East Arapaho/Collins
Enhancement/Redevelopment Study
Baseline Market Analysis

City of Richardson, Texas

May 2013

Table of Contents

Executive Summary – Baseline Market Analysis

EAST ARAPAHO/COLLINS ENHANCEMENT/REDEVELOPMENT STUDY

Introduction

The City of Richardson has historically attracted a concentration of high-technology and telecommunications companies to its Telecom Corridor®. Large national corporations, such as Texas Instruments, Ericsson, and Rockwell Collins, attracted suppliers and complementary businesses to the area, forming a dense, commercial and light industrial district (the "Study Area") focused around telecommunications, semiconductor design and manufacturing, and other high-tech industries. Following the dot-com bust in early 2001, several national telecommunications companies located in or near the Study Area, including Alcatel and Nortel, were subject to consolidation or closure. Many of those companies' suppliers and other businesses left the area throughout the 2000s, leaving relatively high levels of vacancy in predominantly older buildings, many of which are also functionally obsolete.

The original Study Area, presented in **Figure 1** on the following page, is centered along East Arapaho Road in central Richardson, bounded by Collins Boulevard to the north, Plano Road to the east, Apollo Road to the south, and generally Greenville Avenue to the west. It consists of nearly 700 acres of land, and is home to approximately 7.8 million square feet of leasable flex[1], light industrial and office space. The buildings in the Study Area have historically provided space for back office, research and development, and component manufacturing uses in support of the major telecom companies located in the area. The connection to this industry continues today, though to a lesser extent, as the primary economic sectors within the Study Area are high-tech manufacturing and information technology.

The 2009 Comprehensive Plan identified six Enhancement/Redevelopment areas in Richardson, including East Arapaho/Collins. All of these areas are all experiencing the challenges of a first-tier suburb: aging development and infrastructure; properties that are underperforming due to changes in market, technology, and building format; and evolving demographics (although the demographic changes have less of an impact in the Arapaho/Collins area than in the other Enhancement/Redevelopment zones). The Comprehensive Plan suggests reinvestment/revitalization for these areas based on detailed study to determine the full potential for redevelopment. The East Arapaho/Collins Study Area was chosen due to its overall character—large quantities of older, underperforming flex space with unacceptable vacancy rates—and because it has been challenged by changes in markets, technology, and user requirements.

In 2012, in response to the Comprehensive Plan, the City engaged SB Friedman Development Advisors and HDR, Inc. to undertake the first phase of developing a reinvestment and redevelopment strategy for the Study Area. The overall goal of this phase of analysis, referred to as the baseline market analysis, was to identify potential opportunities for/and challenges to rebuilding the area's contribution to the City's employment and tax bases and to catalyze redevelopment on select properties to encourage further reinvestment elsewhere in the Study Area. In general, the purpose of the assignment was to:

[1] Real estate researcher CoStar Group defines flex as versatile space that may be used for office, research and development, quasi-retail sales, or light manufacturing. Under CoStar's definition, at least 50 percent of leasable space must be used for office.

- Assess existing conditions that might be affecting marketability; and
- Analyze market potential for selected real estate products.

Specific tasks completed to provide a broader understanding of the redevelopment challenges and opportunities, and to provide initial guidance to the City regarding the next steps required to change the competitive position of the Study Area, included:

- Develop preliminary estimates regarding the economics of redevelopment; and
- Identify redevelopment strategies that leverage existing assets and the market potential identified in the study process.

This Executive Summary describes the research findings to date. Additional figures, maps and tables are presented in the accompanying PowerPoint presentation.

Existing Conditions

Figure 1: Study Area Map

Source: CoStar, *SB Friedman*

Since the dot-com bust of 2001, high vacancy rates have been experienced in office and flex buildings in the Study Area, and, to a lesser extent, in industrial buildings. Vacancy rates in the Study Area, as reported by CoStar in October 2012, are presented in **Table 1**.

Table 1: Vacancy Rates by Building Type[2]

Product	Rentable Square Feet	Vacant Square Feet	Vacancy Rate
Flex	3,870,300	932,400	24%
Industrial	2,703,200	398,100	15%
Office	1,207,700	297,600	25%
All Product	**7,781,300**	**1,628,100**	**21%**

Source: CoStar Group (October 2012)

The consulting team analyzed existing conditions within the Study Area to determine which conditions could be contributing to the high level of vacancy. Conditions analyzed include regional context/connectivity, infrastructure, and building characteristics, each of which is discussed in turn in this section. Maps depicting Buildings by Use, Ownership, and Vacancy as of October 2012 are presented on **Slide 7** in the attached presentation.

[2] This analysis has excluded buildings that were identified by City Staff as being under redevelopment as of October 2012.

REGIONAL CONTEXT/CONNECTIVITY

Regional context and connectivity was assessed to understand the role and location of the Study Area within the Dallas-Fort Worth Metroplex and the City. The results of the analysis suggest that the Study Area benefits from:

- **Close Proximity to Major Anchors.** The Study Area is located near major anchors of the Telecom Corridor®, as well as the incubators and innovation centers at the University of Texas at Dallas (UTD), and other major employers in the City, including Fossil, Lennox, Blue Cross Blue Shield and State Farm Insurance.
- **Accessibility to a Large Workforce.** The Study Area is easily accessible to a large workforce due to its location near major regional transportation connections, particularly U.S. 75 (North Central Expressway) and the Arapaho Center light rail station, both of which are located along the western boundary of the Study Area. The Study Area is also equidistant between Interstate 635 to the south and President George Bush Turnpike to the north.
- **Strong Transportation Network.** In addition to the rail and highway network, the Study Area is served by several bus lines and high-traffic arterials, and is generally bicycle and pedestrian friendly, though there are scattered missing sidewalk links along some roads.

INFRASTRUCTURE

HDR assessed the condition of the infrastructure to understand its potential effects on marketability. The following infrastructure components were examined:

- **Water and Wastewater Systems.** The current water and wastewater system capacity meets existing needs within the Study Area; however, redevelopment involving multi-story buildings or buildings with large footprints could require the installation of booster pumps to meet water pressure demands.
- **Stormwater and Soil Conditions.** Some stormwater lines within the Study Area do not meet current design criteria and may require replacement. In addition, ten buildings in the northeast corner of the Study Area are in or near the Duck Creek floodplain. This could make the redevelopment of those parcels challenging; however, the Federal Emergency Management Agency is currently amending floodplain boundaries, so the set of buildings potentially affected by flooding is likely to change. The Study Area is free from known hazardous waste spills or contamination, and soil-bearing capacities appear to be adequate for redevelopment.
- **Utilities**. All basic utilities are available within the Study Area, but interviews with tenants, commercial real estate brokers and other key stakeholders suggested that access to high-speed Internet is perhaps the largest challenge to marketability for small tenants. While T-1 Internet service can generally be secured, more affordable DSL service is not consistently available throughout the Study Area. The cost of T-1 or Ethernet service, which ranges from $400 to over $1,400 per month, is often prohibitive for smaller users, who typically rely on cable and phone providers for less expensive Internet service.

BUILDING CHARACTERISTICS

Existing buildings were assessed to determine whether the structures satisfied requirements desired by modern tenants. The perception of obsolescence is a significant challenge as buildings appear to be dated or unsuitable for modern business needs. This perception appears to be influenced by the following characteristics:

- **Age and Curb Appeal.** The median age of flex buildings within the Study Area is 32 years, with over 50 percent of the buildings built prior to 1980. Older buildings tend to have lower ceiling heights, outdated building systems, and dated configurations that may not appeal to modern tenants. In addition, due to the era of development for the majority of the Study Area, the properties lack the green space, curb appeal, cohesive identity, and site-specific amenities that are offered by competing locations developed in the past 10 to 15 years.
- **Parking.** Over 70 percent of buildings within the Study Area do not meet the parking ratios desired by modern tenants. The prevailing ratio, defined as the number of parking spaces per 1,000 square feet of leased space, is well below market demands. Modern flex users are requiring a minimum of 4.0 spaces per 1,000 square feet, while the average offered by Study Area flex buildings is 3.3. Back office users require between 6.0 and 10.0 spaces per 1,000 square feet, significantly higher than the average parking ratio of 4.2 for office buildings in the Study Area. The analysis has revealed that 72 percent of the flex buildings and 78 percent of the office buildings within the Study Area do not meet current market demand for parking.
- **Ownership Issues.** The Study Area includes a number of properties under institutional ownership and several clusters of buildings that were over 75 percent vacant as of October 2012. Clustered vacancy and institutional ownership may present both challenges and opportunities to redevelopment/reinvestment . The effective current value of buildings within the Study Area appears to be lower than what some of the owners perceive. This has limited the potential for transfers of property as institutional owners seem reluctant to write down the value of investment properties and respond to the small tenant market.

EXISTING CONDITIONS CONCLUSIONS

An assessment of existing conditions indicates the Study Area is well-positioned for redevelopment due to its close proximity to the major anchors such as the Telecom Corridor®, the University of Texas at Dallas, and other major employment centers. Strong transportation networks make the Study Area easily accessible via a number and variety of transportation connections. Additionally, infrastructure is generally sufficient to accommodate rehabilitation or redevelopment. Despite these redevelopment assets, several redevelopment challenges, including building age, lack of parking, clustered vacancy and institutional ownership, will need to be addressed to spur significant rehabilitation or redevelopment.

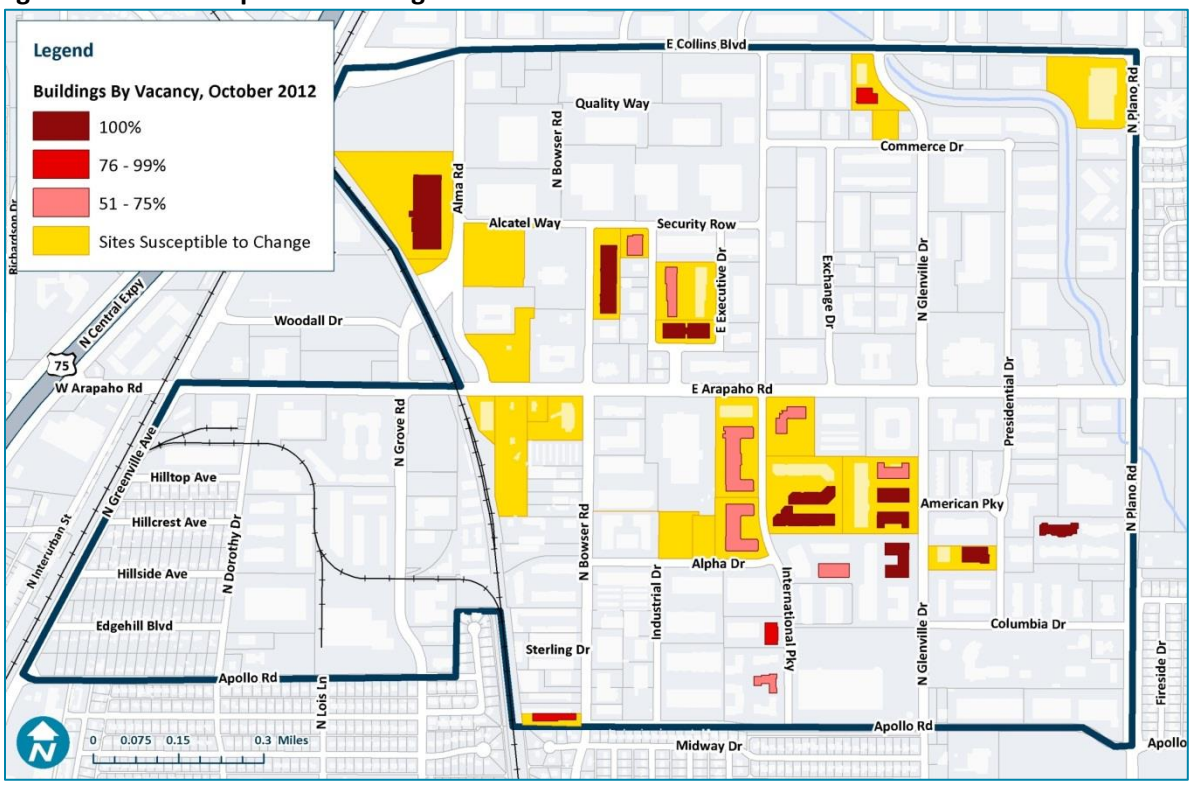
Sites Susceptible to Change

Based on an analysis of existing conditions in the Study Area, a subset of properties in the Study Area has been identified as “sites susceptible to change”, as presented in **Figure 2**. Sites susceptible to change meet at least one of the following criteria, which indicate opportunities for development, redevelopment or the underutilization of property:

- Vacant/Undeveloped land;
- Building vacancy greater than 50 percent, as reported by the CoStar Group;
- Lower value per square foot of land, as determined by the Dallas and Collin County Appraisal Districts; and/or
- Land value comprising 75 percent or more of total assessed value, as determined by the Dallas and Collin County Appraisal Districts.

The sites identified below may prove to be opportunity sites to catalyze further redevelopment throughout the Study Area. Assistance for catalytic projects could be provided by the City of Richardson or Chamber of Commerce, both of which have earned a generally favorable opinion among developers and brokers and are viewed as being proactive and business-friendly.

Figure 2: Sites Susceptible to Change



Source: CoStar, City of Richardson, Dallas and Collin County Auditors, *SB Friedman*

Market Potential

The study team analyzed four real estate products which were initially identified as the product types with the highest rehabilitation or redevelopment potential within the Study Area based on the current building mix and location. The four products tested included modern flex, "value" office, Class A office, and data centers. The study included an examination of the extent to which the area competes with other submarkets offering similar products, a comparison of existing building stock with new product, and an analysis of the market potential for new development or rehabilitation within the Study Area.

The employment sectors and types of tenants that are likely to locate in the tested building products were analyzed from a demand perspective. Target employment sectors were identified through an

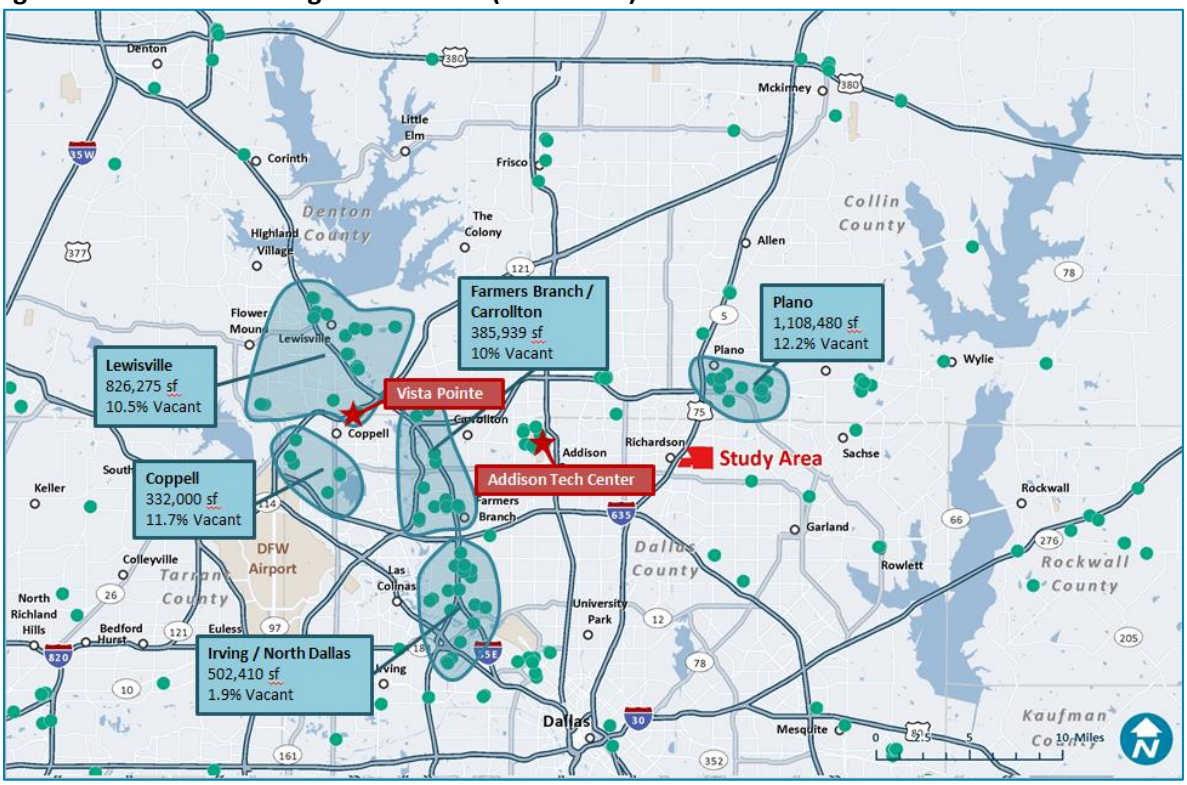
analysis of regionally competitive industries, as well as business sectors with high lease-transaction volumes in the region over the past five years. Regionally competitive industries are defined as businesses that are highly concentrated in the region, that outperform the national economy, are high in employment growth, and are likely to be located in the types of buildings identified and tested.

MODERN FLEX

Flex is defined as versatile space that may be used for office, research and development, quasi-retail sales, or light manufacturing, with over 50 percent of the space used for office. An analysis of comparative flex submarkets suggests that the Study Area is suffering from higher vacancy rates than the rest of Richardson and the competing communities of Plano, Carrollton, and Addison. Vacancy rates within the Study Area were five to nine percent higher than the competing markets as of October 2012. The Study Area is also the only market to experience a negative average annual absorption over the last decade and to see no new construction activity. In contrast, Plano, Carrollton, and Addison had positive absorption over the past decade, averaging 50,200 square feet of space leased per year. The comparison to competing markets can be found on **Slide 18** of the attached presentation.

Significant development is occurring near Dallas-Fort Worth International Airport, along the Interstate 35E Corridor, and in Plano along the George Bush Turnpike. Clusters of new flex buildings developed in competing areas of the Metroplex over the past decade are presented in **Figure 3**.

Figure 3: New Flex Building Construction (2002-2012)



Source: CoStar, *SB Friedman*

Two case studies were examined within these new competitive locations, Vista Pointe in Lewisville and Addison Tech Center in Addison, to determine key differences between the new flex development and

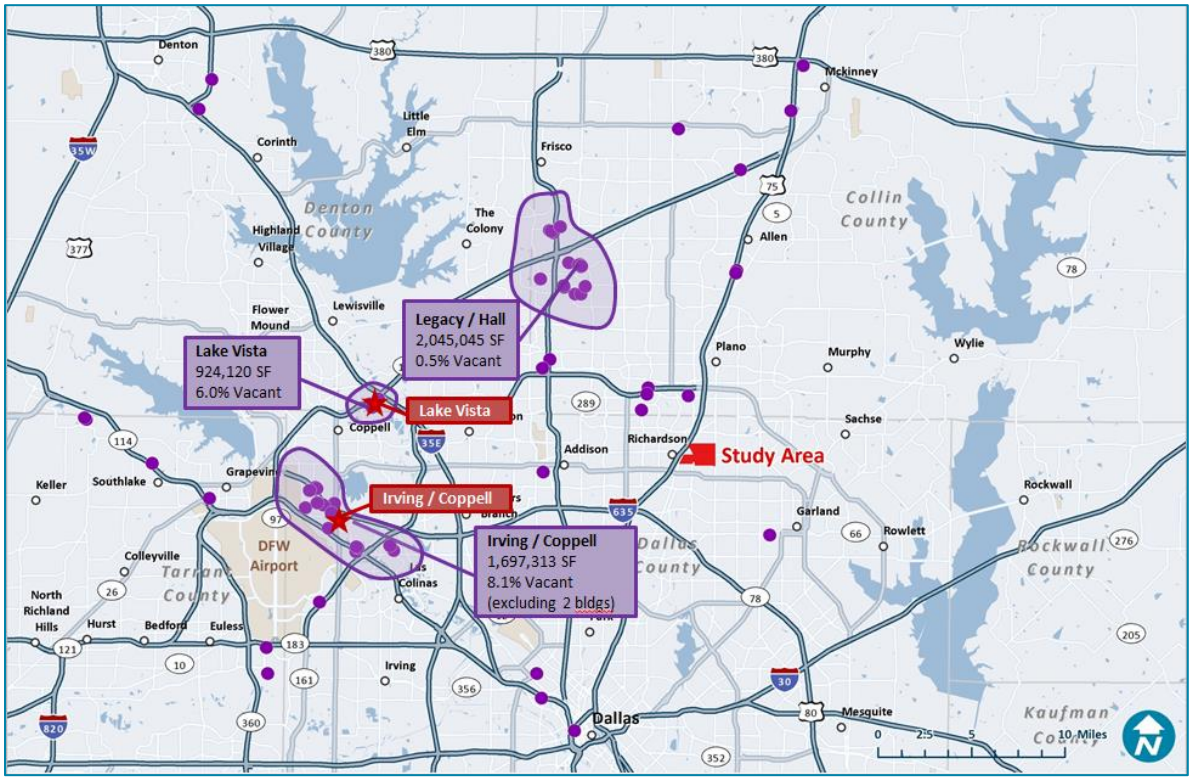
existing buildings within the Study Area. The comparative analysis is presented on **Slide 20** of the attached presentation. In addition to featuring modern facilities, these developments offer higher parking ratios, larger floorplates and higher ceilings than flex buildings with the Study Area. Tenants in recently developed flex space are primarily office users from a wide range of sectors and pay an average rent of $10.65 per square foot, which is 26 percent higher than the average $8.42 per square foot offered within the Study Area.

An analysis of regionally competitive industries and business sectors with high lease-transaction volumes has identified high-tech manufacturing, information technology, computer systems design, and merchant wholesalers as the target sectors for modern flex space within the Study Area. Further analysis suggests that modern flex tenants are smaller-sized with approximately 75 percent of companies that have recently moved occupying less than 13,250 square feet.

VALUE OFFICE

Value office is defined as office space built using economical tilt-wall construction, generally with heights of two to four stories and floorplates between 40,000 and 60,000 square feet. It is a relatively new product line in office development and has become a popular construction method due to the ability to develop standard office space at a relatively lower construction cost and on a relatively shorter timeline. An analysis of new value office buildings constructed in the Metroplex over the past decade is presented in **Figure 4**. The analysis suggests that significant development is located near the Dallas-Fort Worth International Airport, at major highway intersections with significant visibility, and in master-planned communities that offer increased amenities.

Figure 4: New Value Office Construction (2002-2012)



Source: CoStar, *SB Friedman*

Within the new developments, two case studies have been examined, Lake Vista in Lewisville and the Interstate 635 Corridor in Irving and Coppell, to determine key differences between the new developments and buildings found within the Study Area. The comparative analysis is presented on **Slide 23**. Key differences include high parking ratios (between 6.0 and 10.0. spaces per 1,000 square feet, compared to 4.2 per 1,000 square feet in the Study Area), larger floorplates, and a significant clustering of retail and restaurant amenities nearby. Tenants in recently developed value office space are primarily call centers and back office users, such as accounting or payroll services, and pay an average rent of $19.25 per square foot, which is 53 percent higher than the average $12.61 per square foot offered within the Study Area.

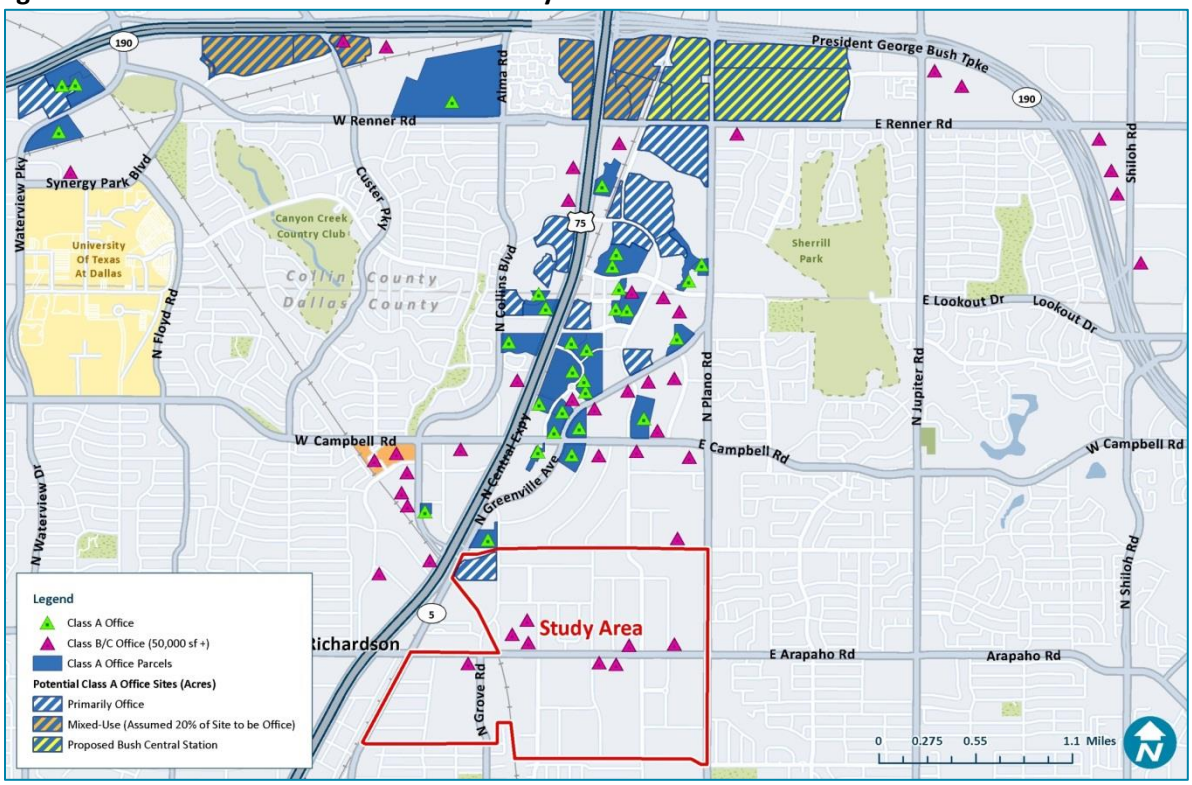
An analysis of regionally competitive industries and business sectors with high lease-transaction volumes suggests that value office space is likely to attract finance and insurance providers, professional services industries, and administrative and support services. Value office tenants tend to secure space in increments nearly four times that of the space needed by tenants within the Study Area and may lease large blocks of space or entire buildings.

CLASS A OFFICE

Class A office is defined as signature office space constructed with high-quality materials and high-end amenities. Class A office buildings come in a variety of sizes, are generally located in highly-visible areas along major expressways, and attract prestigious tenants. The Study Area has generally been considered by the real estate and business community to be unsuitable for Class A office development due to incompatible adjacent land uses and the lack of nearby amenities and visibility. This project included an analysis, presented in **Figure 4** on the following page, to determine the capacity of relatively more attractive sites suitable for Class A office in the City of Richardson. Alternative sites were identified along major roadways with high visibility and proper zoning for Class A office development.

The capacity and availability of suitable Class A sites in the City and average annual absorption rates of office space over the last 20 years suggest that 7.2 million square feet of space – or 21 years of office absorption – could be developed on sites more appropriate for Class A office than the Study Area.

Figure 4: Class A Office Alternative Sites Analysis



Source: CoStar, City of Richardson, Dallas and Collins County Auditors, *SB Friedman*

DATA CENTERS

Digital Realty Trust is midway through redevelopment of the 69-acre former Alcatel site along the northern boundary of the Study Area into up to 800,000 square feet of data center space. The suitability of the Study Area for additional data centers was explored due to the early success of the Digital Realty Trust project. Based on conversations with data center developers and experts, locational requirements for data centers generally include: access to reliable, adequate and relatively inexpensive electricity; existing high fiber density with access to multiple carriers; urban locations or proximity to large metropolitan areas; and low probability for natural disaster. Richardson appears to meet these location requirements; however, several other locations within the Metroplex do as well.

While there may be demand for data center development in the region, such development should be considered a "wild card" use until additional research can be undertaken. Developers have stated that assembled sites are important, and the ability to attract a tenant may be dependent on identifying or documenting power capacity.

MARKET POTENTIAL CONCLUSIONS

There appears to be market potential for modern flex and value office redevelopment within the Study Area. Class A office does not appear to be viable within the Study Area due to a substantial number of more attractive Class A office sites available in northern Richardson. While the Study Area appears to meet basic locational requirements for data centers, additional data center development appears to be a "wild card" use, given developers' desire for dedicated power and assembled parcels.

Taking advantage of the market demand for flex space will require meeting the needs of current flex tenants. Modern flex tenants share many similarities to office tenants, but also require light manufacturing or distribution space. They appear to be leasing smaller spaces in recent transactions, suggesting that developing larger multi-unit buildings or converting existing single-tenant space into smaller units may hold the greatest market potential for the Study Area. Modern flex tenants require a minimum of 4.0 parking spaces per 1,000 square feet leased; therefore, redevelopment/reinvestment would require the provision of additional parking spaces.

Market potential for value office appears to be strongest for back office and call center operations for the industries identified as high-growth sectors. Market potential is enhanced in areas with concentrated retail and restaurant amenities nearby or on greenfield sites where land is available to develop a campus-like environment. While site constraints and land values in the Study Area may make campus-like environments more difficult to achieve, attraction of additional restaurants and retail tenants to the area would strengthen the market potential. Value office tenants require parking ratios in excess of 6.0 spaces per 1,000 square feet leased; therefore, existing building footprints may need to be reconfigured to meet these demands.

Preliminary Economics of Redevelopment

Confirmation of market demand for flex and value office space is insufficient to spur redevelopment—the economics of redevelopment must be positive for developers and/or business owners to reinvest in the Study Area. For these reasons, the consulting team conducted a preliminary analysis of the economics of redevelopment/rehabilitation and new construction for flex and value office, the two product types for which market demand has been identified. The preliminary quantitative analysis is presented on **Slides 34 to 37**. The economics of redevelopment in the Study Area appear to be challenged by the following factors:

- **Infill Redevelopment.** The Study Area is predominantly built out, so redevelopment will generally require acquisition of an existing building for rehabilitation, or demolition and new construction. The effective price of land—which includes the cost of a building—is therefore significantly higher than the price of greenfield land in new development areas.
- **Need for Parking.** Parking ratios in the Study Area tend to be lower than those required by current flex and value office tenants. In order to provide additional parking, existing buildings may need to be demolished so that the newly vacant land can be converted to surface parking. Reducing the rentable building area to increase space for parking may create economic challenges for building owners and developers.
- **Creation of Multi-Tenant Space.** Several buildings identified as "sites susceptible to change" were originally developed as single-tenant buildings. Current flex tenants tend to want smaller spaces, so the buildings would need to be demised into multi-tenant spaces. Conversion of an existing building into multi-tenant space often requires installation and distribution of new HVAC systems for each tenant space, creation of individual access or delivery points for individual tenants, and other improvements.

Preliminary review of achievable rents and costs of rehabilitation or new construction suggest that rehabilitation may be economically feasible in certain circumstances, but that high acquisition costs have a major impact on the financing gap for new construction. Initial findings suggest the following:

- **Flex.** Rehabilitation of existing buildings into multi-tenant spaces with sufficient parking may be economically feasible, depending on the extent of tenant improvements required. Distribution of new HVAC systems to multiple spaces will drive up costs, but achievable rents for rehabilitated space may be sufficiently high to offset those costs. Due to high acquisition costs and relatively lower achievable rents, new construction of flex space appears likely to have a substantial financing gap.
- **Value Office.** Many existing buildings in the Study Area would not be suitable for conversion or rehabilitation into value office space due to limited floorplates and lack of parking. Despite higher costs of construction, initial estimates suggest that the economics of new construction are better for value office than flex development, given the higher achievable rents with value office product. While a financing gap may still occur with new construction of value office, it appears to be significantly smaller than for flex development.

Additional analysis of the economics of redevelopment should be undertaken in the next phase of the study effort to fully understand the financing gaps that are likely to arise for rehabilitation of existing flex buildings and new construction of value office in the Study Area.

Redevelopment Potential and Conclusions

In conclusion, the Study Area benefits from a number of desirable assets that could drive redevelopment. Those assets include: superior access to the regional labor force via strong transportation connections; proximity to UTD and major regional employers; an existing high-tech manufacturing and information technology economic base; the availability of relatively low-cost space; and basic infrastructure to accommodate rehabilitation and redevelopment. Additionally, the City of Richardson and Chamber of Commerce are viewed as business-friendly by the business and real estate communities.

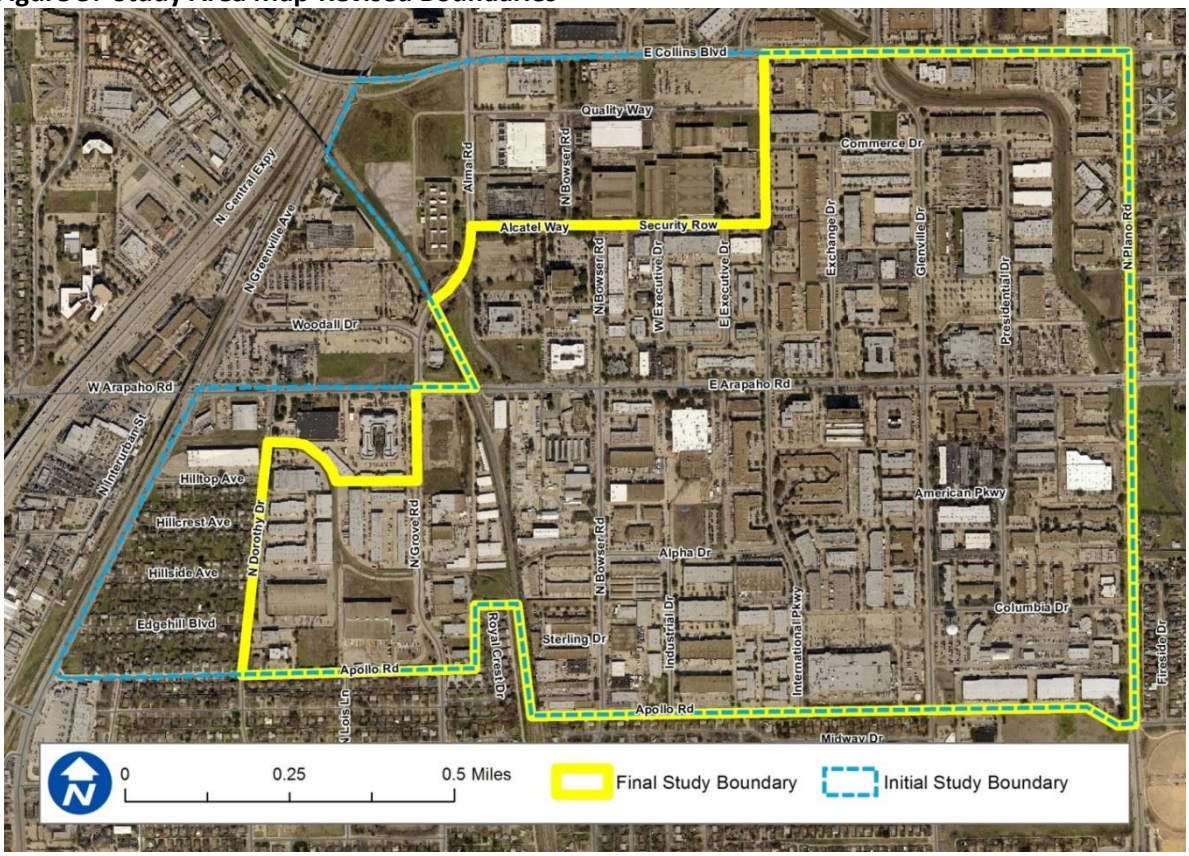
Still, certain challenges must be overcome for the Study Area to rebuild its contribution to the City's employment and tax bases. Those challenges include: the perception of building obsolescence among brokers and potential tenants; the need for smaller multi-tenant space; the lack of available low-cost, high-speed Internet; insufficient parking for many buildings and tenants; and an overall lack of curb appeal compared to newer business parks in the region. In addition, clustered vacancy and substantial institutional ownership within the Study Area may also prove problematic, as owners appear unwilling to write down the value of their properties or make the investments necessary to respond to the small tenant markets. The economics of rehabilitation and redevelopment in the Study Area have proven to be challenging when compared to greenfield development, so writing down of property value may be required. Addressing this and the other challenges will be necessary to compete with newer airport-adjacent and master-planned business parks.

Strategies and Implementation

To leverage the market potential identified in the study and overcome the challenges associated with redevelopment, SB Friedman and HDR suggest that the City consider implementing the following overall strategies to change the competitive position of the Study Area:

- **Revise the Study Area Boundaries to Exclude Certain Properties Along the Western Edge of the Study Area (Figure 5).** Remove several sub-areas originally included in the study boundaries that do not demonstrate the same characteristics and challenges or include the same building/product type as the remainder of the area; have already begun to redevelop in a more market-responsive manner; and/or have more potential when studied in the context of a future Transit-Oriented Development due to their proximity and relationship to DART's Arapaho Center Station transit facility.
- **Maintain and Strengthen the Linkage to the University of Texas at Dallas (UTD).** Explore opportunities to attract UTD Incubator "graduates" to the Study Area as these enterprises mature and are ready to move to a new business environment.
- **Improve Internet Service.** Ensure basic DSL Internet service is available for small users and explore opportunities for developing a new high-speed Internet infrastructure.
- **Carry Out Targeted Redevelopment of Opportunity Sites.** Identify potential rehabilitation and redevelopment projects. Create and test development concepts. Conduct a more detailed analysis on financial gap associated with rehabilitation/redevelopment. Share the results of these efforts with property owners/developers and determine their plans for these sites.
- **Consider Establishing City Financial Assistance Program for Building Rehabilitation and Redevelopment.** Explore available tools for financial gap assistance. Define a program and the criteria for use of incentives in the Study Area.
- **Attract Support Services and Amenities.** Identify appropriate sites with high traffic volume, accessibility and visibility. Estimate the latent demand potential for businesses and employees in the Study Area. Work with property owners and brokers to develop marketing materials to attract restaurants, inline retail, and business support services.
- **Enhance Curb Appeal through a Public Improvement Program.** Identify and design gateway opportunities, landscaping, and streetscaping amenities. Identify public financing sources for streetscape enhancements. Improve the Arapaho Road streetscape.
- **Enhance Curb Appeal through Design Guidelines for Private Improvements.** Create a Design Overlay District with associated Design Guidelines that address new and rehabbed buildings. Ensure that rehabilitated, redeveloped and new projects conform to the Design Guidelines and the new regulations within the Design Overlay District.
- **Consider Rebranding the Study Area.** Explore new branding opportunities as other redevelopment strategies are implemented. Create an identity for the East Arapaho/Collins district. Implement a branding and marketing campaign through the City, Chamber, brokerage community, etc.

Figure 5: Study Area Map-Revised Boundaries



Appendix:

February 4, 2013

City Council Presentation

SB Friedman Development Advisors

HDR

East Arapaho/Collins Redevelopment Study

City Council Presentation| February 4, 2013

VISION | ECONOMICS | STRATEGY | FINANCE | IMPLEMENTATION

Our Team

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- **Steve Friedman**, AICP, CRE, President- *Project Director*
- **Ranadip Bose**, AICP, Senior Project Manager- *Project Manager*
- **Fran Lefor**, Associate Project Manager- *Market Analysis*

HDR

- **Doug Bisson**, AICP, Vice President- *Urban Designer and Planner*
- **Troy Henningson**, Land Planner
- **Jordan Everhart**, Community and Transportation Planner

Project Outline

1

Existing Conditions

- Connectivity, Infrastructure and Building Characteristics
- Challenges to Marketability

2

Market Potential

- Supply Analysis
  - Modern Flex
  - Value Office
  - Class A Office
  - Data Centers
- Demand Analysis
  - Modern Flex
  - Value Office

3

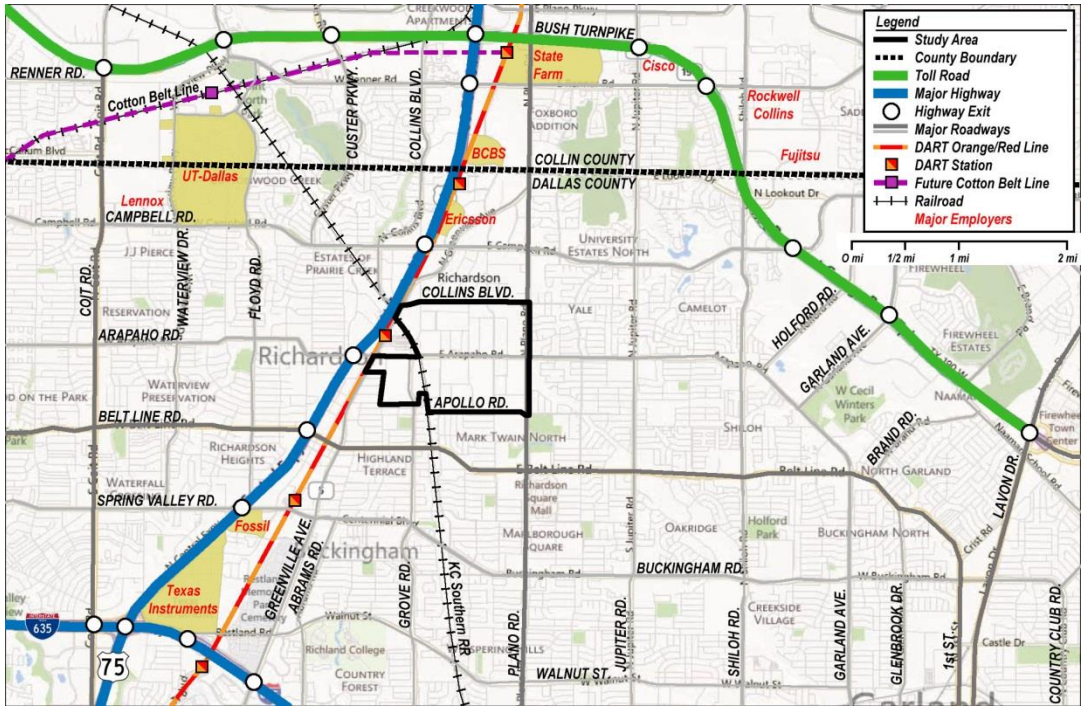
Preliminary Economics of Redevelopment

4

Redevelopment Assets, Challenges and Potential Strategies

1. Existing Conditions:
Connectivity, Infrastructure and Building Characteristics

Regional Context and Connectivity



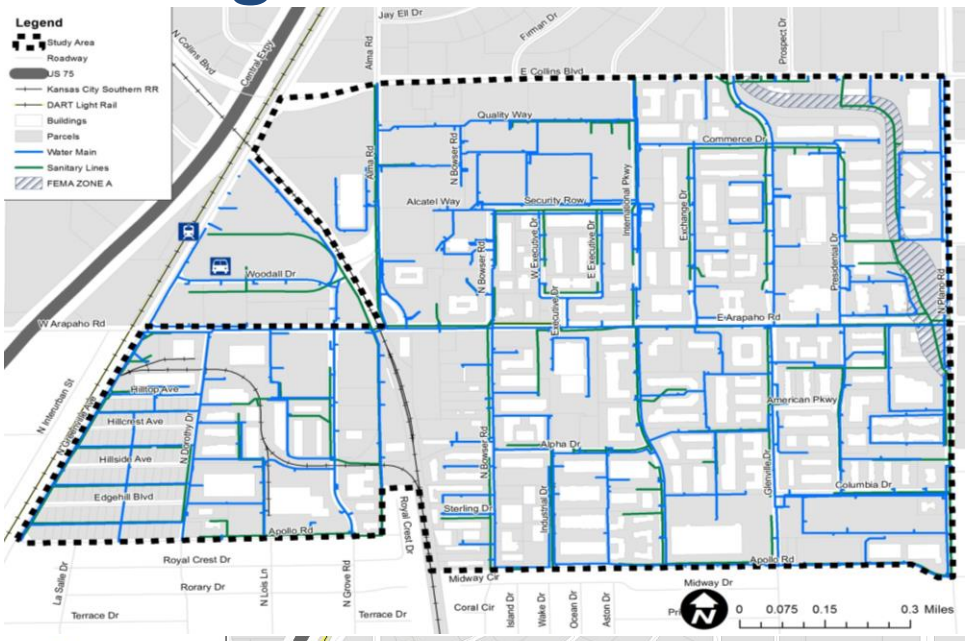
- Good Regional Transportation Connections
- Near UTD and Major Employers
- Strong Transportation Network
  - Public Transit – Rail and Buses
  - Arterial Streets
  - Generally Pedestrian Friendly

Public Transit

Roadway

Pedestrian & Bicycle

Existing Infrastructure



Water and Wastewater

- Meets capacity
- Large new buildings may require installation of booster pumps to meet water pressure demands

Stormwater and Environmental

- Some stormwater lines at capacity
- No known hazardous waste spills or contamination
- Soil bearing capacities adequate

Building Use, Ownership, Vacancy

Building Use

Product	Rentable SF	Vacant SF (3Q 2012)	Vacancy Rate
Flex	3,870,300	932,400	24%
Industrial	2,703,200	398,100	15%
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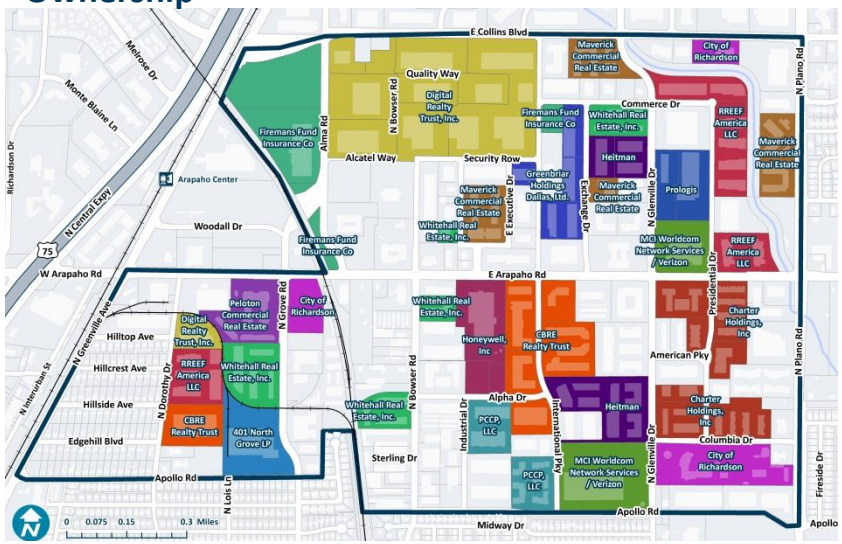
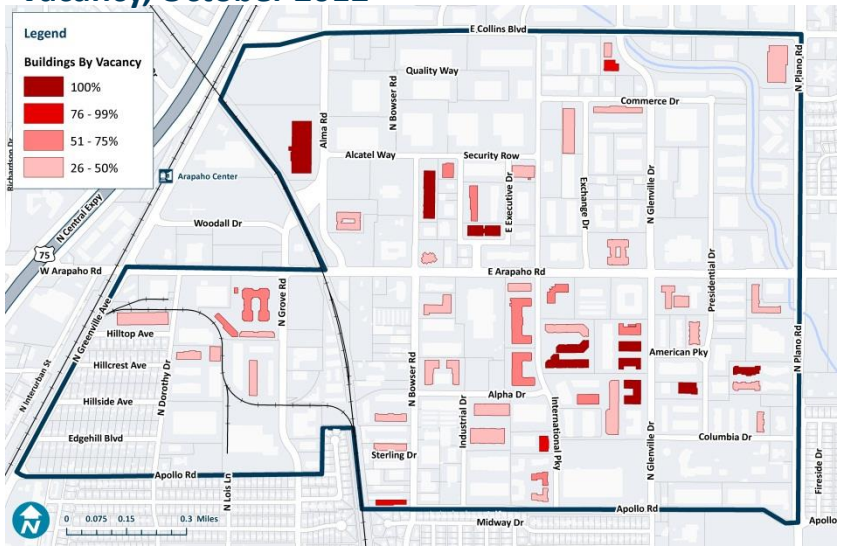
FLEX: Versatile space. May be used for office, R&D, quasi-retail sales, light manufacturing. CoStar flex definition: > 50% of spaced used for office.

Ownership [2]

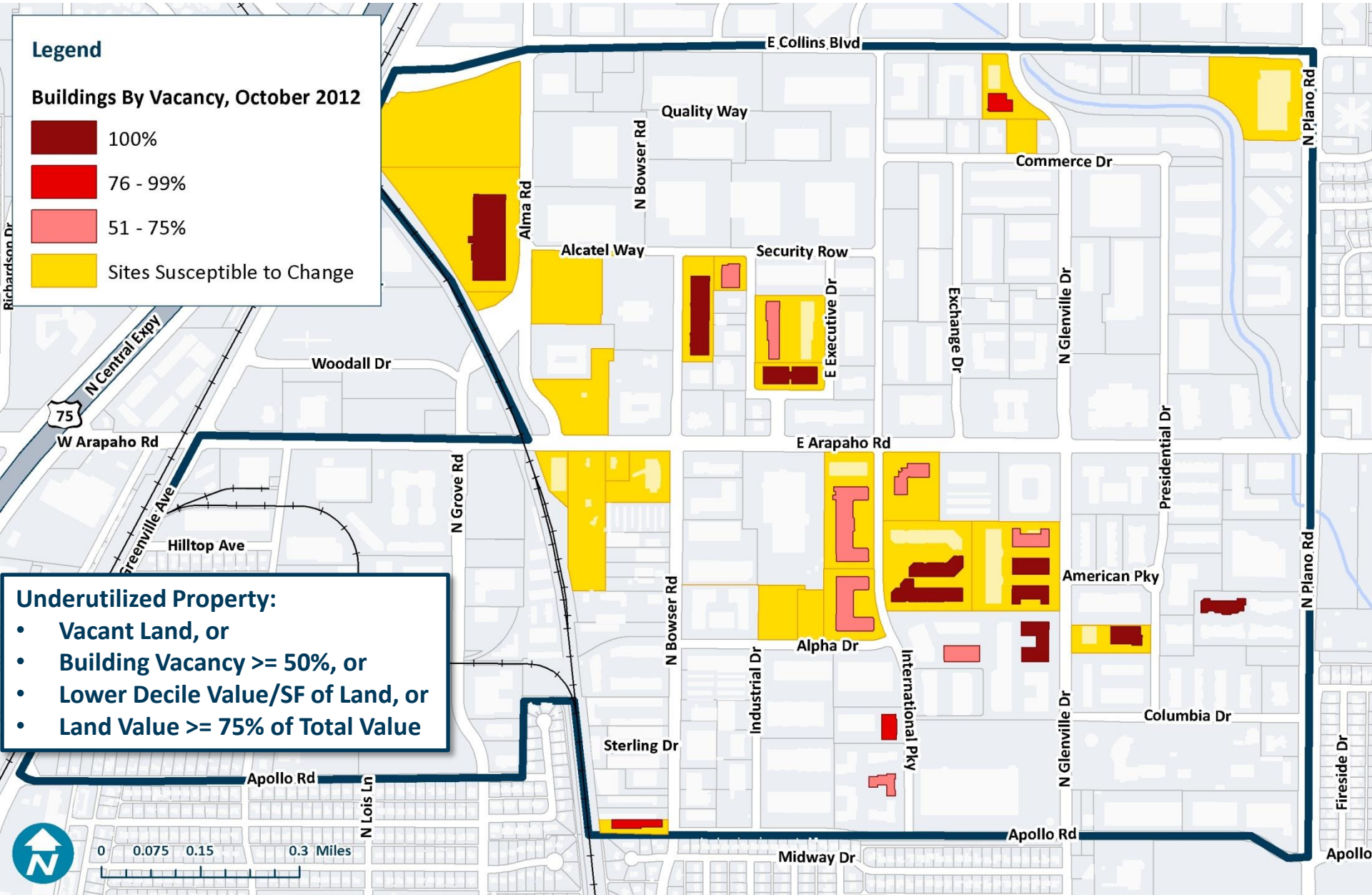


Vacancy, October 2012



[1] Excluding Digital Realty data centers. [2] Displaying only owners with 10 or more acres of property in Study Area. Owners identified through CoStar and Appraisal District data and refined through broker interviews. Source: CoStar, Richardson Chamber of Commerce, Appraisal District, broker interviews, *SB Friedman*.

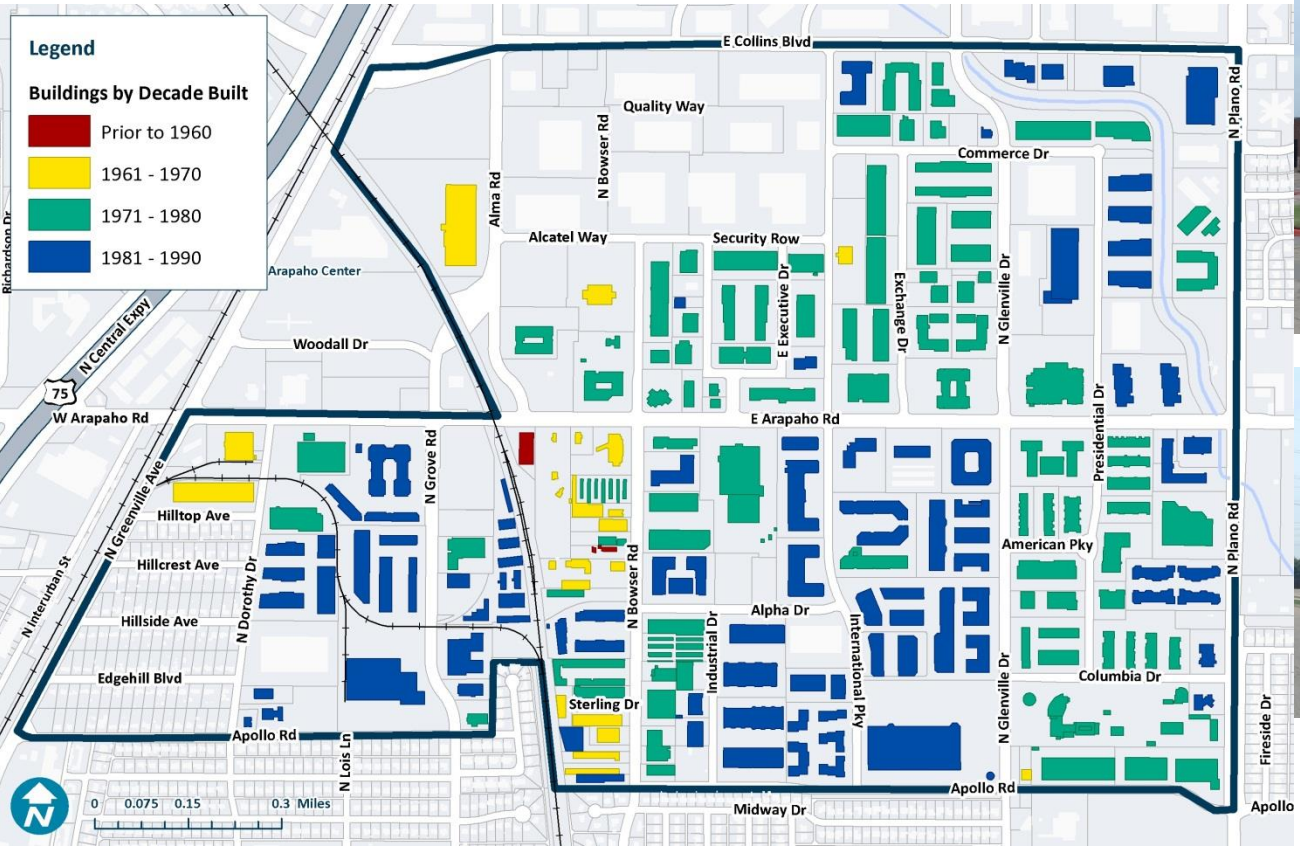
Sites Susceptible to Change



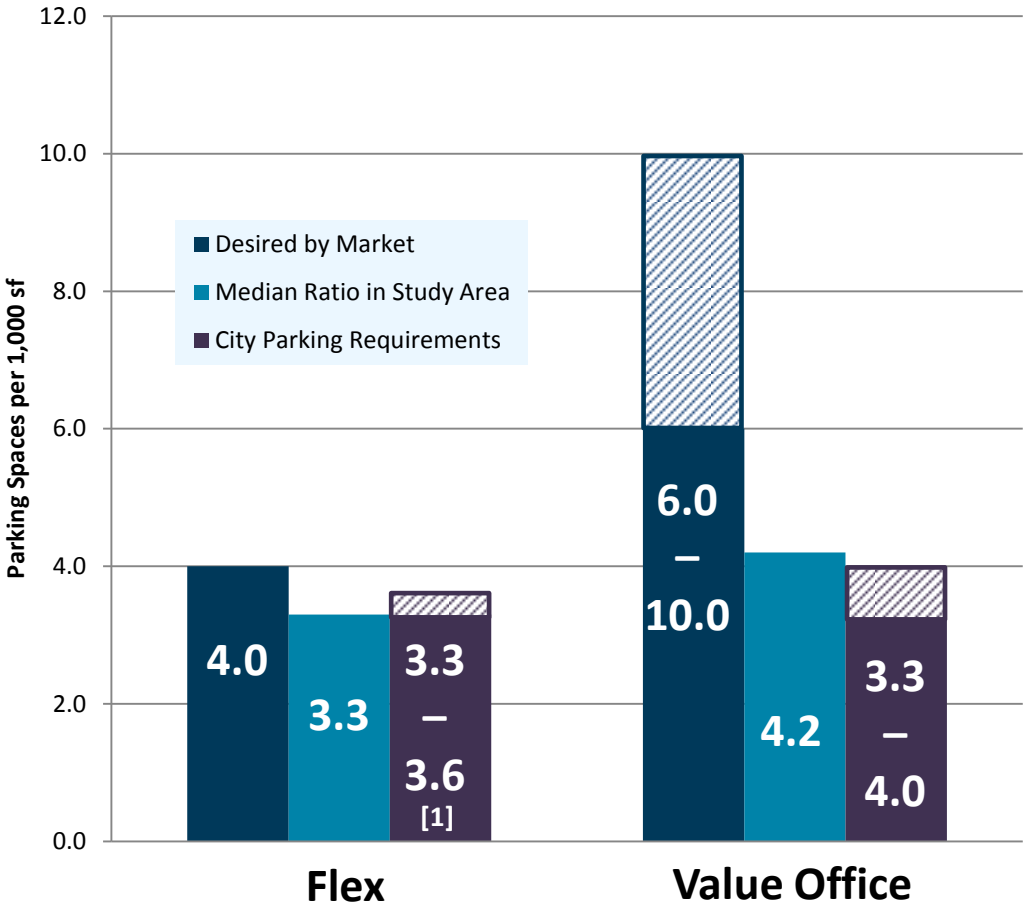
1. Existing Conditions:
Challenges to Marketability

Perception of Obsolescence

- Many buildings appear dated and obsolete
- Over 50% built before 1980
- Median flex building is 32 years old



Low Parking Ratios



City Parking Requirements

Minimum Number of Spaces per 1,000 sf by Use

Assembly / Manufacturing / Research Lab	2.5
Showroom / Warehouse	1.0
Office (75,000+ sf)	3.3
Office (Below 75,000 sf)	4.0

Greater than 70% of space in the Study Area *does not meet* parking ratio desired by tenants

- 72% of flex space
- 78% of value office

[1] Flex space is estimated to be 50-75% office with assembly, manufacturing, and research labs occupying the remaining space

Source: CoStar, Richardson Chamber of Commerce, broker and developer interviews, *SB Friedman*.

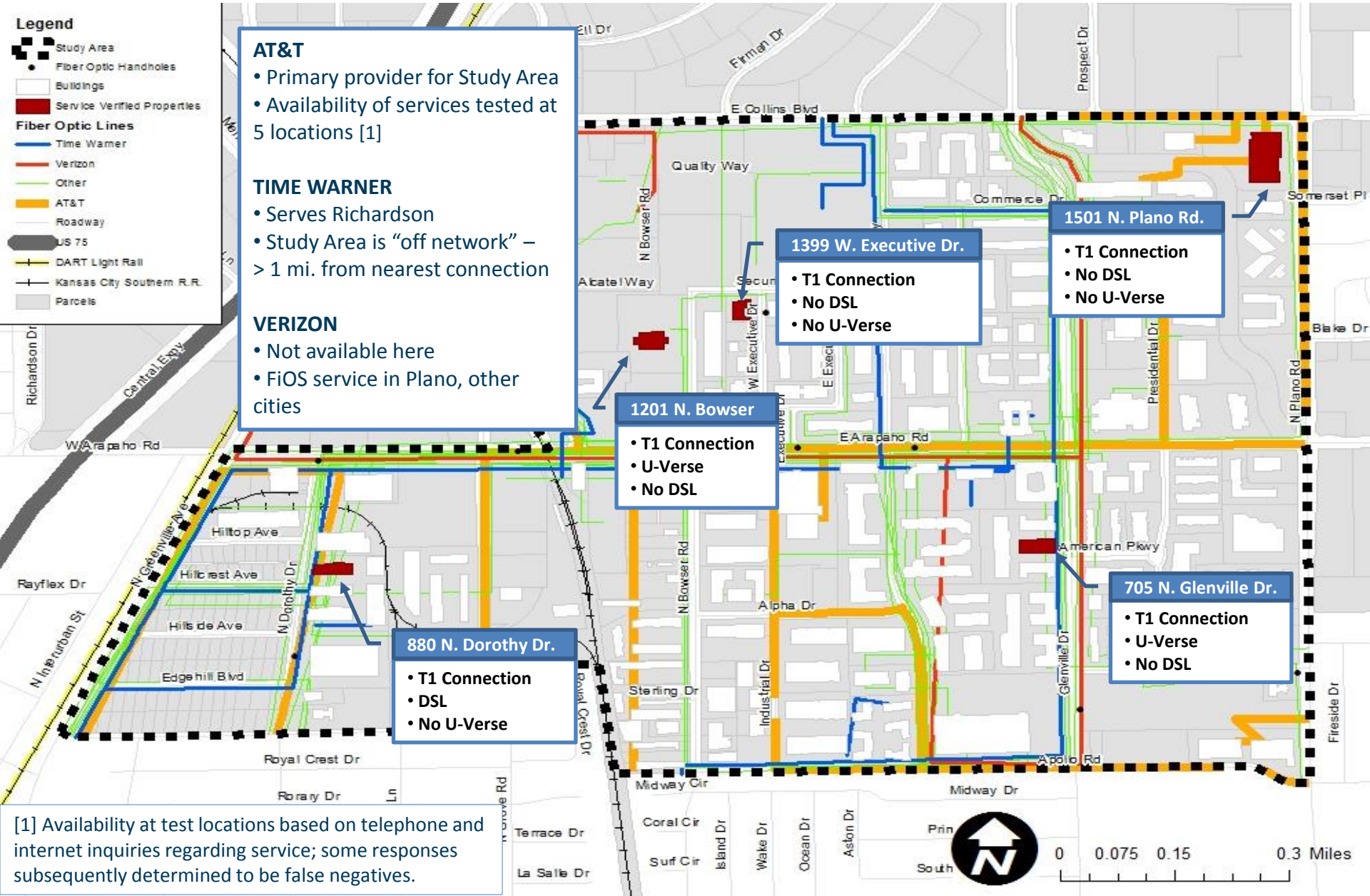
Greenspace Comparison

PLANO
- Parking/drives prohibited between building and street
- Design overlay district
  - Minimum tree count/sf of street frontage, parking space
  - More stringent landscaping requirements

	ROW Width	Sidewalks	Total Greenspace	Avg. Greenspace Depth	Avg. Bldg. Setback
COMPARISON	110'	One Side	3.26 Acres	41'	62'
	104'	Both Sides	1.85 Acres	22'	65'

RICHARDSON
- Similar setbacks, but parking lots front on streets
- No greenspace required on street frontage
- Less stringent landscaping for parking areas (properties developed under older codes)

Availability of Lower-Cost, High-Speed Internet



[1] Availability at test locations based on telephone and internet inquiries regarding service; some responses subsequently determined to be false negatives.

Existing Conditions Conclusions

- Good connectivity and access via highways and public transit
- Existing infrastructure generally sufficient
- Perception of obsolescence due to older building stock
- Lower parking ratios and greenspace than competitive parks
- Lower-cost internet availability problematic for smaller users
- Clustered vacancy and institutional ownership present redevelopment opportunities and challenges

2. Market Potential

Supply Analysis

Real Estate Products Tested

Modern Flex

Value Office

Class A Office

Data Centers

2. Market Potential

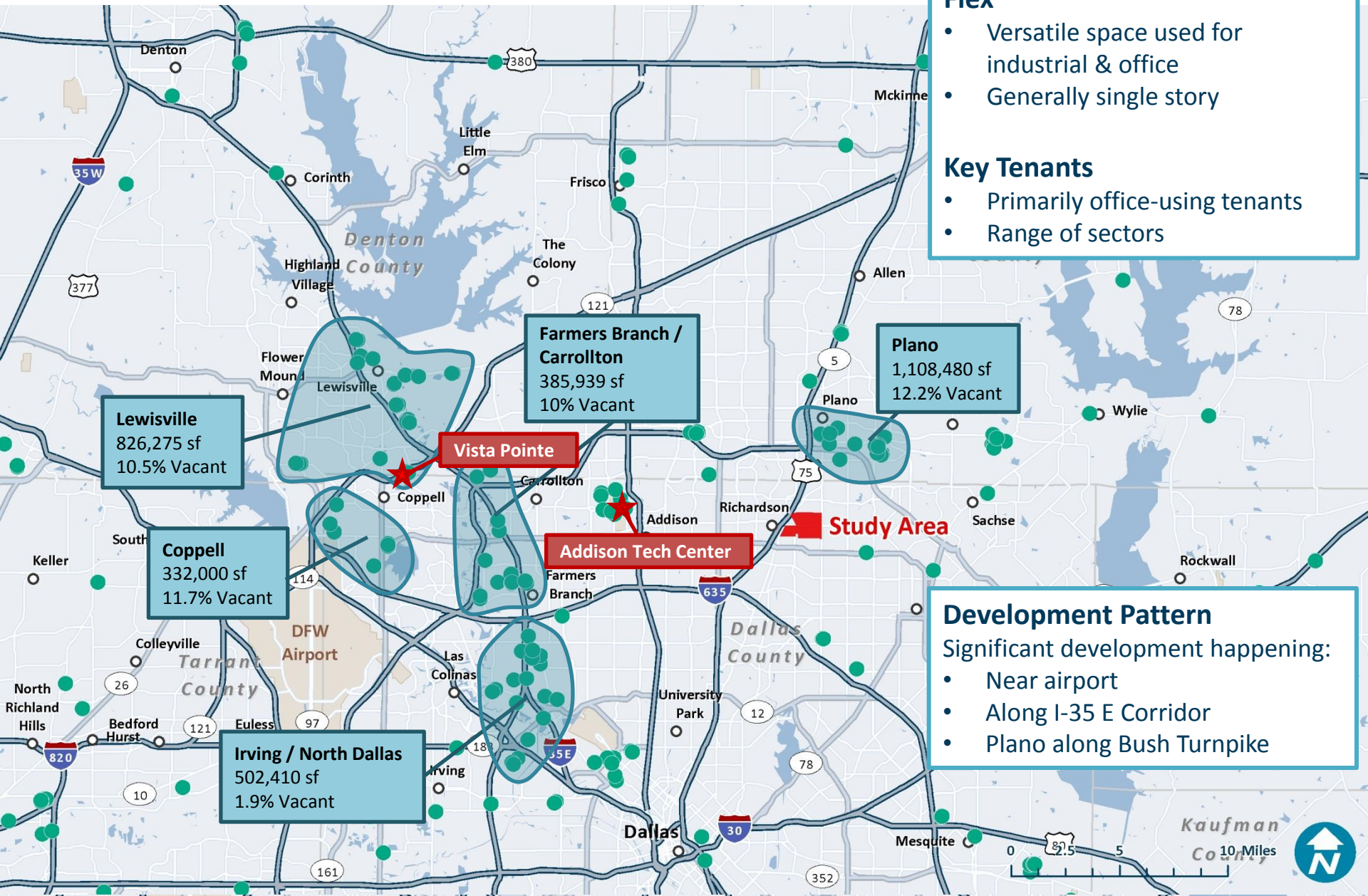
Supply Analysis: Modern Flex

Comparative Analysis of Flex Submarkets

	Study Area [1]	Rest of Richardson	Plano	Carrollton / Addison
Total Rentable Building Area (RBA)	3,870,331	5,367,376	5,111,511	10,787,937
Vacancy (Q3 2012)	24%	19%	16%	15%
Average Annual Absorption (square feet - sf) 10 Years	(55,829)	53,225	54,418	42,947
New Construction (sf) 10 Years	0	226,160	357,717	326,786
Capture of New Flex Development in Metroplex 10 Years	0.0%	3.5%	5.5%	5.0%

Source: CoStar, Richardson Chamber of Commerce, *SB Friedman*
[1] Excluding Digital Realty data center buildings.

New Flex Product (2002-2012)



Flex

- Versatile space used for industrial & office
- Generally single story

Key Tenants

- Primarily office-using tenants
- Range of sectors

Development Pattern

Significant development happening:

- Near airport
- Along I-35 E Corridor
- Plano along Bush Turnpike

Comparative Analysis of Flex

	Study Area Flex	Vista Pointe	Addison Tech Center
Year Built	n/a	2000-2007	2001
Total RBA	n/a	288,200	228,400
Vacancy (3Q 2012)	24%	10%	5.2%
Median Floorplate (sf)	26,100	30,200	45,600
Median Parking Ratio	3.3	4.0	4.5
Avg. Weighted Rent	$8.42	$11.00	$9.75

Vista Pointe

Addison Tech Center

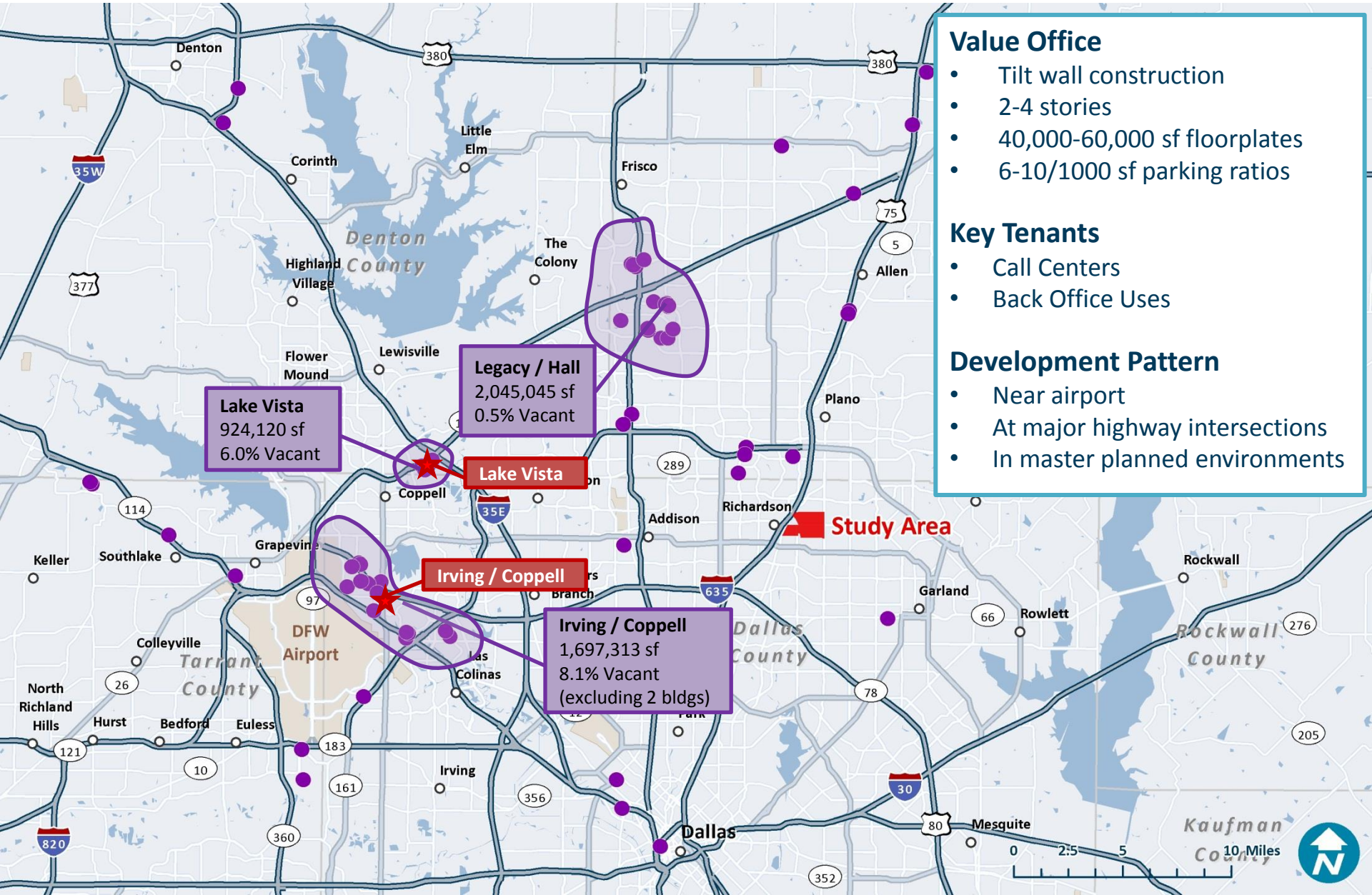
Key Differences in New Flex Product:
- Parking ratios of 4+/1000 sf
- Larger floorplates
- Higher ceilings
- Modern facilities

Source: Jackson Shaw, Bing, SB Friedman

2. Market Potential

Supply Analysis: Value Office

New Value Office (2002-2012)



Value Office

- Tilt wall construction
- 2-4 stories
- 40,000-60,000 sf floorplates
- 6-10/1000 sf parking ratios

Key Tenants

- Call Centers
- Back Office Uses

Development Pattern

- Near airport
- At major highway intersections
- In master planned environments

Comparative Analysis of Value Office

	Study Area Office [1]	Lake Vista	Irving / Coppell
Year Built	n/a	2001-2008	2003-2009
Total RBA	742,136	924,120	1,697,303
Vacancy (3Q 2012)	29% [2]	6.0%	8.1%[3]
Median RBA (sf)	57,200	122,000	112,250
Median Floorplate (sf)	23,600	61,000	38,400
Median Floor Area Ratio (FAR)	0.34	0.28	0.27
Median Parking Ratio	4.2	6.0	6.0
Avg. Wtd. Rent	$12.61	$20.00	$18.95

Key Differences in New Value Office:
- Parking ratios of 6+/1000 sf
- Larger floorplates
- Adjacent to retail and restaurants
- Often in master planned developments

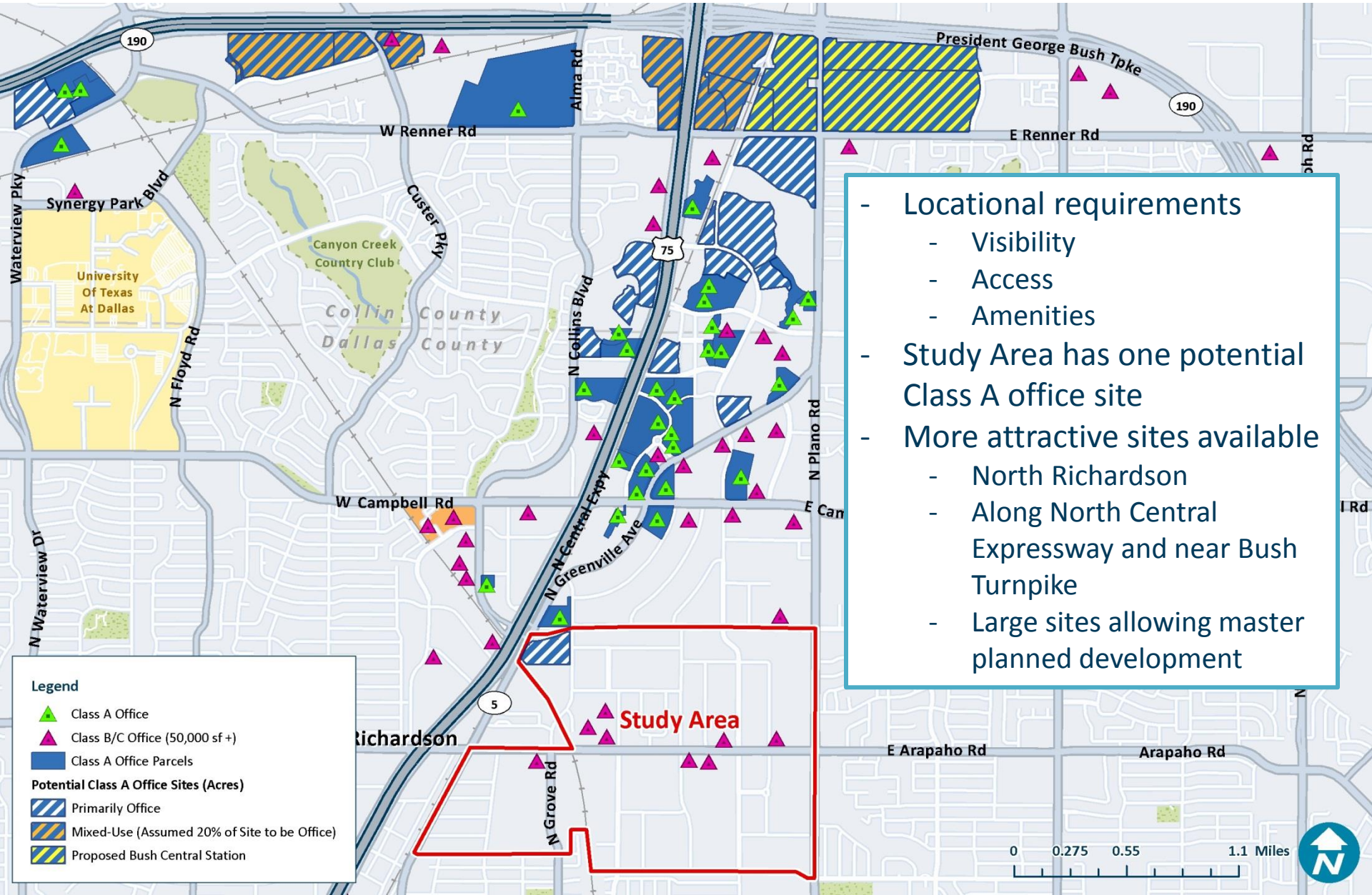
Source: CoStar, Richardson Chamber of Commerce, InfoUSA, Holt Lunsford Commercial, *SB Friedman*

[1] 2-4 stories
[2] Without Peloton building; 45% with Peloton
[3] Excludes two 100% vacant buildings

2. Market Potential

Supply Analysis: Class A Office

Potential Class A Office Sites



- Locational requirements
  - Visibility
  - Access
  - Amenities
- Study Area has one potential Class A office site
- More attractive sites available
  - North Richardson
  - Along North Central Expressway and near Bush Turnpike
  - Large sites allowing master planned development

Class A Office Alternative Sites Analysis

Richardson Alternative Sites Analysis	
Median FAR of Existing Class A Office	0.59
Potential Class A Office Development [1]	
Primarily Office Sites	214 acres
Mixed-Use Sites (assumed 20% office)	155 acres
Total Potential Class A Office sf [2]	7,187,000
Avg. Annual Square Footage Delivered (last 20 years)	341,000
Years of Class A Development Capacity at Available Richardson Sites	21

[1] Based on current zoning and assuming 20% Class A office for mixed-use developments.
[2] Based on proposed 1.5 million sf at Bush Central Station and Median FAR for remaining parcels.

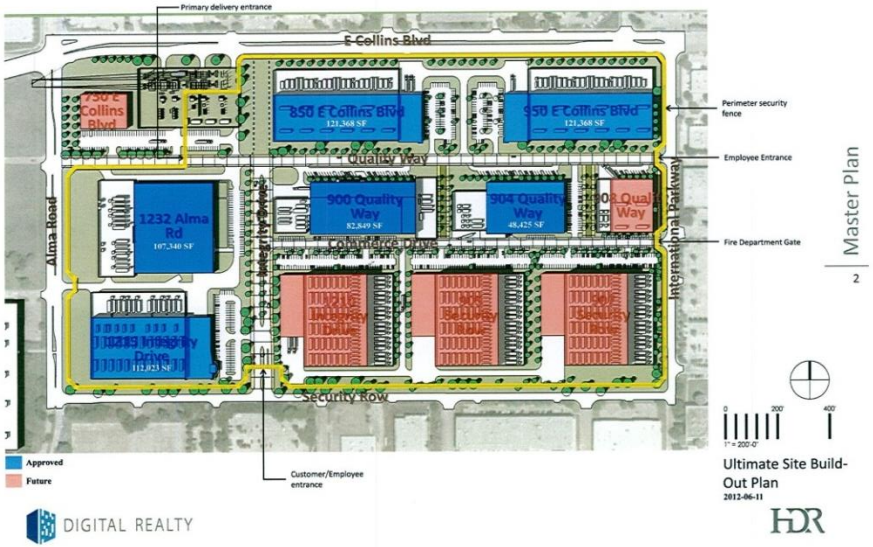
Source: CoStar, Dallas and Collins County Assessment Data, SB Friedman

2. Market Potential

Supply Analysis: Data Centers

Data Centers – Location Dynamics

- Location Requirements
  - Reliable, adequate and relatively inexpensive electricity
  - High fiber density with access to multiple carriers
  - Urban location/proximity to large metro areas
  - Low probability for natural disaster



- Richardson Appears to Meet All Location Requirements, but so do Other Locations in Metroplex
  - Power access and capacity is critical – dedicated substations preferred
  - Buildings must be able to withstand high wind speeds, so not all buildings can be retrofitted
  - Few developers want to assemble multiple parcels or do one-off buildings, so assembled sites are attractive (e.g., Digital Realty Trust purchased former Alcatel site)

Source: Interviews with Experts, Digital Realty Trust, SB Friedman

2. Market Potential

Demand Analysis

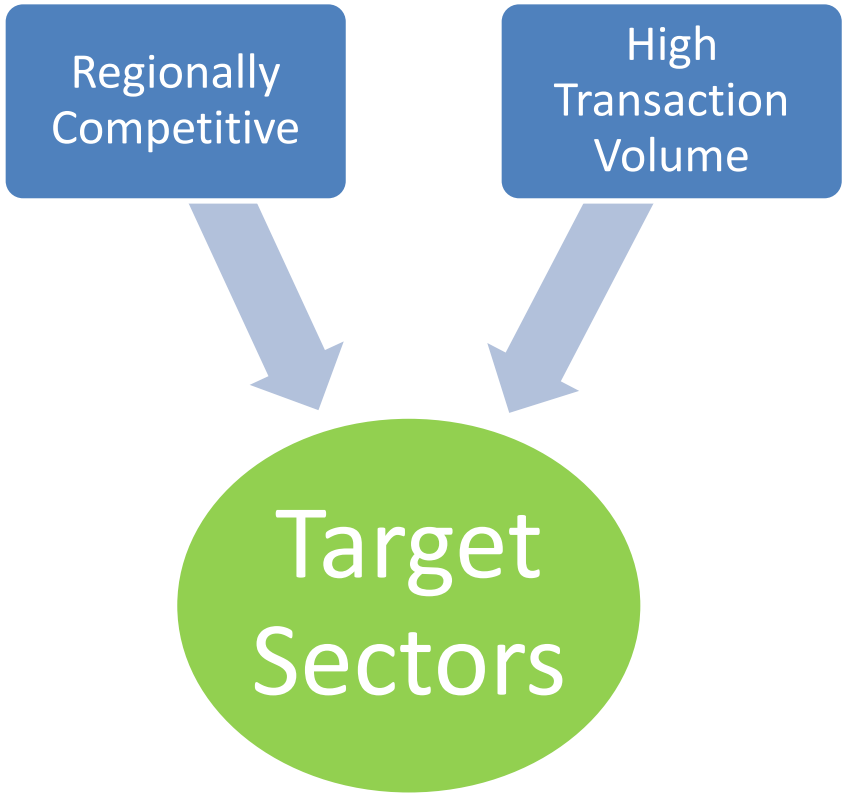
Tenant and Sector Analysis

Modern Flex

Value Office

Demand Analysis – Flex and Value Office

- Highly concentrated in region
- Outperforming national economy
- High employment growth
- Likely to be located in flex and value office space



- Sectors with greatest share of flex and value office transactions in last 5 years

FLEX	VALUE OFFICE
High Tech Manufacturing	Finance and Insurance
IT – Computer Systems Design	Professional Services
Merchant Wholesalers	Administrative and Support

Tenant Profiles

Modern Flex

- Smaller tenants
  - 75 percent lease less than 13,250 sf

Value Office

- Larger tenants
  - More employees
  - Lease entire buildings or larger spaces
- Headquarter firms tend to prefer:
  - DFW airport proximity
  - Concentrated retail and restaurant amenities
  - Campus-like environments

Flex tenants who have moved in past 5 years in NE Dallas submarket. Value office tenants in competitive new value office developments.
Source: CoStar, Richardson Chamber of Commerce, Google, Bing, SB Friedman

Market Analysis Conclusions for Study Area

Modern Flex

- More office-like tenants
- High-tech with light manufacturing/distribution
- Smaller multi-tenant spaces
- Parking ratios of 4+/1000 sf

Value Office

- Back office, call centers in high-growth sectors
- Need retail amenities and business support services
- Parking ratios of 6+/1000 sf

Data Centers

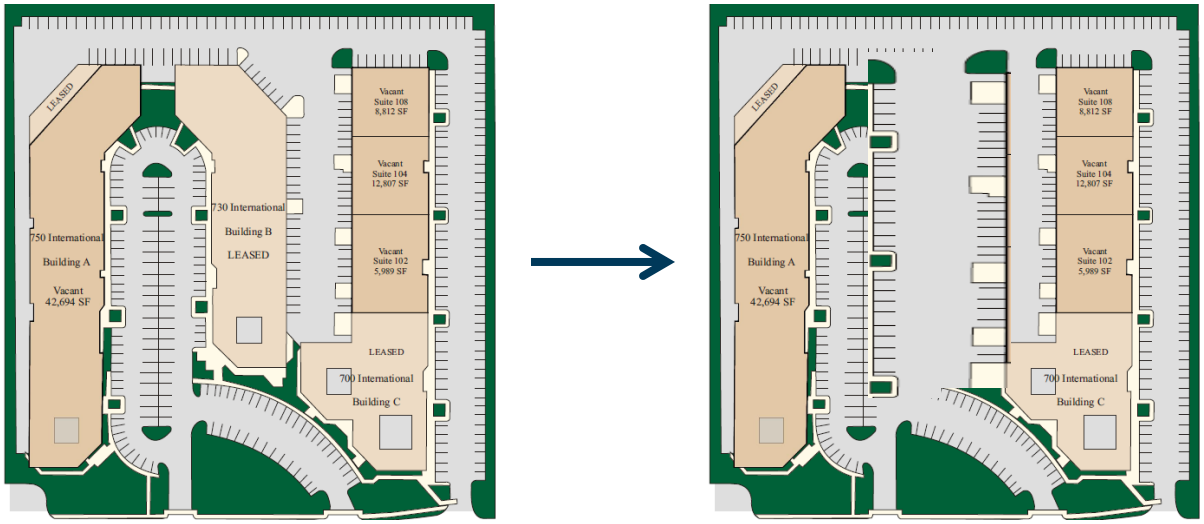
- Meet basic location criteria
- Power access and capacity is critical
- “Wild Card” use

Class A Office

- Other better Richardson sites can absorb demand for many years

3. Preliminary Economics of Redevelopment

Redevelopment/Rehabilitation



Existing Layout

Building Area Acquired (sf): 126,645

Purchase Price/sf Building: $25

Asking Study Area Rents: up to $9.50/sf

Layout After One Building Demolished to Provide Additional Parking

Building Area Available (sf): 92,816

Purchase Price/Remaining sf Building: $34

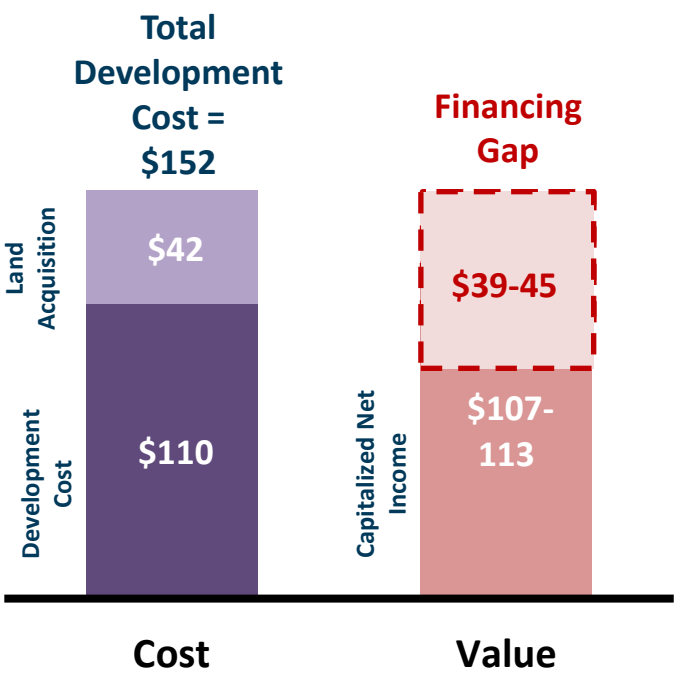
Required Rents to Cover Costs of Rehabilitation: $9 - 10.50/sf

Rehab may be Economically Feasible, Depending on Extent of Required Tenant Improvements

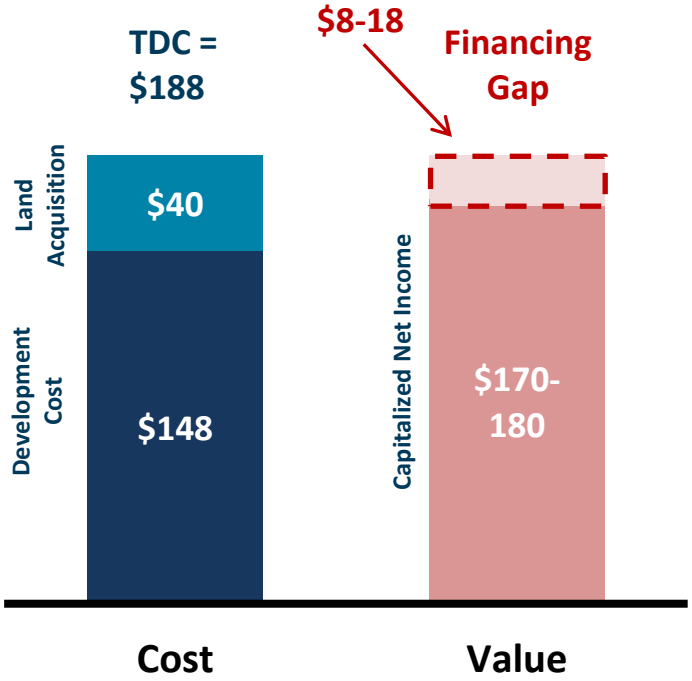
Source: Broker and Developer Interviews, *SB Friedman*

New Construction

Modern Flex



Value Office



- High Acquisition Costs Drive Financing Gap for New Construction
- Modern Flex Likely to be Difficult Economically
- Value Office Appears to Have Greater Feasibility

Preliminary Conclusions

- High Acquisition Cost Results in Financing Gap
- Within Striking Distance of Feasibility
  - Rehabilitation: Garden office, flex, value office buildings
  - New construction: Value office buildings

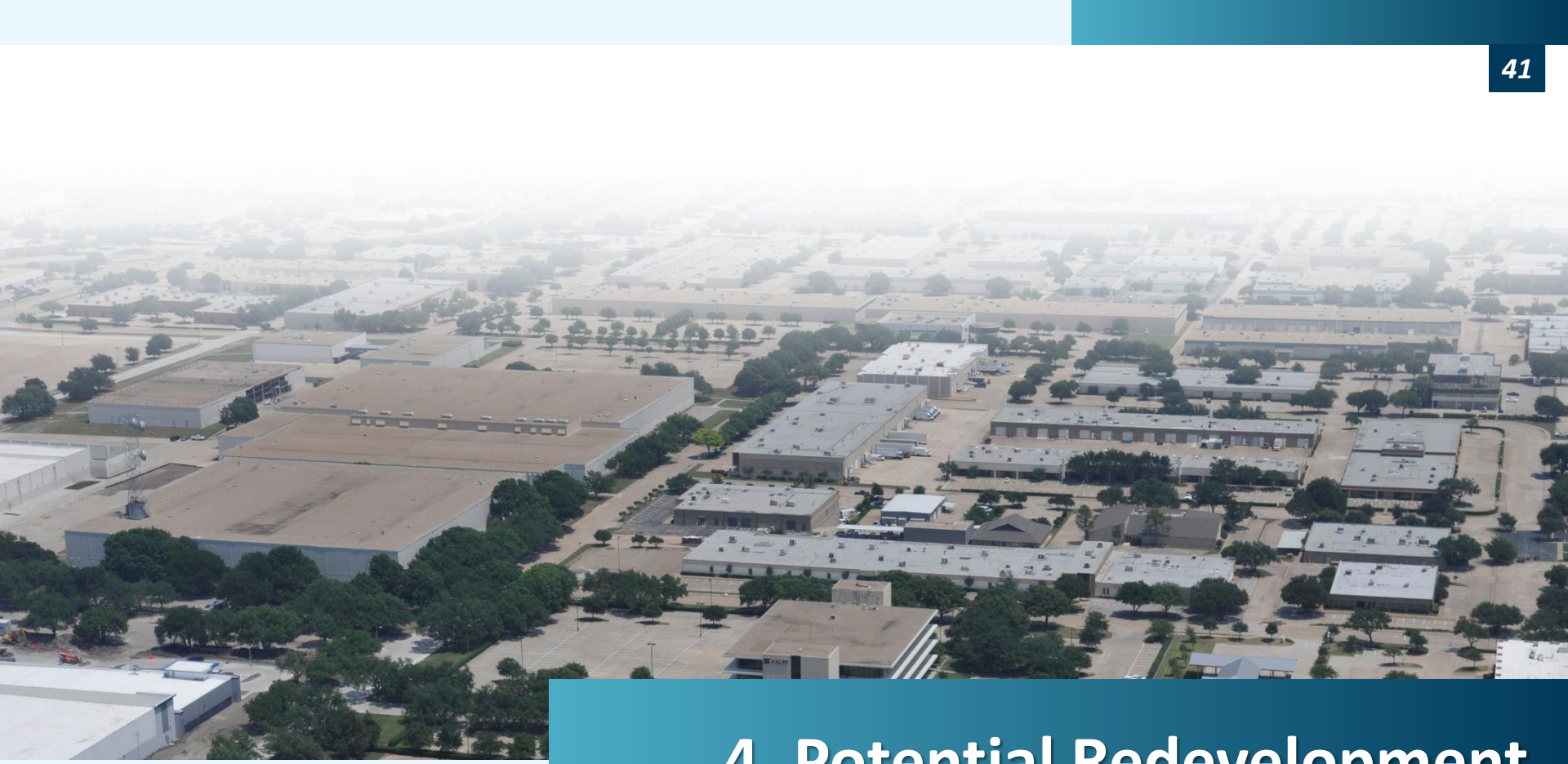
4. Redevelopment Assets, Challenges, and Potential Strategies

Redevelopment Assets

- Access to regional labor force via mass transit and regional roadways
- Proximity to UTD and major employers
- Existing high-tech manufacturing and IT economic base
- Relatively lower-cost space available
- Basic infrastructure in place
- City of Richardson and Chamber business-friendly attitudes

Redevelopment Challenges

- Attractiveness to Potential Tenants
  - More smaller tenants in need of multitenant space and low-cost, high-speed internet
  - More office users with higher parking needs
  - Lack of curb appeal compared to alternatives
- Redevelopment Challenges
  - Airport and master planned developments have greater market appeal
  - Economics challenging compared to greenfield development
- Ownership Expectations
  - Effective current value of buildings lower than owner expectations, limiting potential for transfers of property
  - Institutional owners *appear* reluctant to:
    - Write down value of investment properties
    - Respond to small tenant market



4. Potential Redevelopment Strategies

Maintain and Strengthen Linkage to UTD

- Maintain Dialogue with UTD
- Explore Opportunities to Attract UTD Incubator "Graduates" to Study Area

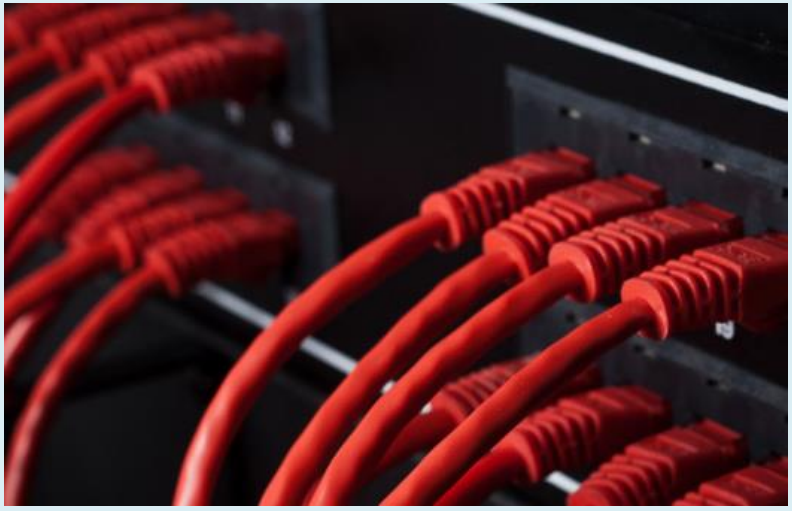
University of Iowa Research Park Coralville, Iowa

- Technology Innovation Center (collaborative space for tech ventures)
- BioVentures Center (wet lab, R&D incubator)
- Research Park supported with TIF, direct business assistance from City

Source: UIRP

Improve Internet Service

- Ensure Basic Lower-Cost Internet Service is Available for Small Users
- Explore Opportunities to Enhance Internet Network

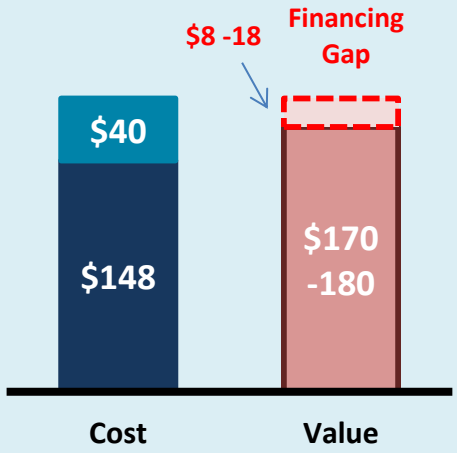


Targeted Redevelopment of Opportunity Sites

- Identify Potential Rehab/Redevelopment Projects
- Create and Test Development Concepts
- Conduct More Detailed Analysis on Financial Gap Associated with Rehab/Redevelopment

Identify Strategic Redevelopment Parcels

Preliminary Economics of Value Office Development



Consider Establishing City Financial Assistance Program for Building Rehab and New Development

- Explore Available Tools for Financial Gap Assistance

- Define Program and Criteria for Use of Incentives in Study Area

Building partnerships Growing Milwaukee

- TIF; Second Mortgage Program; Façade Grants; Milwaukee Energy Efficiency (ME^2) Program; Retail Investment Fund
- TIF Performance Criteria:
  - Underwriting based on demonstrated financing gap
  - Job creation/retention
  - Disadvantaged contractor participation
  - Design review
  - Sustainability

Attract Support Services and Amenities

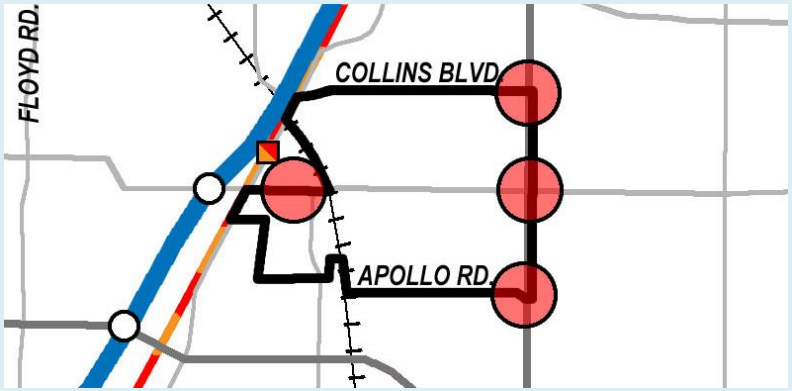
- Identify Appropriate Sites
  - High traffic volume
  - Accessible and visible
- Estimate Latent Demand Potential for Businesses and Employees in Study Area
- Work with Property Owners and Brokers to Develop Marketing Materials to Attract:
  - Restaurants
  - In-line retail
  - Business support services

Source: CoStar

Enhance Curb Appeal – Public Improvement Program

- Identify and Design Gateway Opportunities, Landscaping, Streetscaping Amenities
- Identify Public Financing Sources for Streetscape Enhancements
- Enhance Arapaho Road Streetscape

Potential gateway locations



Enhanced landscaping in center median

Enhance Curb Appeal – Design Guidelines for Private Improvements

- Create Design Guidelines or an Overlay District

- Apply New Regulations to Building Rehabilitations, Redevelopment and New Development

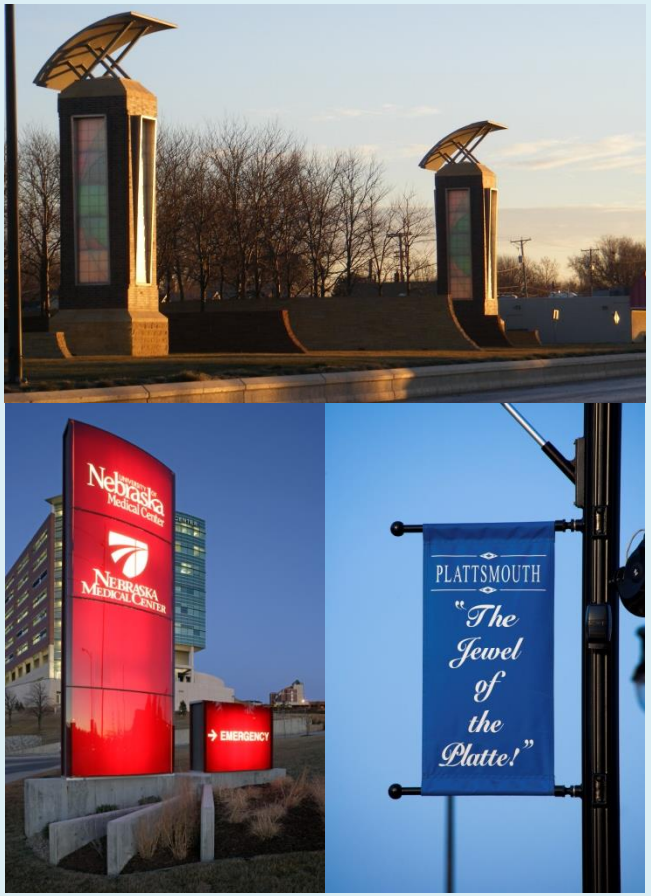
Buildings addressing the street, parking behind, pedestrian enhancements, etc.

Long term strategy to improve functionality and enhance curb appeal

Consider Re-Branding Study Area

- Explore New Branding Opportunities as Other Strategies are Implemented
- Create an Identity for the District
- Implement a Branding and Marketing Campaign through the City, Chamber, Brokerage Community, etc.

Gateway and identification signage, lighting, banners



Discussion