable sales; analysis is prepared free and clear of financing; project size ranges from 20 to 75 acres.	St. Paul	Office, industrial	1 to 5	3.0%	—	—	—	12
DEVELOPER/EQUITY PARTNER Primary method of pricing is comparable sales; analysis is prepared free and clear of financing; project size ranges from 5 to 20 acres.	West Coast, Mid-Atlantic Florida	Office, multifamily	1 to 5	—	—	—	—	36 to 48
OWNER/DEVELOPER Primary method of pricing is DCF; analysis is prepared subject to financing.	New York metropolitan area	Commercial	1 to 5	2.0%	2.0% to 5.0%	8.0%	—	24
DEVELOPER Primary method of pricing is DCF; analysis is prepared subject to financing; project size is 10 acres.	West and South	Multifamily	1 to 5	Less than CPI	1.0% to 5.0%	—	11.0%	24 to 36
DEVELOPER Uses pricing method other than DCF or comparable sales; analysis is prepared free and clear of financing; project size is 18 acres.	Midwest	—	1 to 5	12.0%	Based on a % of revenue	20.0%	—	60
DEVELOPER Primary method of pricing is bulk sales analysis; project size ranges from 80 to 614 acres.	San Francisco; Bakersfield, CA	Master-planned single-family	1 to 5	—	—	—	—	2 to 3
DEVELOPER Primary method of pricing is comparable sales; analysis is prepared subject to financing; project size ranges from 30 to 300 acres.	United States, Canada, Mexico	Bulk distribution, warehouse	1 to 5	—	—	—	10.00%	3
DEVELOPER Uses both DCF and comparable sales analysis for pricing; analyses are prepared both free and clear of and subject to financing; project size is 18 acres.	Wisconsin	Office, light industrial, mixed use	—	0.0%	Based on a % of revenue	—	—	—

Investment and Property Market Characteristics: Office Markets

PRICEWATERHOUSECOOPERS

FOURTH QUARTER 1999

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	FORECAST VALUE CHANGE NEXT 12 MONTHS		PRICE AS % OF REPLACEMENT COST		STRUCTURAL VACANCY		YEARS TO STRUCTURAL VACANCY		TIs - NEW (PSF)		TIs - RENEWAL (PSF)	
Market	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average
National CBD	2.00%-10.00%	4.93%	65.00%-110.00%	91.25%	4.00%-10.00%	7.38%	0-5	2.5	$10.00-$50.00	$27.67	$0.00-$25.00	$11.83
National Suburban	0.00%-10.00%	3.75%	80.00%-110.00%	98.55%	0.00%-8.00%	5.88%	0-3	1.1	$8.00-$30.00	$15.77	$4.00-$20.00	$7.18
Atlanta	0.00%-6.00%	1.92%	90.00%-110.00%	100.00%	5.00%-8.00%	6.75%	0-0	0.0	$5.00-$15.00	$10.90	$3.25-$10.00	$5.55
Boston	(10.00%)-10.00%	2.20%	80.00%-100.00%	95.00%	2.00%-10.00%	5.13%	0-1	0.5	$5.00-$25.00	$15.00	$0.00-$15.00	$6.67
Chicago	0.00%-10.00%	1.88%	85.00%-110.00%	95.56%	2.00%-10.00%	6.39%	0-4	0.9	$10.00-$40.00	$21.39	$5.00-$20.00	$9.06
Dallas	(5.00%)-10.00%	2.42%	50.00%-110.00%	92.92%	3.00%-30.00%	8.17%	0-6	1.9	$8.00-$30.00	$15.14	$2.00-$15.00	$7.00
Houston	0.00%-15.00%	6.43%	50.00%-110.00%	85.83%	3.00%-10.00%	6.19%	0-4	1.4	$5.00-$30.00	$14.56	$2.00-$15.00	$6.56
Los Angeles	0.00%-15.00%	5.69%	75.00%-100.00%	87.81%	5.00%-10.00%	7.00%	1-3	1.9	$10.00-$30.00	$18.45	$0.00-$15.00	$6.30
Manhattan	3.00%-10.00%	6.63%	60.00%-90.00%	82.00%	0.00%-12.00%	6.75%	0-2	0.8	$30.00-$45.00	$35.83	$5.00-$20.00	$11.50
Pacific Northwest	0.00%-5.00%	3.21%	85.00%-110.00%	97.93%	3.00%-7.00%	5.17%	0-3	0.9	$5.00-$35.00	$16.69	$0.00-$15.00	$6.79
San Francisco	(5.00%)-10.00%	3.94%	70.00%-110.00%	96.25%	3.00%-8.00%	5.20%	0-0	0.0	$0.00-$80.00	$23.64	$0.00-$20.00	$7.14
Southeast Florida	0.00%-3.00%	1.50%	80.00%-110.00%	98.93%	5.00%-11.00%	7.50%	0-3	1.0	$12.00-$27.00	$17.42	$3.00-$15.00	$7.00
Washington, DC	0.00%-10.00%	4.00%	75.00%-110.00%	92.78%	4.00%-8.00%	6.52%	0-3	1.7	$3.00-$35.00	$18.79	$3.00-$15.00	$10.08

Investment and Property Market Characteristics: National Markets

FOURTH QUARTER 1999

Source: Personal survey conducted by PricewaterhouseCoopers LLP during October 1999.

	FORECAST VALUE CHANGE NEXT 12 MONTHS		PRICE AS % OF REPLACEMENT COST		CLASS-A+ and A MALLS				CLASS-B+ and B MALLS				STABILIZED OCCUPANCY		
					IRRs		OARs		IRRs		OARs				
Market	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	
Regional Mall	0.00%-10.00%	3.50%	80.00%-120.00%	97.50%	9.75%-12.50%	10.88%	7.00%-9.50%	7.95%	11.00%-13.50%	12.08%	7.50%-11.00%	9.05%	92.00%-97.00%	94.40%	(Class-B to A+)
Power Center	0.00%-0.00%	0.00%	80.00%-125.00%	101.67%									90.00%-97.00%	94.14%	
Strip Center	0.00%-10.00%	2.21%	88.00%-120.00%	98.68%									90.00%-98.00%	94.42%	

					WAREHOUSE/DISTRIBUTION				R&D/FLEX							
					IRRs		OARs		IRRs		OARs		TIs - NEW (PSF/UNIT)		TIs - RENEWAL (PSF/UNIT)	
					Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average
Industrial	0.00%-10.00%	2.17%	80.00%-110.00%	98.50%	9.50%-12.50%	11.00%	8.00%-10.00%	9.03%	8.00%-13.00%	11.54%	8.00%-12.00%	9.77%	$0.00-$15.00	$3.94	$0.00-$8.00	$1.69
Apartment	(7.00%)-5.00%	2.17%	75.00%-110.00%	94.50%									$35.00-$350.00	$165.00	$0.00-$150.00	$50.00

Survey Process

Survey participants represent a cross section of major institutional equity real estate market participants who invest primarily in institutional-grade property. Initially, each participant is interviewed by telephone or in person regarding the cash flow assumptions used in analyzing real estate investment opportunities throughout the United States. Subsequent quarterly surveys are completed by mail with telephone follow-ups. Information is criteria applied in the quarter in which it is reported.

As a group, the survey participants collectively own, control, or acted as agent in 1998 transactions of institutional-grade real property assets with a total estimated value in excess of $200 billion. The minimum equity investment of the participants is from $5 million to $50 million (excluding hotel participants). Rates and other assumptions presented in this survey indicate participants' expectations from institutional-grade real property investment. They do not reflect performance of such property. The information is not generally applicable to investments that are not institutional grade. Although we do not represent that the survey is statistically accurate, the survey results provide important insight into the thinking of a significant part of the equity real estate marketplace.

Definitions

- INSTITUTIONAL-GRADE REAL ESTATE
  Real property investments that are sought out by institutional buyers and have the capacity to meet generally prevalent institutional investment criteria.
- KORPACZ YIELD INDICATOR (KYI)
  A composite IRR average of the surveyed markets
- KORPACZ DIVIDEND INDICATOR (KDI)
  A composite OAR average of the surveyed markets
- MARKETING TIME
  The period of time between the initial offering of a property for sale and the closing date of the sale
- STRIP SHOPPING CENTER
  Neighborhood or community center
- RESPONDENT TYPE
  Classification of survey participants into descriptive categories (e.g., domestic pension fund, REIT, investment advisor)
- FORECAST PERIOD
  Time for projection of anticipated cash flow benefits for discounted cash flow analysis
- CHANGE RATE
  Annual compound rate of change

  Market Rent
  Achievable current rent if vacant

  Expenses
  Total property expenses
- RESIDUAL
  Estimated total price at conclusion of forecast period

  Cap Rate
  Overall capitalization rate used in calculation of residual price

  Selling Expense
  Transaction expenses (legal, brokerage, marketing, etc.) paid by the seller
- DISCOUNT RATE (IRR)
  Internal rate of return in an all-cash transaction, based on annual year-end compounding; formerly termed the *free and clear equity IRR* in the Korpacz Survey
- OVERALL CAPITALIZATION RATE (OAR)
  Initial rate of return in an all-cash transaction; formerly termed the *free and clear equity cap rate* in the Korpacz Survey
- VACANCY ASSUMPTIONS
  Months Vacant
  The number of months a space remains unleased at the expiration of a vacating tenant lease

  Tenant Retention
  Percentage of leased rentable area that is expected to be released by the existing tenants at lease expiration

  Underlying Vacancy/Credit Loss
  Percentage of total revenue uncollected due to unexpected vacancy or credit loss (in addition to any rent loss from vacancies at lease expirations)
- NET OPERATING INCOME (NOI)
  Income remaining after deduction of all property expenses. In direct capitalization, investors capitalize one of the following:
  1. NOI *after* capital replacement reserve deduction but *before* TIs and leasing commissions
  2. NOI *before* capital replacement reserve deduction, TIs, and leasing commissions
  3. Cash flow *after* capital replacement reserve deduction, TIs, and leasing commissions
- REGIONAL MALL CLASSIFICATIONS

Class	Inline Retail Sales PSF
A+	$400 and up
A	$300 to $399
B+	$250 to $299
B	$200 to $249
C+	$150 to $199
C	$100 to $149
D	Less than $100

- RESERVE
  Amount allocated for periodic replacement of building components during a property's economic life
- FULL-SERVICE HOTEL
  Hotel with restaurant and lounge facilities, meeting space, and a minimum service and amenities level; moderate to lower upper-tier pricing; includes all-suite hotels
- ECONOMY/LIMITED-SERVICE HOTEL
  Hotel with "rooms only" operation and no food and beverage except possibly continental breakfast; lower-tier pricing
- EXTENDED-STAY HOTEL
  Hotel with rooms that generally include work stations with two-line phones, access to fax machines; mid- and upper-price hotels include kitchenettes, separate lounging area; weekly rates.
- LUXURY HOTEL
  High-quality hotel offering personalized guest services, typically with extensive amenities; upper-tier pricing; includes four- and five-star resorts
- OPERATING EXPENSES (HOTEL)
  The on-going expenditures incurred during the ordinary course of business necessary to maintain and continue the production of gross revenues, not including reserves, debt service, and capital costs
- GROSS ROOMS REVENUE MULTIPLIER (GRRM)
  The relationship, or ratio, between sale price and gross rooms revenue
- MANAGEMENT FEE (HOTEL)
  An expense item representing the sum paid for or the value of management service, excluding incentives, expressed as a percentage of total revenues
- RESERVE FOR REPLACEMENT OF FIXED ASSETS (HOTEL)
  An allowance that provides for the periodic replacement of building components, and furniture, fixtures, and equipment, which deteriorate and must be replaced during the building's economic life
- RevPar
  Revenue per available room

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