

HIGH TECH REAL ESTATE



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At a recent Telecom Corridor event, the keynote speaker was John Morgride, Chairman of the Board for Cisco. What he had to say was that Cisco chose this area, not for our cheap housing, not for our cheap real estate, not for our quality of life or our international

airport...although these points helped. They came here because of our people, an educated labor force.

Just as having Hewlett-Packard spawn the Silicon Valley, the Telecom Corridor was fortunate to have Texas Instruments and Collins Radio in its backyard. What followed was a ready labor force that attracted MCI WorldCom (formerly MCI) to come in the 1980's, which brought Fujitsu, Nortel, Ericsson, Alcatel, and Raytheon, and as of recent, Cisco. What came out of these large technology companies were many startups, some which are growing on their own, while some are being acquired by the giants.

These technology companies created demand for a different kind of real estate that meets the needs of an exciting new industry. The floor plates are bigger, at least 50,000 sq. ft. and not more than four stories high. The parking is heavier with ratios of 1:225 and uncovered. Space plans are open to allow for flexibility. Typically there is a lab in the center of the space that is the heart of the operation. These labs require heavier air-conditioning, sometimes a static guard flooring, light bright and roomy for equipment. More meeting rooms for breakout meetings are required and someplace there is tucked away a pool table or a volleyball court for

creative minds to break away from their computer. The commute better be easy to boot. The biggest difference is the need for heavy power. They just can't get enough power, and this is a strain on the tenant improvement allowance, which easily ratchets up to the \$50.00 per square foot range. Fiber has to be within close accessibility, as the cost to bring it into the facility can be stout if it is not close by. These operations are 24/7, and as tested in California, cannot even afford a minute without power. The tenant's preference is to have dual-feed power to the facility. This requires two sub-stations from the power company supplying power to the facility. Some areas have the capability to be dual-feed, but the cost to bring the power to the facility is in most cases prohibitive. If the dual-feed power is not there, then a backup generator is required. These generators are large in size and many times require visual screening and sound attenuation measures to meet city requirements.

The Data Centers or Network Operations Centers (NOC) are even more specific in their requirements. These are simply big boxes with no windows that house millions of dollars of equipment and few people. The floors need to handle a live load of 200 to 400 lbs. per square foot. Few or no windows are required for security and to serve as a barricade from the environment. The requirements for these properties are fiber connectivity, higher clear heights, as well as the ability to place outdoors equipment such as emergency backup generators. The parking ratios are extremely low. While the actual parking requirement varies on the amount of office space associated with the raised floor, Dallas is revising its code to require only one space per 5,000 sq. ft. of raised floor area. Again, power is the key requirement, not only dual feed, but owners are requesting 100-200 watts per square foot. Costs



range from \$300 to \$500 per square foot for the total cost of construction, shell costs are estimated at around \$100 per square foot, with occupancy costs ranging from \$200 to \$400 per square foot. Landlord's contribution to improvement costs is low or non-existent. Rates for this type of property are 3% to 4% higher than a more traditional tech space.

Currently the greatest problems facing Tenants and Developers for this type of product are: 1) The lead time to get power equipment to the interior of the building, i.e., UPS, batteries, generators and switchgear, is approximately 8 to 12 months. The utility power lead time depends upon whether the site has the capacity in the power grid close to the site and if the utility company has to do extensive engineering and construction to get the power to the site. If there is reasonable fiber in the area, the time to get it into the facility has not been a constraint. 2) Securitizing the credit for companies that are struggling with dropping stock prices and the inability to get additional funding. This presents a problem for the developer in building this type of facility. What is the exit strategy for a facility that is such a specific use? Developers must make certain that the facility is built in such a way that the building can be converted to an alternative use. Build in extra parking and the ability to add windows later, and hope that there is a strong market to sell the facility that can prove up the rents now and in the future.

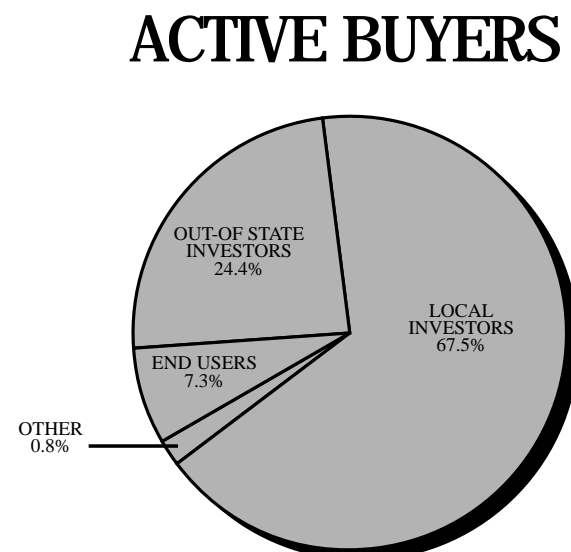
The technology segment has been the driving force behind our strong economy. As the drop off rate occurs for high tech firms, and it will...keep in mind that there were thousands of auto manufacturers in the beginning, and now there are only three. Can the real estate that is so specific to an industry be converted in a cost effective manner? This is what makes change so interesting...the unknown.

Janice Peters, CCIM specializes in the leasing and sales of technology real estate.

TRENDS - The information contained herein is the result of a survey of participants in the commercial real estate markets of North Texas for the second half of 2000. The respondents include local and national developers, asset managers, loan officers in local and national lending institutions, brokers, as well as consultants, mortgage bankers and individual investors. Some of the data reported reflects a weighted average using the transactions and total dollar amounts as the basis. Thus, the respondents that were the most active within the period had more influence on the data reported.

The responding group as a whole participated in 486 transactions totaling approximately \$804 million during the second half of 2000. Of the respondents, 11.8% were lenders, 11.8% were investors, 61.8% were brokers and 14.7% were other real estate professionals. It appears that the data provided herein is more reflective of the second tier or Class B type properties. 52.0% of the capitalization rates, and 62.8% of the discount rates reflect Class B properties. Of the buyers in the 486 transactions reported, 67.5% were local investors, and 67.7% of the acquisition funds were provided by local banks. Therefore, it appears that the majority of the responses were reflective of Class B type properties within the Dallas/Fort Worth region.

“Who are the active buyers in today’s market?”
The following chart reflects the actual buyers, based on the number of transactions, according to the respondents.





We asked respondents to estimate changes in revenue and expenses by property type, which is demonstrated in the following table.

REVENUE AND EXPENSE EXPECTATIONS

Property Type	Year 1		Year 2		Thereafter	
	Revenue	Expense	Revenue	Expense	Revenue	Expense
Apartments	3.08%	3.29%	3.38%	3.17%	3.58%	3.21%
Office	3.75	3.20	3.11	3.22	3.56	3.22
Retail	3.50	3.00	3.31	2.81	3.25	2.94
Industrial	4.00	2.64	3.00	2.58	3.00	2.58
Hotel	3.00	3.67	3.00	3.67	3.00	3.67

We asked the investment community about their acceptable returns when investing in land. The following yield rates reflect both leveraged and unleveraged returns. The low end of the range reflects primarily unleveraged positions, with the upper end corresponding with leveraged or equity yields.

YIELDS FOR LAND

Property Type	Average	Low	High
Pad Site	12.7%	10.0%	20.0%
Industrial	13.5	11.0	20.0
Residential Lot Development	24.7	18.0	33.0
Speculative Land Purchase	34.5	25.0	50.0

Direct capitalization, expressed as a rate, converts a single year's net operating income into a value. The market recognizes three types of "Cap Rates." The "going-in" rate is based on the investor's analysis of the current income at time of purchase. The "stabilized rate" is based on the investment's typical operating year at a stabilized occupancy. The "reversion rate" is the capitalization rate anticipated by investors at the time of resale.

CAPITALIZATION RATES

Property Type	Going-In		Stabilized		Reversion	
	Average	Range	Average	Range	Average	Range
Apartments	9.2%	8.5-11.0%	9.4%	8.6-10.5%	9.6%	9.0-10.0%
Office	10.0	9.5-11.0	10.4	9.5-11.5	10.3	9.5-11.0
Retail	10.1	9.5-10.5	10.8	10.3-12.0	10.9	10.0-12.0
Industrial	9.9	9.0-11.0	10.6	9.5-13.0	11.2	10.0-15.0
Hotel	10.8	10.5-11.5	11.0	11.0-11.0	11.3	11.0-11.5

The capitalization rates reported are more reflective of Class B type properties and are broken out as follows: Class A 29.3%, Class B 53.2%, Class C 14.6% and Others 2.9%.

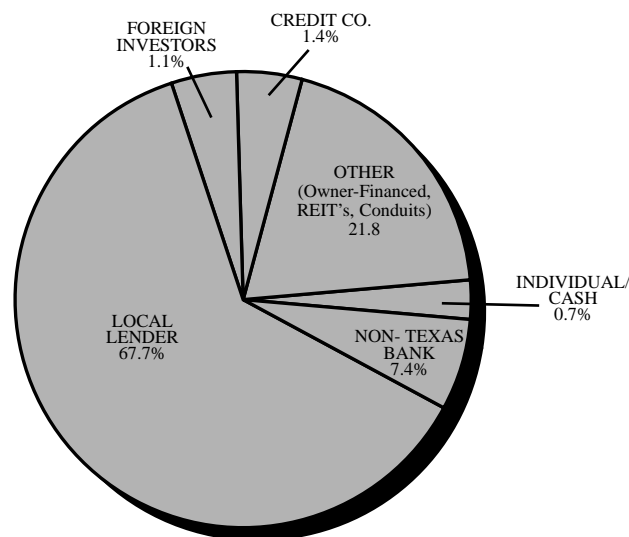
A discount rate (interest rate to the lender, yield to the investor) is the rate that equates the property's present value to its future income over a period of years and eventual resale. The following table presents the range and the average discount rates, as compared to the year-end 1999. The discount rates presented in the table were allocated by property type as follows: Class A 26.9%, Class B 62.8%, Class C 4.3% and Other 6.0%.

DISCOUNT RATES

Property Type	Year-End 1999 Average	Year-End 2000 Average	Year-End 2000 Low	Year-End 2000 High
Apartments	11.2%	11.0%	9.5%	13.5%
Office	11.4	11.7	10.0	16.0
Retail	11.4	11.6	10.0	15.0
Industrial	10.5	10.6	9.0	12.0
Hotel	13.0	15.3	13.0	20.0
Ground Leases	9.7	9.4	9.0	10.0

The following graph shows the sources of funds used in the transactions (based on the dollar amount of the transactions.)

SOURCES OF FUNDS





When asked what would be a reasonable exposure time for a property to sell in the open market, the respondents answered as follows:

REASONABLE EXPOSURE TIME

Property Type	Months	Property Type	Months
Apartments:		Land:	
Class A	6.4	Leased Fee Sites	9.0
Class B	6.1		
Other	6.4		
Office:		Industrial:	
High Rise	8.4	Bulk Warehouse	5.3
Class A Suburban	7.5	Office/Warehouse	5.5
Class B	7.6	Tech/Flex	6.4
Other	6.8		
Retail:		Hotels:	
Regional	7.4	Full Service	8.9
Community	7.2	Limited Service	9.3
Neighborhood	6.9	Economy	9.0
Unanchored	8.6		

The following table reflects the anticipated term of ownership (from acquisition to resale) for certain property types.

HOLDING PERIOD (YEARS)

Property Type	Avg	Range	Mode	Property Type	Avg	Range	Mode
Apartments	4.7	2.0-7.5	5.0	Industrial	6.0	2.0-15.0	7.0
Office	6.8	3.0-13.5	5.0	Hotels	7.2	3.0-17.5	3.0
Retail	6.1	3.0-13.5	5.0	Ground Lease	9.5	1.0-20.0	10.0

INVESTMENT OPPORTUNITY IN 2001

Industrial properties were viewed as being the best investment opportunity, followed by apartment, land, retail, office and hotel properties. The participants were asked to provide their forecast for 2001; 10.0% said great, 56.7% think good, 33.3% say stable and none anticipate a decline.

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The following table reflects market averages and ranges for finish-out in office, industrial and retail properties. These are shown on a per square foot basis. The ranges for industrial reflect both bulk and flex type space. The upper end reflects flex space, with the lower end being more representative of warehouse or bulk type space and is usually only applied to the office portion.

FINISH-OUT

Property Type	New			Renewal		
	Average	Low	High	Average	Low	High
Office	\$19.77	\$13.50	\$40.00	\$12.55	\$4.00	\$34.00
Industrial	9.75	3.50	30.00	2.00	0.75	5.00
Retail	17.94	10.0	40.00	7.20	3.00	15.00

We asked the respondents what they used for a stabilized vacancy and collection loss when analyzing different property types. The following table summarizes their responses, presenting both the average and the mode.

VACANCY AND COLLECTION LOSS (Average and Mode)

Multi-Tenant	Loss (%)	Single Tenant	Loss (%)
Retail:		Retail:	
Strip Center	9.2/10.0	Credit	3.4/5.0
Neighborhood	8.0/7.0	Non-Credit	6.8/5.0
Anchored	5.5/5.0		
Multi-anchor	5.8/5.0		
Office:		Industrial:	
Class A	7.0/5.0	Credit	3.7/5.0
Class B	8.6/10.0	Non-Credit	6.6/5.0
Garden (Class C)	10.1/10.0		
Small	8.7/10.0		
Industrial:		Office:	
Bulk	5.3/5.0	Credit	3.9/5.0
Flex	6.7/5.0	Non-Credit	7.0/5.0
Apartments:			
Class A	6.0/7.0		
Class B	6.7/6.0		
Class C	7.5/7.0		

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