East Arapaho/Collins Redevelopment Study

City Council Presentation| February 4, 2013

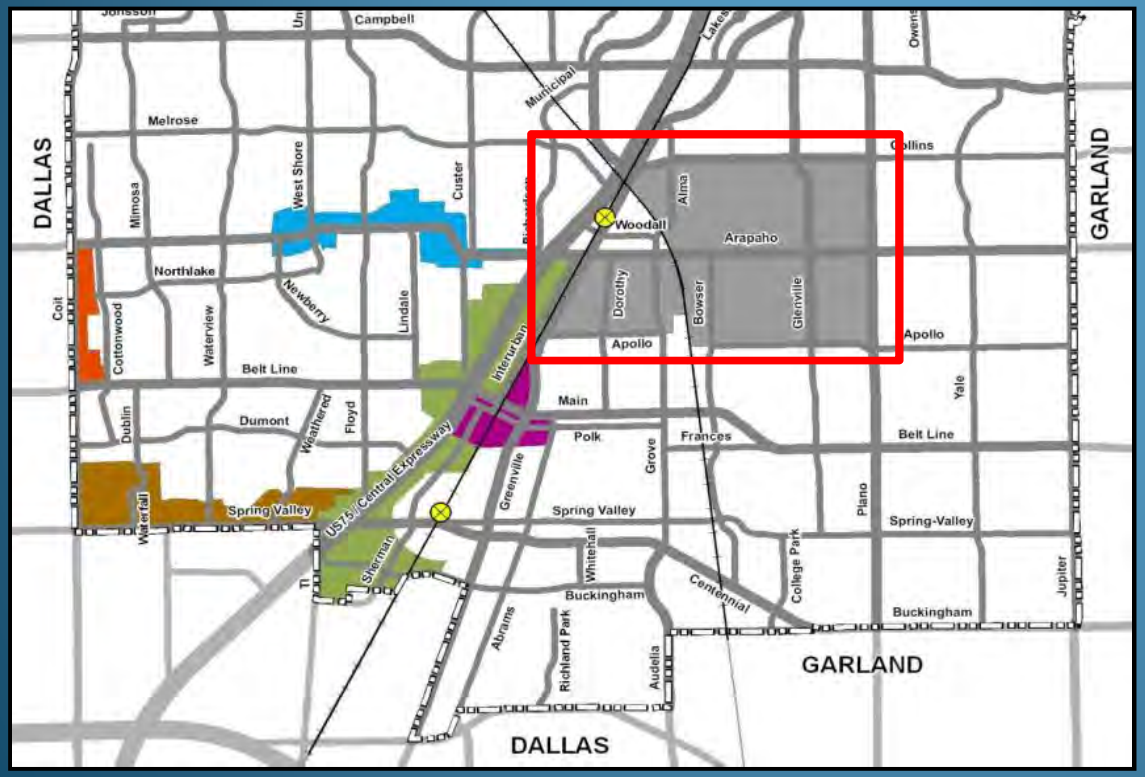
Arapaho / Collins

Presentation Outline

- Comprehensive Plan
- Study area boundaries
- Existing conditions
- Flex space
- Purpose
- Consultant team
- Study approach and schedule
- Discussion

Arapaho/Collins
Comprehensive Plan

- West Spring Valley (complete)
- Old Town/Main Street (*underway*)
- Central (*underway*)
- East Arapaho/Collins *(underway)*
- West Arapaho
- Coit



Reflect the challenges of a first-tier suburb—aging development and infrastructure; under-performing properties; evolving demographics

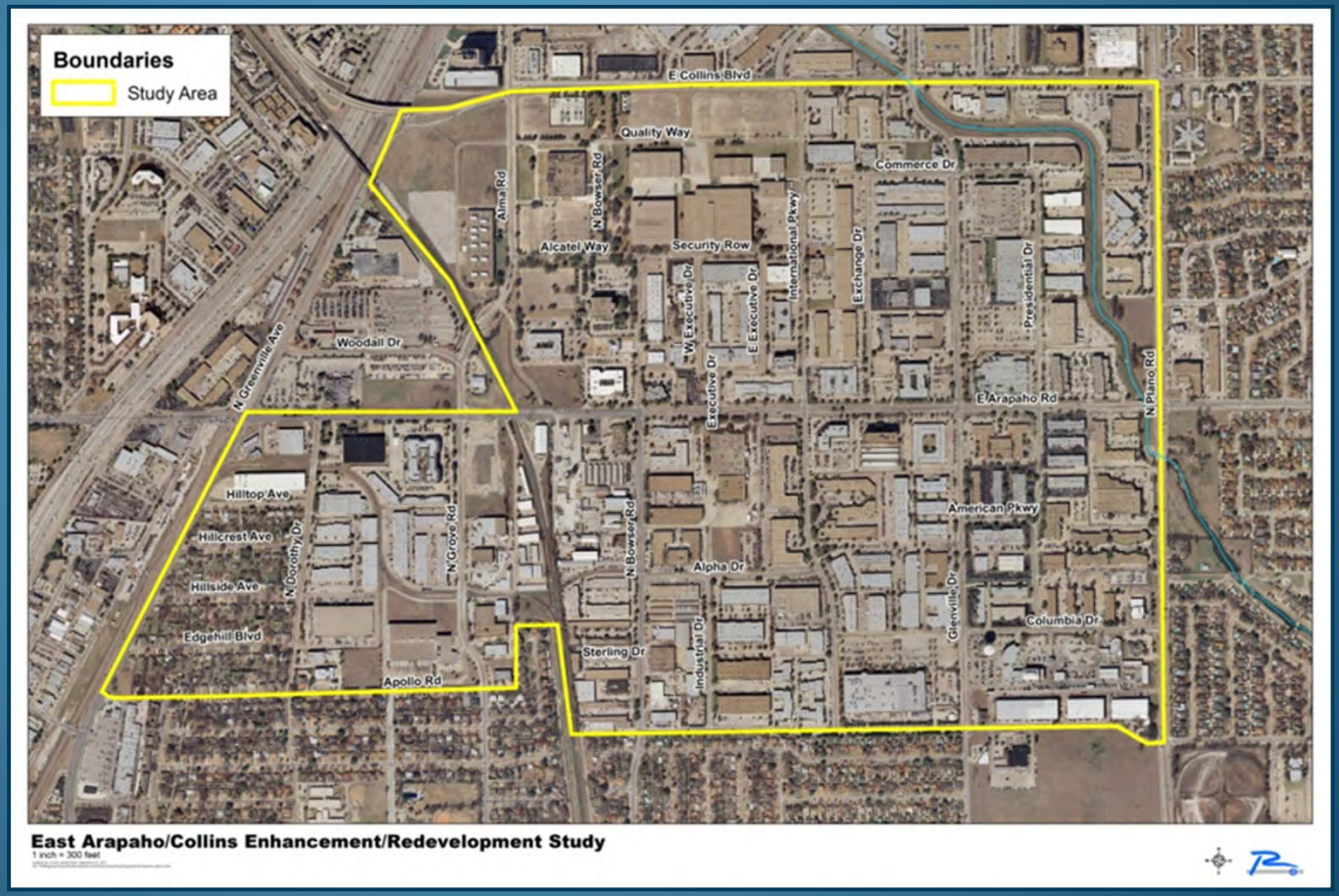
Reinvestment, redevelopment encouraged after further, detailed study to determine redevelopment potential

Arapaho / Collins

Study Area Boundaries - Comprehensive Plan

- West: Greenville Avenue (generally)
- North: Collins Boulevard
- East: Plano Road
- South: Apollo Road

- 699 acres
- 299 parcels



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Purpose of the Study

- Develop a strategy for addressing the underperforming flex space in the study area
- Use the resources of
  - City
  - Richardson Economic Development Partnership
  - Consultants
  - Stakeholders
    - Key Informants
      - Property owners
      - Real estate brokers
      - Business owners/representatives
      - Chamber
      - UTD
      - DART
    - Community

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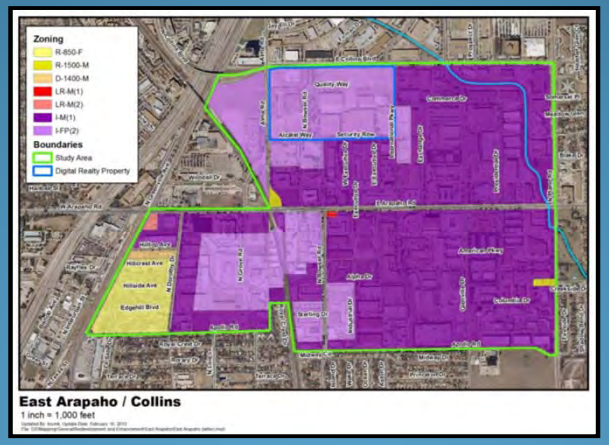
Flex Space

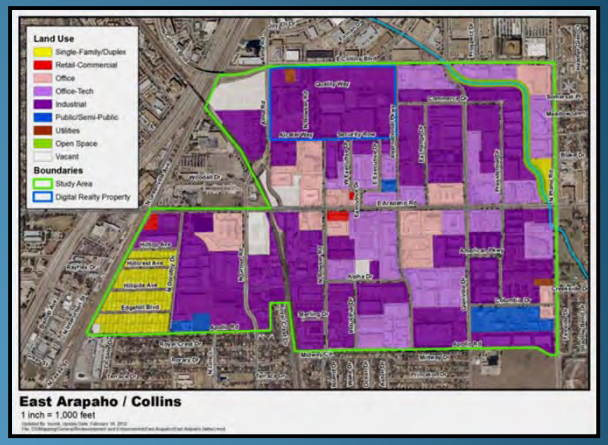
- Definition:
  - Flexible/versatile in design to allow for a variety of office, research and development, quasi-retail sales, industrial processing, high tech (or combinations) in a single space
- Building characteristics :
  - One or two story height
  - Some percentage of space (usually at least half) designed for office layout
  - Ceiling heights of up to 16 feet (to allow for racking of inventory; ceilings can be dropped for office users)
  - Overhead door delivery options (grade level, dock high)

Arapaho/Collins

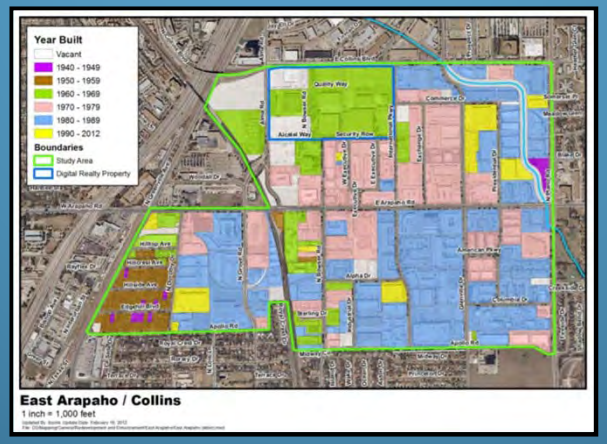
Study Area Boundaries - Comprehensive Plan

- 86% zoned Industrial
- 75% used for industrial, office tech; 10% used for office





- 81% of improvements built 1970-1989
- No construction 2000-2009
- Since 2010, new construction/uses include data centers, call centers



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Study Approach

- Baseline Market Analysis
  - Confirm study area boundaries
  - Obtain input and local market insight from key informants
  - Provide a preliminary assessment of land use, traffic/ transportation and infrastructure
  - Identify sites susceptible to change
  - Identify the market potential and opportunities/constraints of the study area

Arapaho/Collins
Tentative Schedule

Task	Approximate Schedule
✓ Inventory existing conditions	February-March 2012
✓ Select and hire consultant	July-August 2012
✓ Key informant interviews	September-October 2012
✓ Evaluate baseline market data	November-December 2012
▪ Present baseline market report	January-February 2013
▪ Create reinvestment/ redevelopment strategy and implementation plan	2013
▪ Begin implementation	2013

SB Friedman Development Advisors

HDR

East Arapaho/Collins Redevelopment Study

VISION | ECONOMICS | STRATEGY | FINANCE | IMPLEMENTATION

Our Team

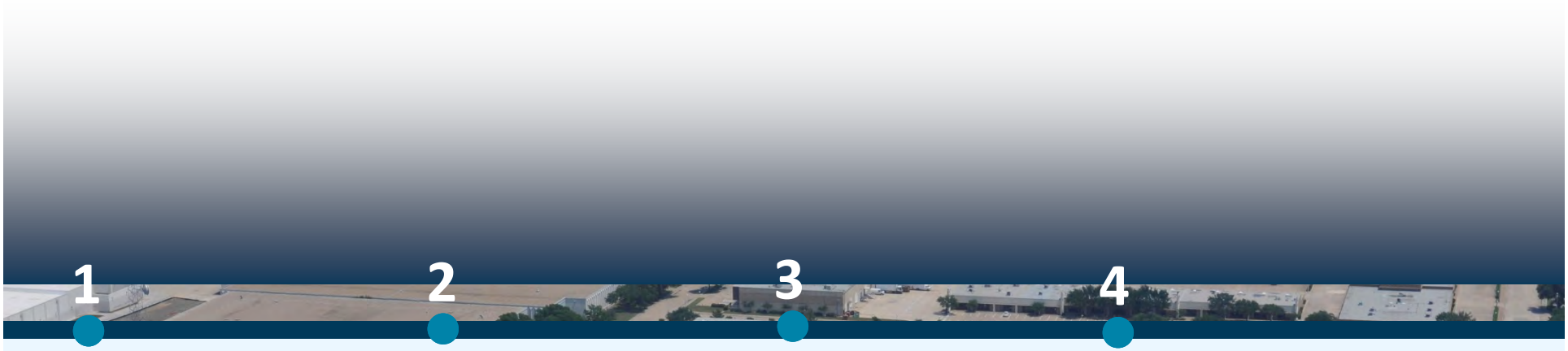
SB Friedman Development Advisors

- **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

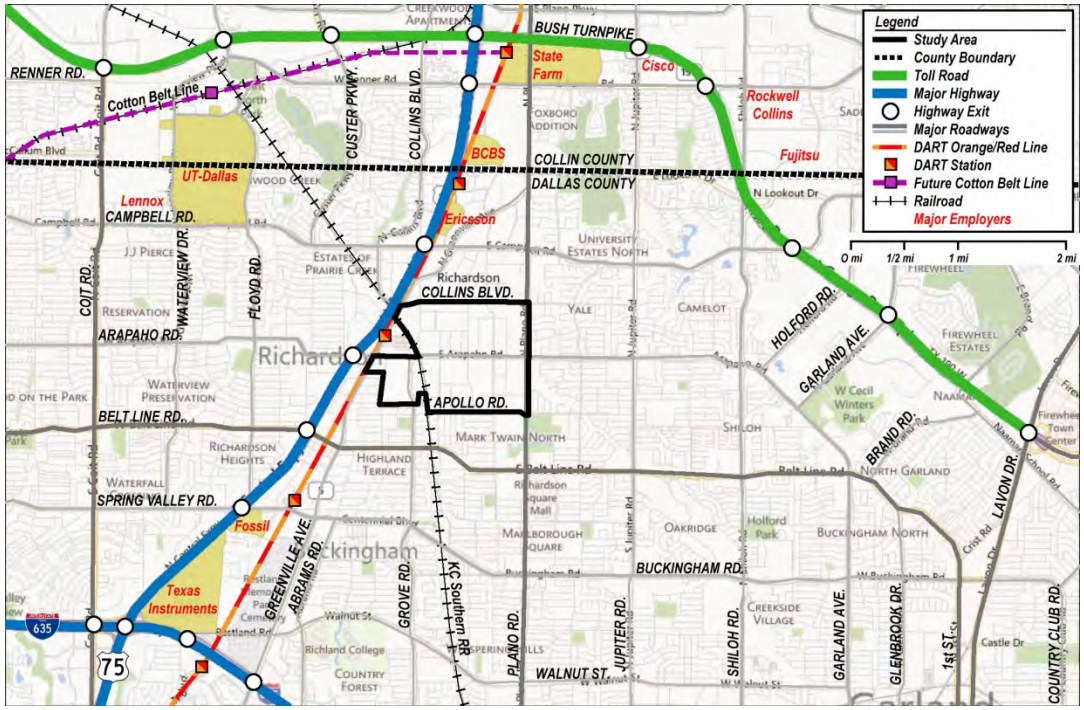
- Supply Analysis
  - Modern Flex
  - Value Office
  - Class A Office
  - Data Centers
- Demand Analysis
  - Modern Flex
  - Value Office

3 Preliminary Economics of Redevelopment

4 Redevelopment Assets, Challenges and Potential Strategies

1. Existing Conditions:
Connectivity, Infrastructure and Building Characteristics

Regional Context and Connectivity



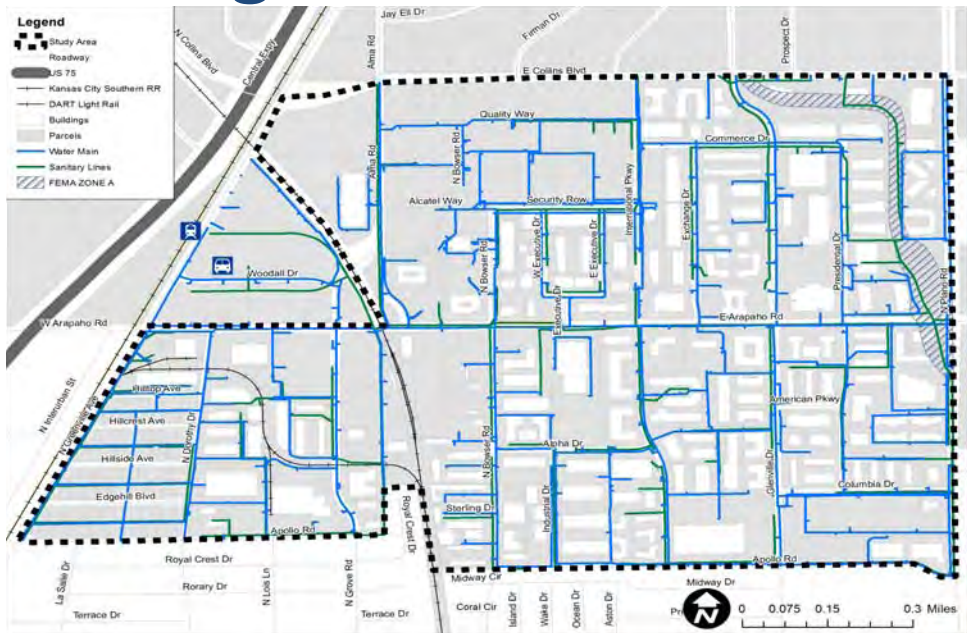
- Good Regional Transportation Connections
- Near UTD and Major Employers
- Strong Transportation Network
  - Public Transit – Rail and Buses
  - Arterial Streets
  - Generally Pedestrian Friendly

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

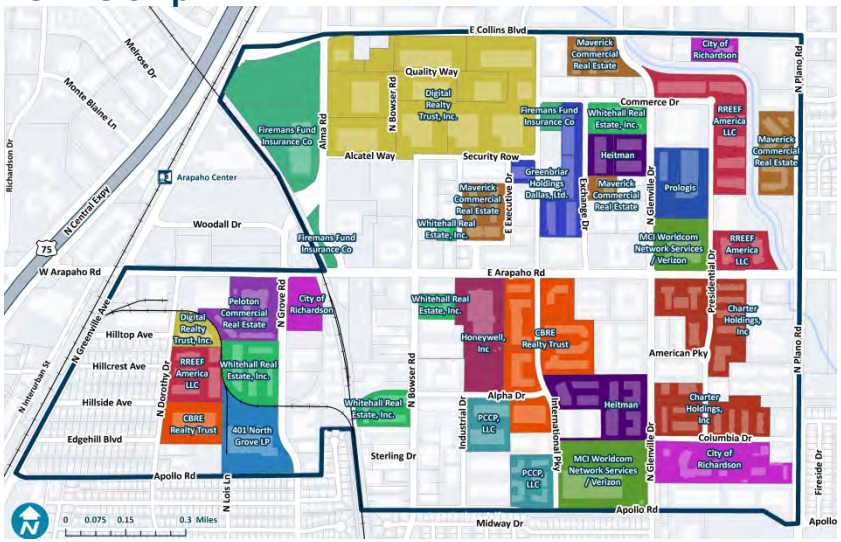
Building Use, Ownership, Vacancy

Building Use

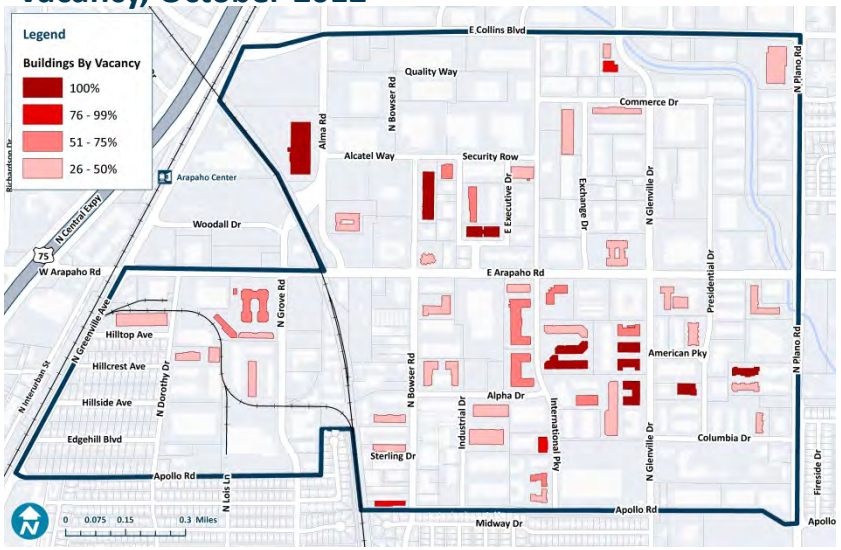
Product	Rentable SF	Vacant SF (3Q 2012)	Vacancy Rate
Flex	3,870,300	932,400	24%
Industrial	2,703,200	398,100	15%
Office	1,207,700	297,600	25%
All Product [1]	**7,781,300**	**1,628,100**	**21%**

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]

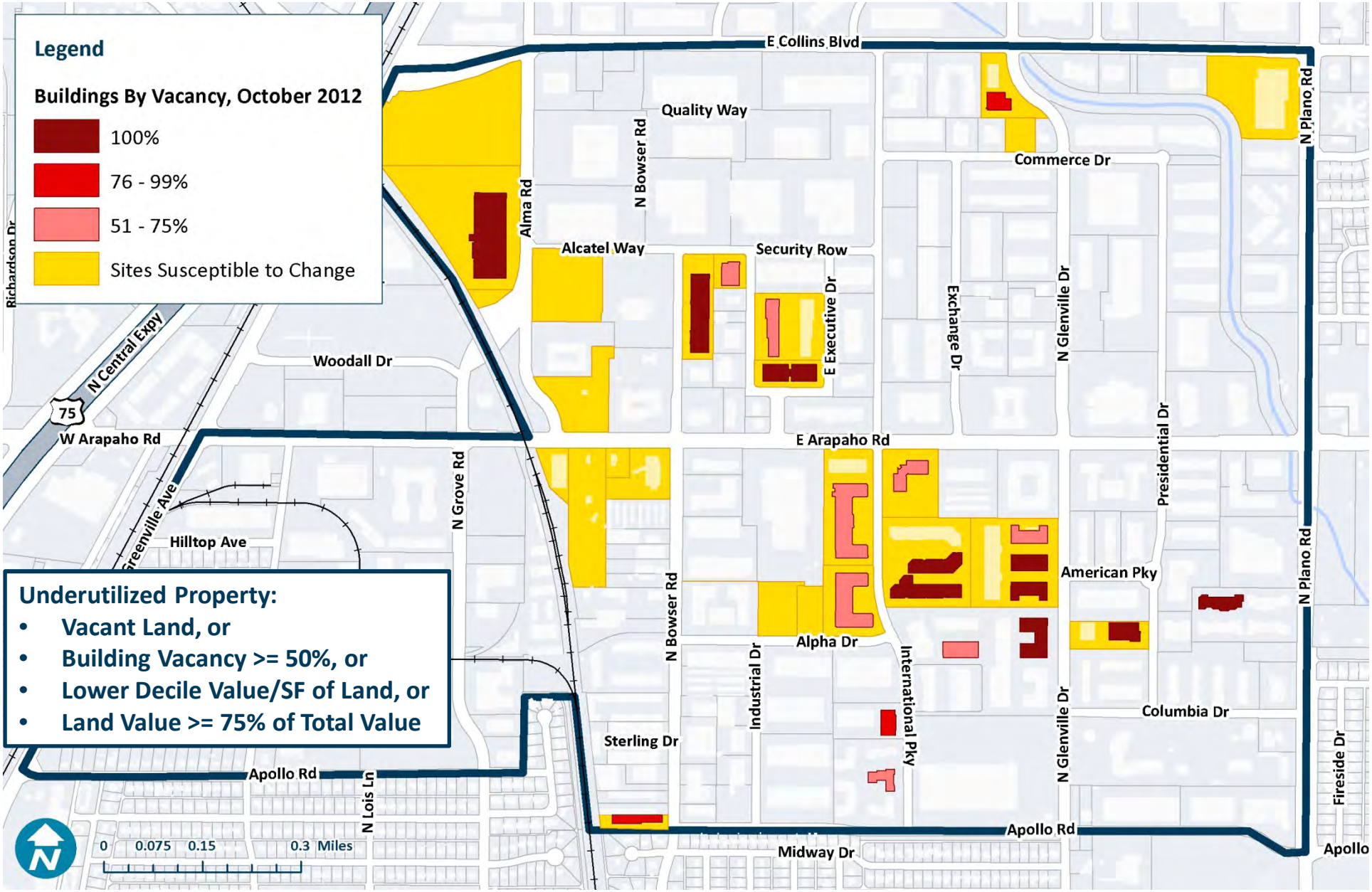


Vacancy, October 2012



[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*.

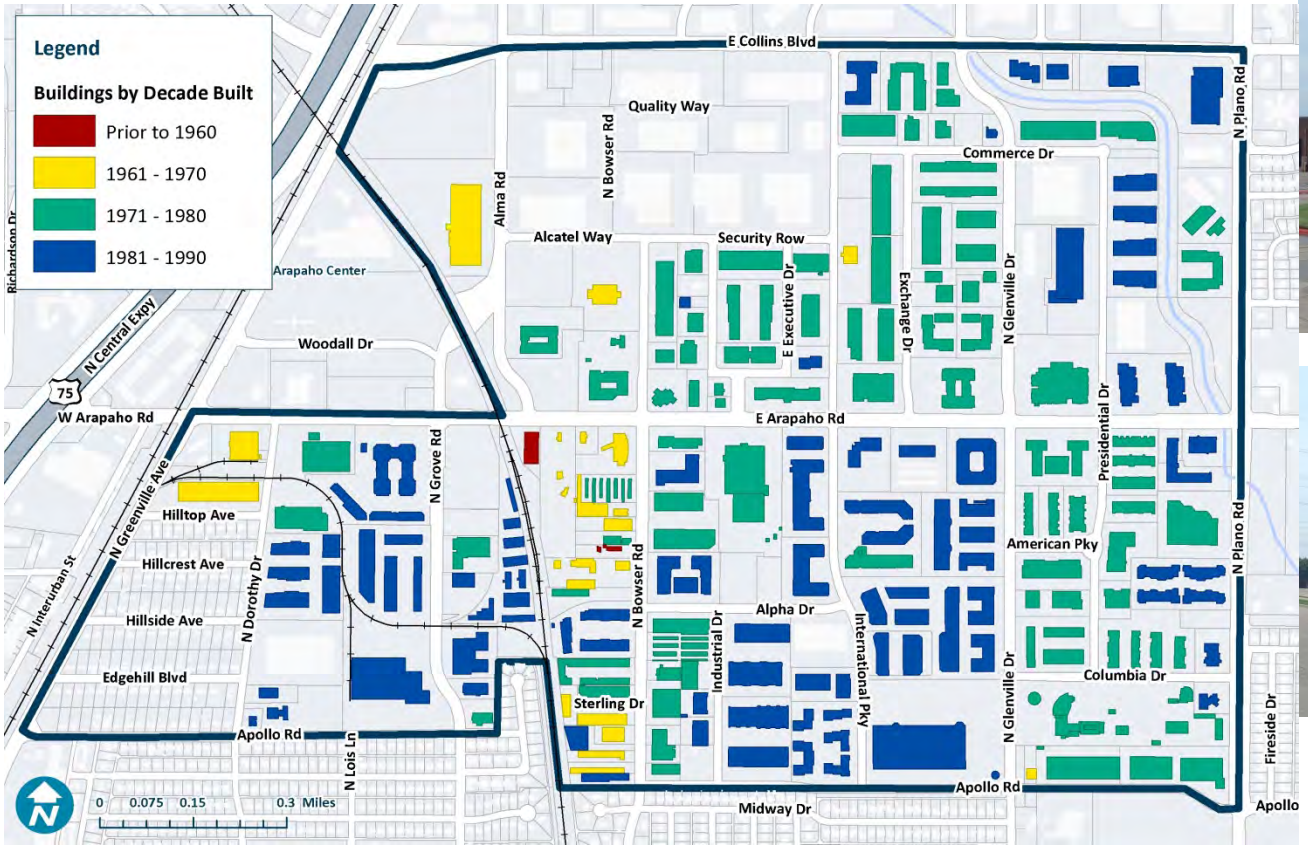
Sites Susceptible to Change



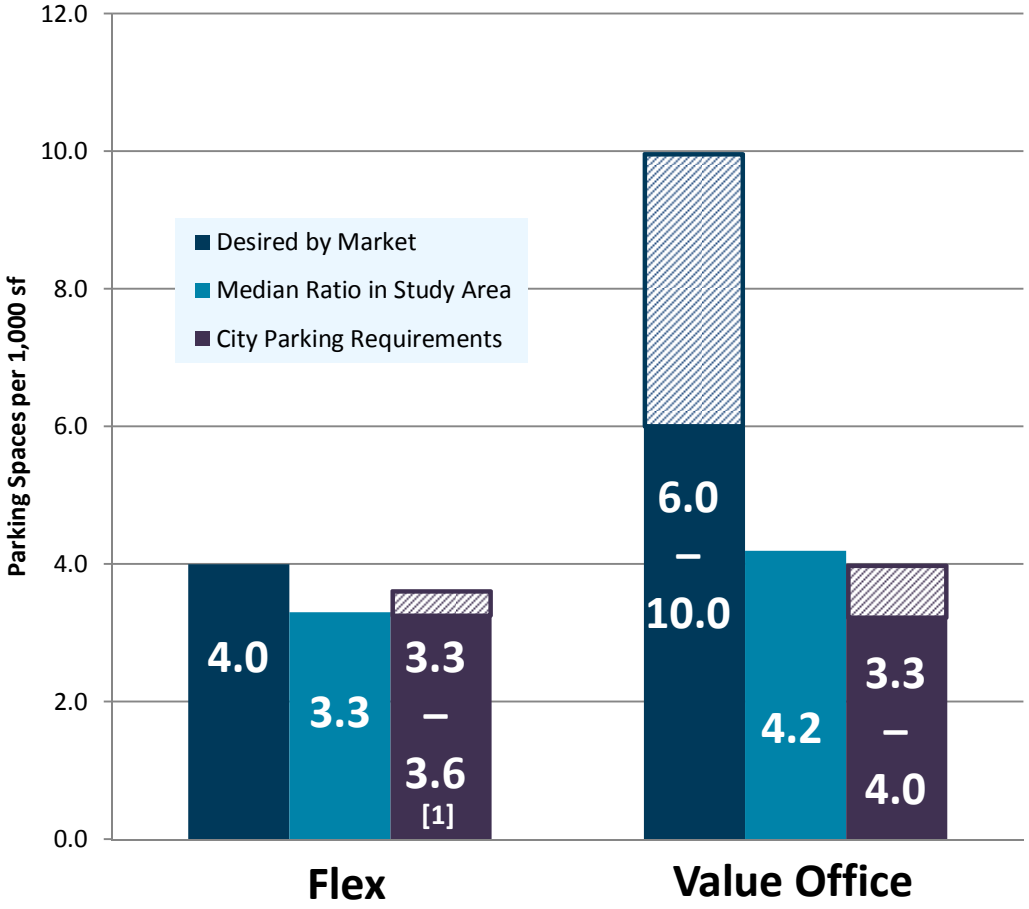
1. Existing Conditions:
Challenges to Marketability

Perception of Obsolescence

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



Low Parking Ratios



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

City Parking Requirements

Minimum Number of Spaces per 1,000 sf by Use

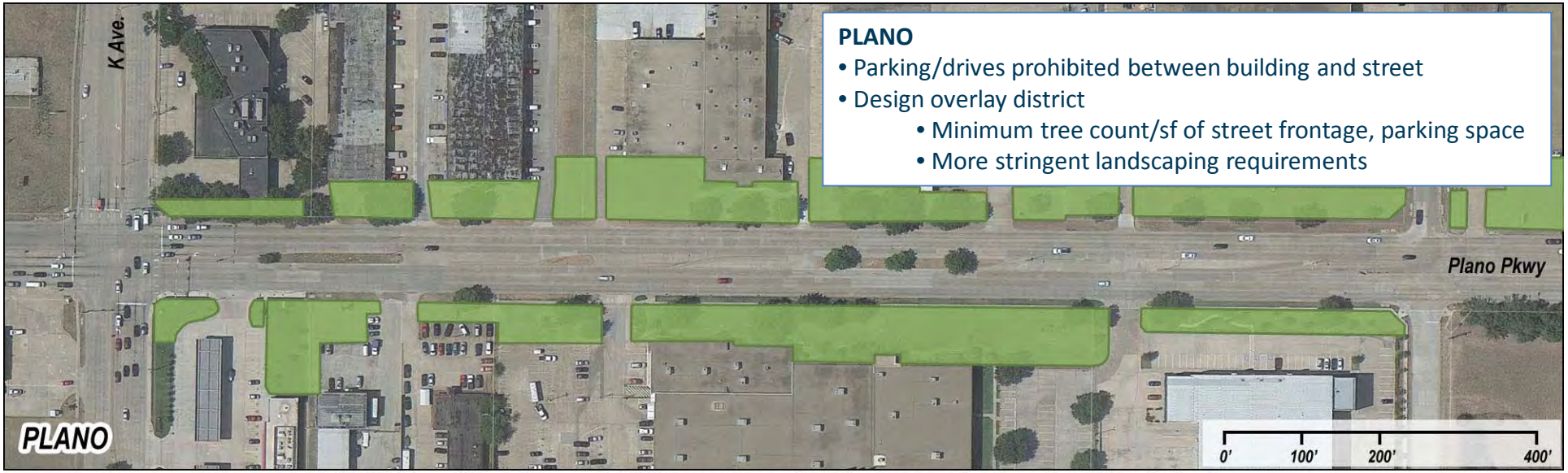
Assembly / Manufacturing / Research Lab	2.5
Showroom / Warehouse	1.0
Office (75,000+ sf)	3.3
Office (Below 75,000 sf)	4.0

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

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'

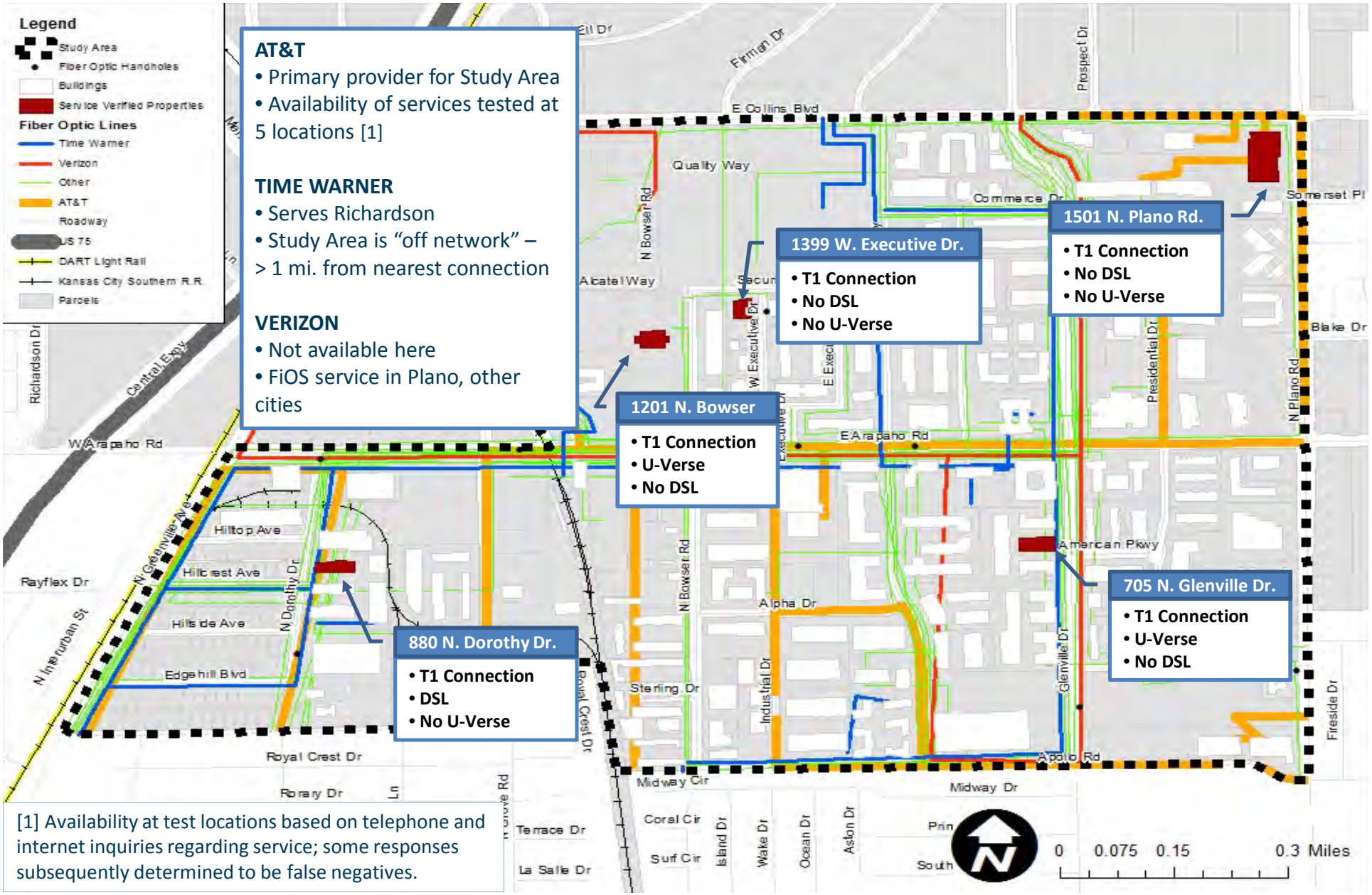
RICHARDSON
- Similar setbacks, but parking lots front on streets
- No greenspace required on street frontage
- Less stringent landscaping for parking areas (properties developed under older codes)

Availability of Lower-Cost, High-Speed Internet

AT&T
- Primary provider for Study Area
- Availability of services tested at 5 locations [1]

TIME WARNER
- Serves Richardson
- Study Area is "off network" – > 1 mi. from nearest connection

VERIZON
- Not available here
- FiOS service in Plano, other cities



[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

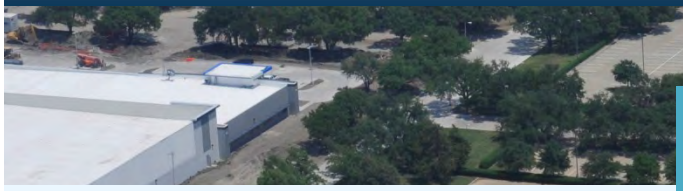
Real Estate Products Tested

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.

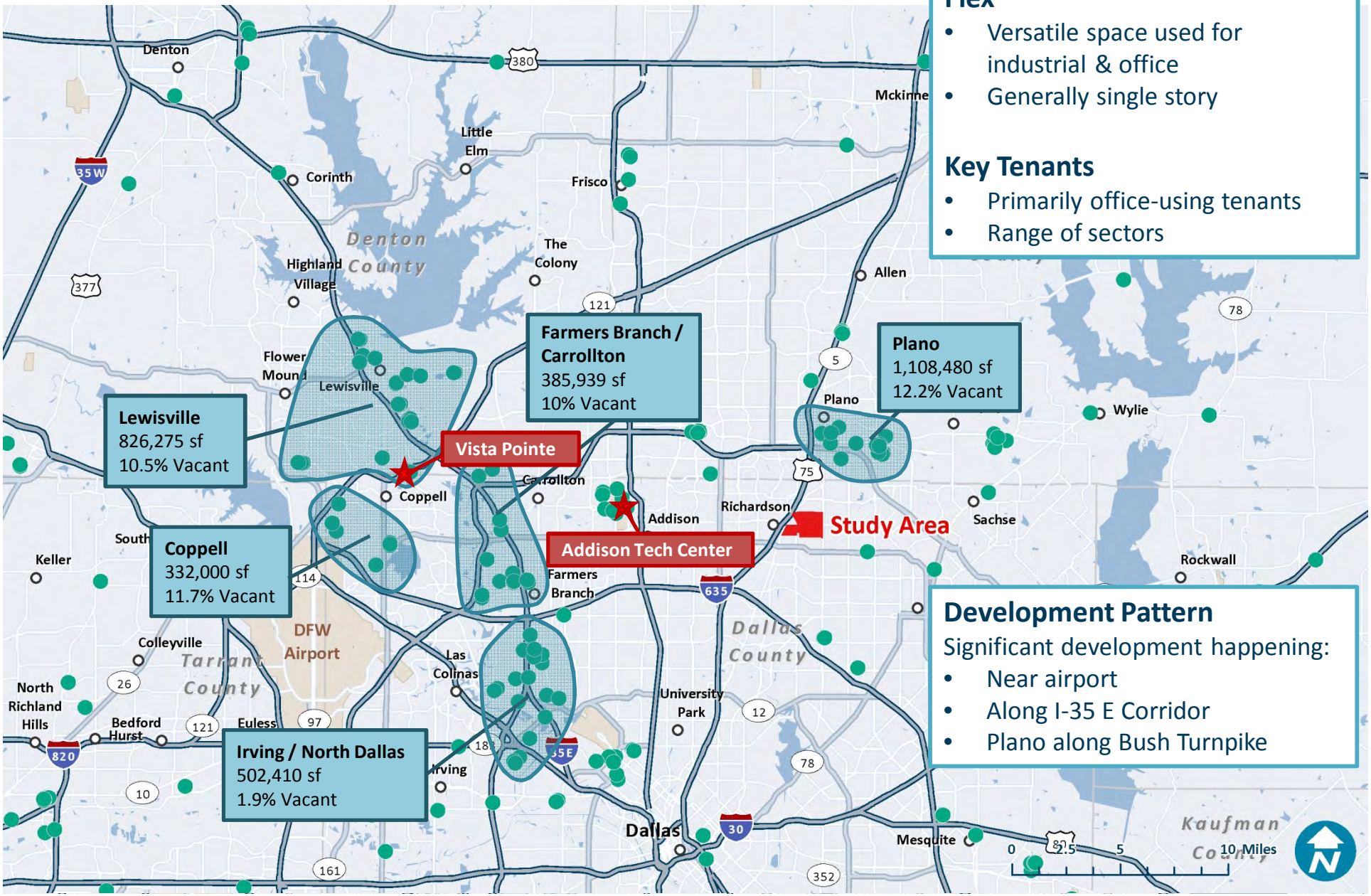
New Flex Product (2002-2012)

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

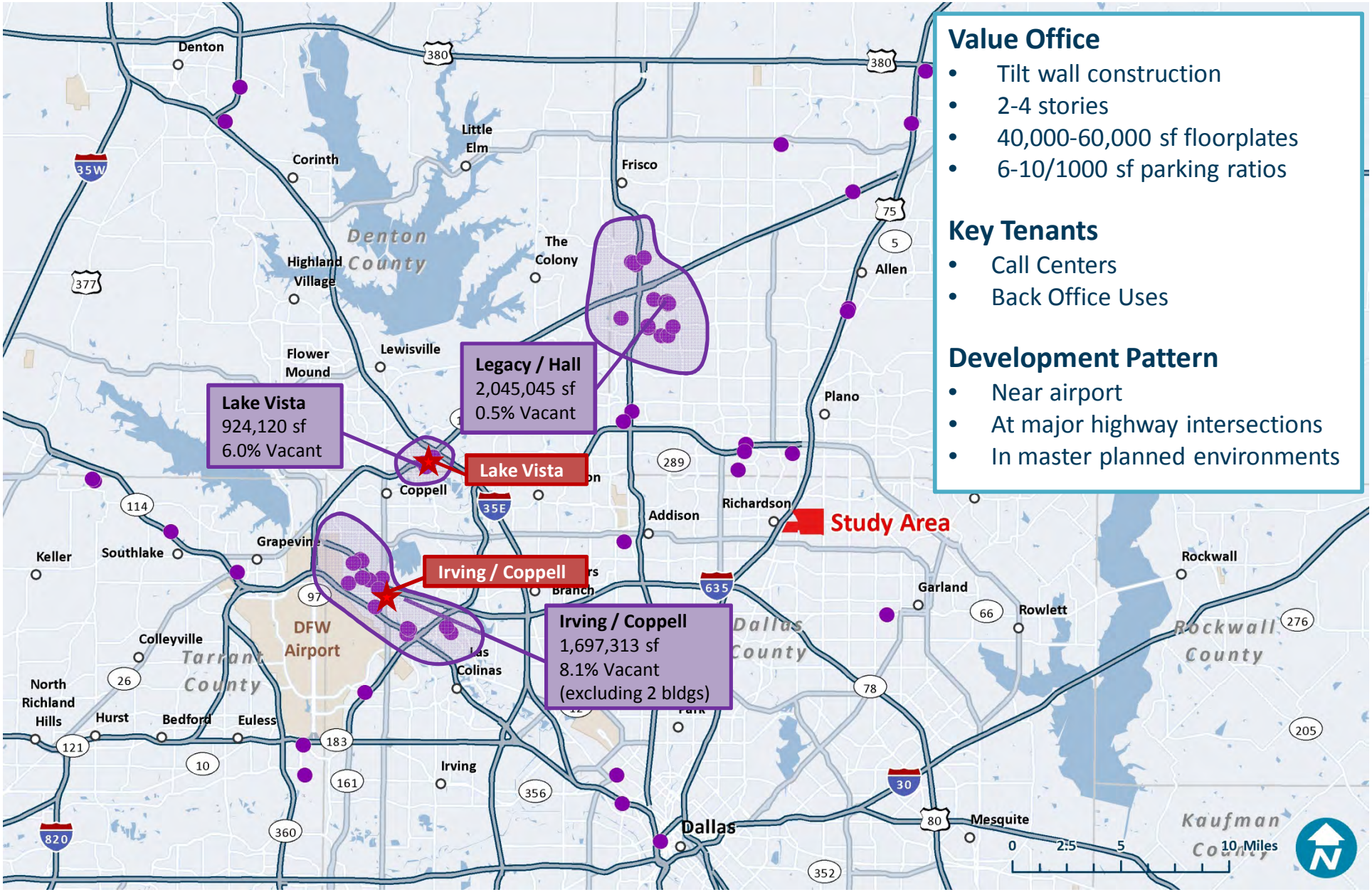
Key Differences in New Flex Product:
- Parking ratios of 4+/1000 sf
- Larger floorplates
- Higher ceilings
- Modern facilities

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

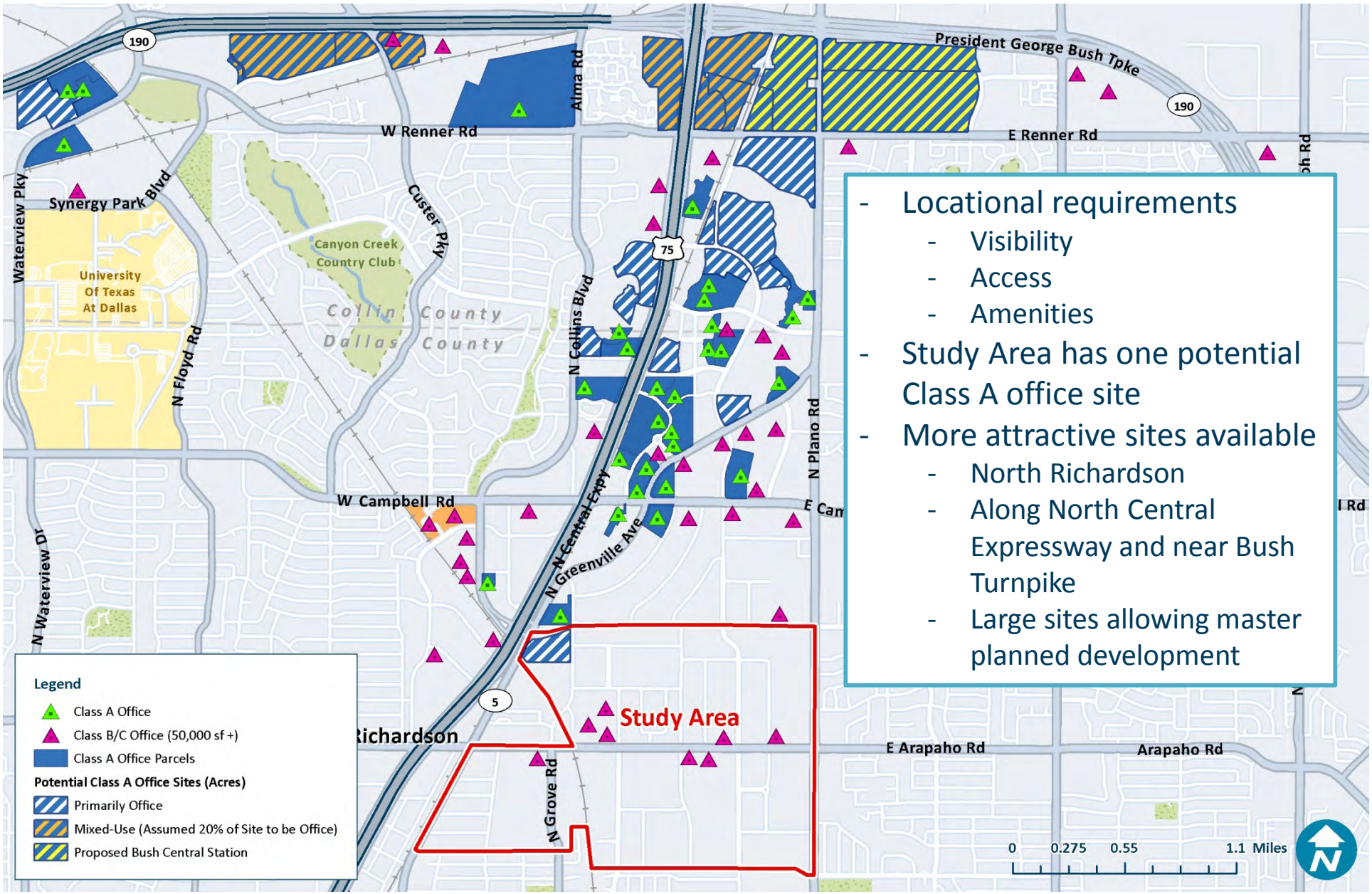
Source: CoStar, Richardson Chamber of Commerce, InfoUSA, Holt Lunsford Commercial, *SB Friedman*

[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.

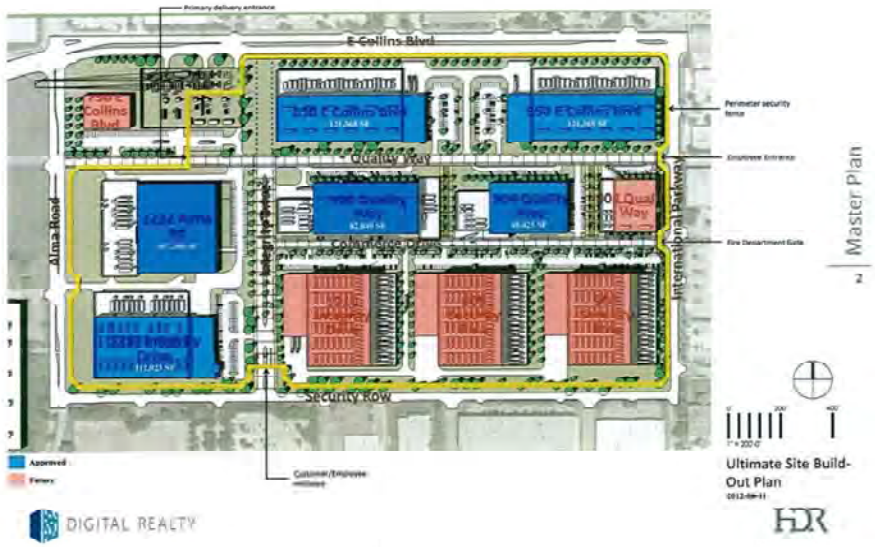
Source: CoStar, Dallas and Collins County Assessment Data, SB Friedman

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

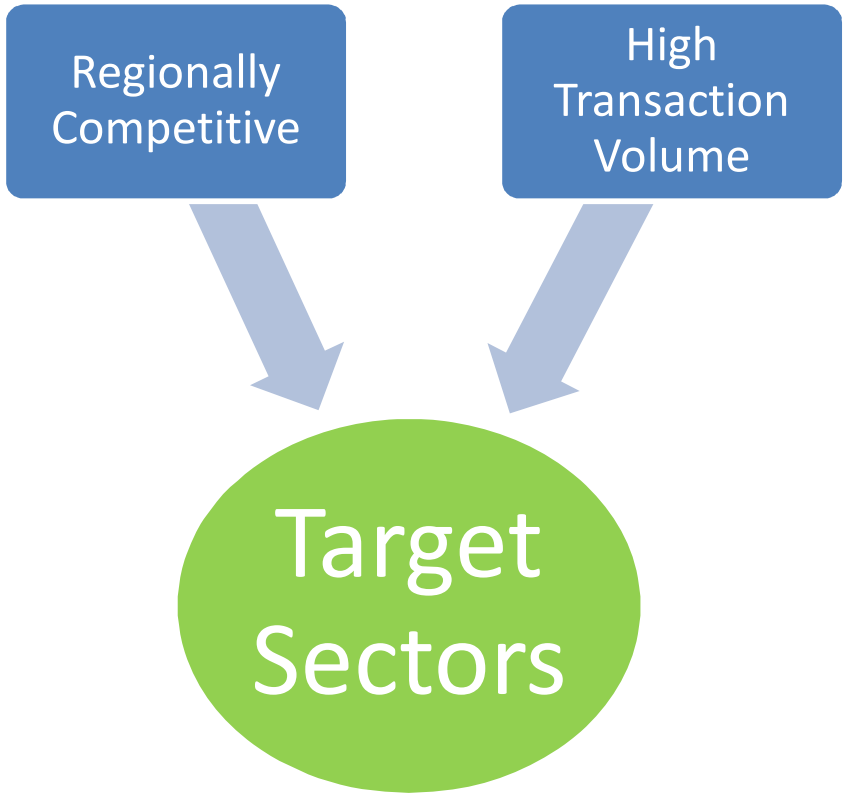
Tenant and Sector Analysis

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

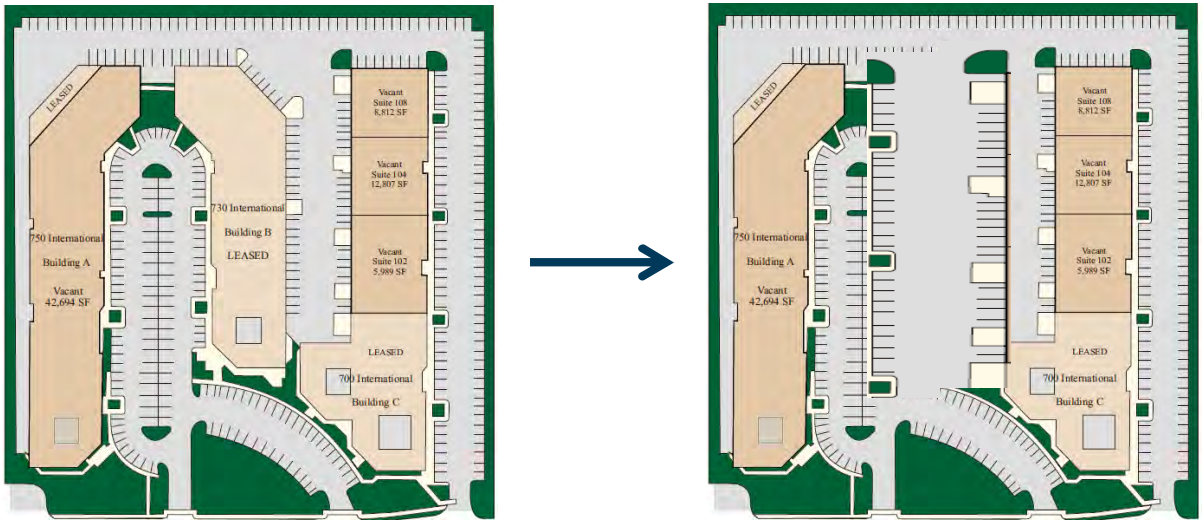
- Meet basic location criteria
- Power access and capacity is critical
- “Wild Card” use

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

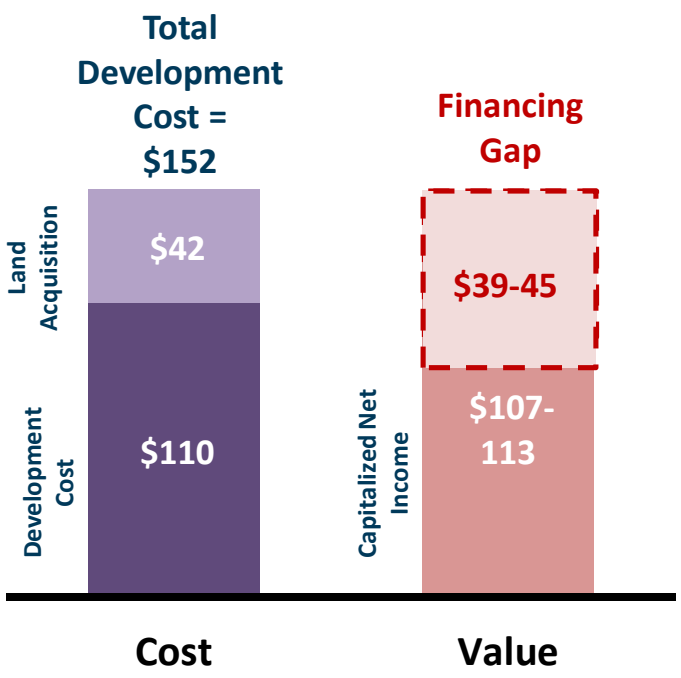
Required Rents to Cover Costs of Rehabilitation: $9 - 10.50/sf

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

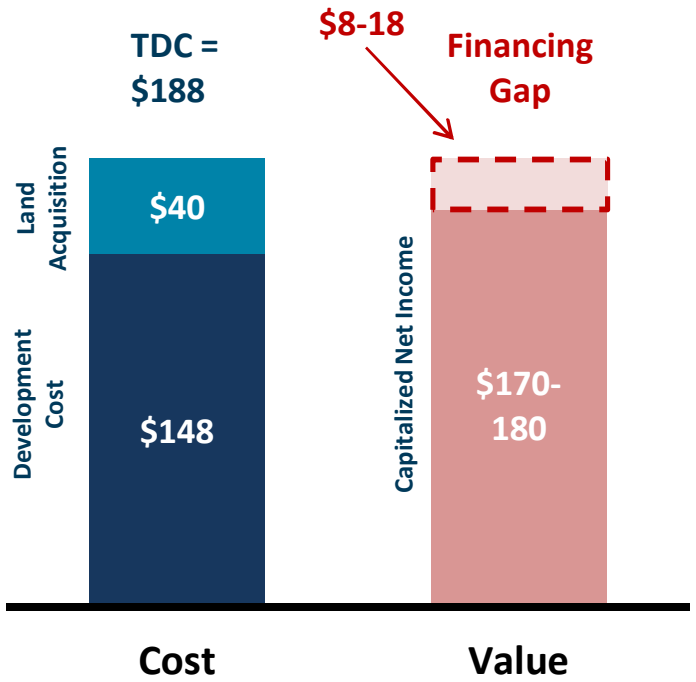
Source: Broker and Developer Interviews, *SB Friedman*

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

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

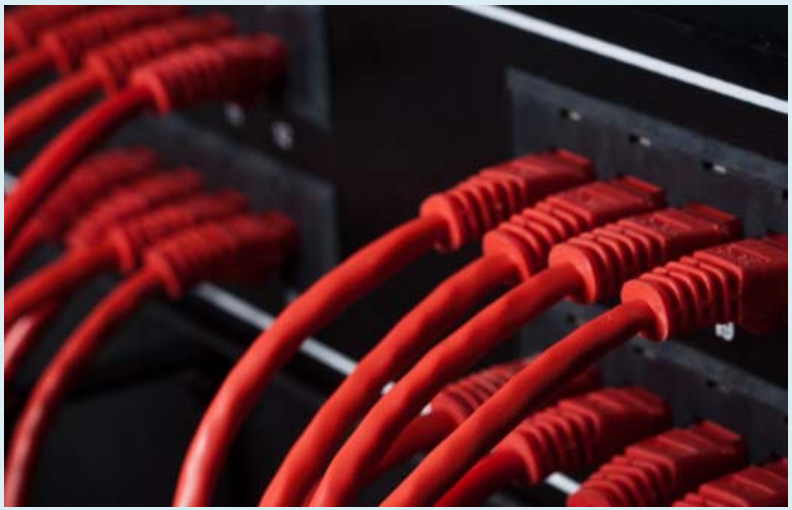
- Technology Innovation Center (collaborative space for tech ventures)
- BioVentures Center (wet lab, R&D incubator)
- Research Park supported with TIF, direct business assistance from City

Source: UIRP

Improve Internet Service

- Ensure Basic Lower-Cost Internet Service is Available for Small Users

- Explore Opportunities to Enhance Internet Network

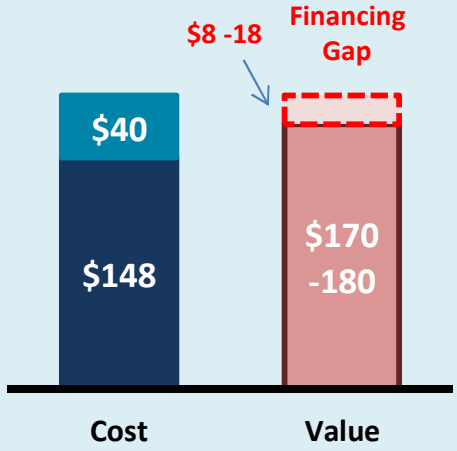


Targeted Redevelopment of Opportunity Sites

- 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

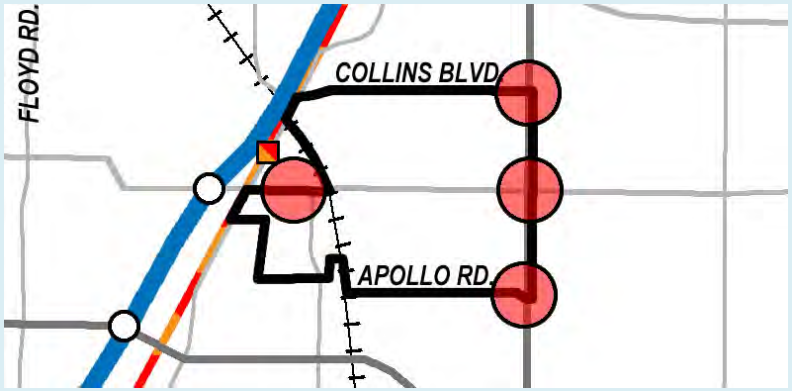
- Identify Appropriate Sites
  - High traffic volume
  - Accessible and visible
- Estimate Latent Demand Potential for Businesses and Employees in Study Area
- Work with Property Owners and Brokers to Develop Marketing Materials to Attract:
  - Restaurants
  - In-line retail
  - Business support services

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

Arapaho/Collins

Consultant Recommendations

- Maintain and strengthen linkage to UTD
- Improve internet service
- Further analyze opportunity sites
- Consider establishing a financial assistance program for rehab/new development
- Attract support services/amenities
- Enhance curb appeal
  - Public improvements
  - Guidelines and standards for private improvements
- Re-brand/(Brand) the Study Area

Staff Recommendation (consultants agree)

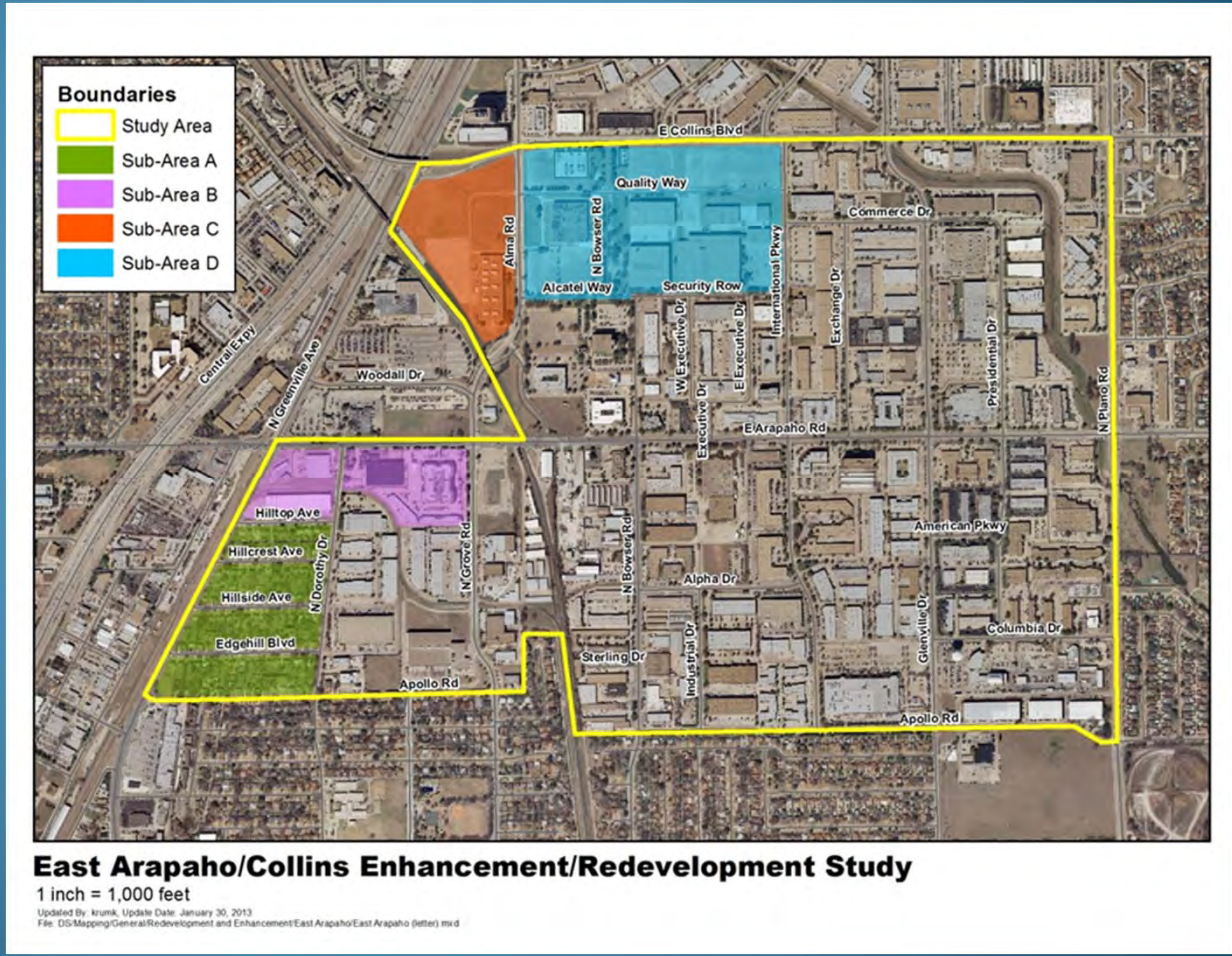
- Revise Study Area boundaries

Arapaho/Collins

Revised Study Area Boundaries

- Delete Sub-Areas A, B, C, D

- A – Unlike the remainder of the Study Area
- B and C – Study in the context of TOD
- D – Already under redevelopment



Arapaho / Collins

Possible Future Study / Work Elements

- Establish a means/vehicle for working with UTD on issues of mutual interest regarding this project
- Determine what actions, if any, the City can take to address the internet issue
- Select and refine preferred plans and catalyst site concepts, including a financial analysis
- Review codes and ordinances and make recommendations (revising regulations will be a separate step)
- Create a plan for improving the identity of the Study Area

Arapaho/Collins

Potential Implementation Actions

- Amend zoning requirements and other standards to support reinvestment/redevelopment
- Plan, fund and construct necessary infrastructure improvements
- Meet with UTD on a regular or as-needed basis to discuss issues of mutual interest
- Develop a marketing and recruitment plan
- Investigate public/private partnership opportunities

Arapaho/Collins
Tentative Schedule

Task	Approximate Schedule
✓ Inventory existing conditions	February-March 2012
✓ Select and hire consultant	July-August 2012
✓ Key informant interviews	September-October 2012
✓ Evaluate baseline market data	November-December 2012
✓ Present baseline market report	January-February 2013
▪ Contract to continue the study and undertake future study elements	2013
▪ Refine and prioritize implementation strategies	2013
▪ Begin implementing high priority strategies	2014

Discussion

Industrial Zoning Code Comparison

Richardson

- Building Setbacks: 40’
- Parking Ratios:
  - Assembly, manufacturing, research = 1/400 sf
  - Showroom/warehouse= 1/1000 sf
- Landscaping:
  - Bldg > 75,000 sf = 7% of lot
  - Bldg < or = 75,000 sf = 10% of lot
  - Min 20% of required green space must be within parking lots

Plano

- Building Setbacks: 50’, parking/drives prohibited between building and street
- Parking Ratios:
  - Warehouse – 1/1000 sf + 1/300 sf for office space (when mixed)
  - General Industrial – 1/1000 sf
- Landscaping (plus overlay district):
  - 30’ wide landscape edge along roadways, min one 3” cal tree and one ornamental per 50’ of frontage
  - 8 sf of landscaping per pkg space
  - 1-2 trees per every 15 pkg spaces
  - 18”-40” high landscaped screen
  - Up to 50% of interior landscaping can be outside of parking areas

Fiber/Telecom Cost Comparison

	AT&T	TIME WARNER CABLE	VERIZON
Availability in Study Area	DSL: Partial Coverage U-Verse: Partial Coverage T1: Full Coverage	Available, but entire Study Area "Off Network"	Not Available in Study Area
Maximum Speed	DSL: 6Mb/s (down) Up to 768 kb (up) U-Verse: 24 Mb/s (down) Up to 3 Mb/s (up) T1: 1.5 Mb/s (up & down) Ethernet: 10-50+ Mb/s (up & down)	10 -50 Mb/s (down) 768 kb – 2 Mb/s (up)	DSL: 7 -15Mb/s (down), Up to 1Mb/s (up) FiOS: 35-75 Mb/s (down) Up to 35 Mb/s (up) T1: 1.5 Mb/s (up & down)
SUBSCRIBER COSTS			
Connection Fee	None – AT&T will cover cost of DSL or T1 connection to building	Significant – All properties > 1mi. from connection point	n/a
Monthly Fee [1]			(Plano)
Ethernet	$1,000 - $1,400+	n/a	[2]
T1	$400	n/a	$400
DSL	$40 - $100	n/a	$89
Cable/U-Verse/FiOS	$40 - $95	10 Mb: $150 35 Mb: $320 50 Mb: $385	$115 - $135

Source: Verizon, AT&T, Time Warner, HDR, *SB Friedman.*

[1] Some monthly fees dependent on speed and duration of contract. [2] Verizon was not asked about their Ethernet connection.

Regionally Competitive Sectors

NAICS [1]	NAICS Description	Ranking	2005 Emp. [2]	2009 Emp.	Annual Growth	Does the Study Area Compete?
High Tech Manufacturing						
3364	Aerospace Product & Parts	Superstar	8,601	9,871	4%	
3344	Semiconductor & Other Electronic Components	Cash Cow	17,429	9,318	-14%	
3323	Architectural & Structural Metals	Cash Cow	7,694	6,464	-4%	
3342	Communications Equipment	Superstar	1,759	4,817	29%	
Finance & Insurance						
5222	Non Depository Credit Intermediation	Superstar	31,924	31,570	0%	
5241	Insurance Carriers	Superstar	27,218	29,086	2%	
5412	Accounting, Tax Prep, Bookkeeping, & Payroll Services	Superstar	16,719	18,758	3%	
5242	Agencies, Brokerages, & Other Insurance Related Activities	Superstar	15,107	18,528	5%	
5223	Activities related to Credit Intermediation	Superstar	12,781	9,725	-7%	
Information Technology						
5415	Computer Systems Design & Related Services	Cash Cow	35,283	38,138	2%	
5171	Wired Telecommunication Carriers	Cash Cow	25,852	18,202	-8%	
5112	Software Publishers	Superstar	8,119	11,316	9%	
5182	Data Processing, Hosting, & Related Services	Cash Cow	9,376	8,143	-3%	
Professional Services						
5511	Management of Companies & Enterprises	Superstar	64,889	72,471	3%	
5416	Management, Scientific, & Technical Consulting Services	Cash Cow	24,843	21,027	-4%	
5413	Architectural, Engineering, & Related Services	Superstar	16,029	18,412	4%	
5418	Advertising, Public Relations, & Related Services	Superstar	7,560	8,745	4%	
Merchant Wholesalers						
4236	Electrical & Electronic Goods	Superstar	13,113	17,667	8%	
4234	Professional & Commercial Equip & Supplies	Cash Cow	13,252	10,814	-5%	

Source: Target Industry Analysis from Richardson Chamber of Commerce

[1] Sectors shown are only those that are likely to occupy flex or value office space. [2] Analysis conducted for Dallas and Collins Counties

Superstar: Growth and relative employment higher than national average

Cash Cow: Relative employment higher and growth lower than national average

Flex: Most Commonly Represented Sectors[1]

Study Area Tenants and NE Dallas Transactions

NAICS	NAICS Description	Employment	Study Area & North of Collins Flex Tenants	Recent Moves & Transactions in NE Dallas
High Tech Manufacturing				
3364	Aerospace Product & Parts	Superstar		
3344	Semiconductor & Other Electronic Components	Cash Cow		
3342	Communications Equipment	Superstar		
3391	*Medical Equipment & Supplies*			
3345	*Measuring & Control Instruments*			
Finance & Insurance				
5222	Non Depository Credit Intermediation	Superstar		
5242	Agencies, Brokerages, & Other Insurance Related Activities	Superstar		
Information Technology				
5415	Computer Systems Design & Related Services	Cash Cow		
Professional Services				
5511	Management of Companies & Enterprises	Superstar		
5416	Management, Scientific, & Technical Consulting Services	Cash Cow		
5413	Architectural, Engineering, & Related Services	Superstar		
Merchant Wholesalers				
4236	Electrical & Electronic Goods	Superstar		
4234	Professional & Commercial Equip & Supplies	Cash Cow		
4238	*Machinery, Equipment, & Supplies*			
Construction				
2382	*Building Equipment Contractors*			
2372	*Land Subdivision*			

Sources: Target Industry Analysis from Richardson Chamber of Commerce, InfoUSA, CoStar, *SB Friedman*
[1] Greater than 60% of all employees and 50% of all businesses

Top Tier Middle Tier Bottom Tier

Value Office: Most Commonly Represented Sectors[1]

Tenants in Study Area and New Value Office Developments

NAICS	NAICS Description	Employment	Study Area & North of Collins Office Tenants	Tenants in New Product (Legacy, Lake Vista, Irving)
High Tech Manufacturing				
3334	*HVAC Equipment*			
Finance & Insurance				
5242	Agencies, Brokerages, & Other Insurance Related Activities	Superstar		
Information Technology				
5415	Computer Systems Design & Related Services	Cash Cow		
Professional Services				
5511	Management of Companies & Enterprises	Superstar		
5416	Management, Scientific, & Technical Consulting Services	Cash Cow		
5413	Architectural, Engineering, & Related Services	Superstar		
Administrative & Support				
5614	*Business Support Services*			
5619	*Other Business Support Services*			

Sources: Target Industry Analysis from Richardson Chamber of Commerce, InfoUSA, CoStar, *SB Friedman*

[1] Greater than 80% of all employees

Top Tier Middle Tier Bottom Tier

Slide 69

F10 Delete rows that don't have high % of emps

Really just transactions in 3 parks, or all new product

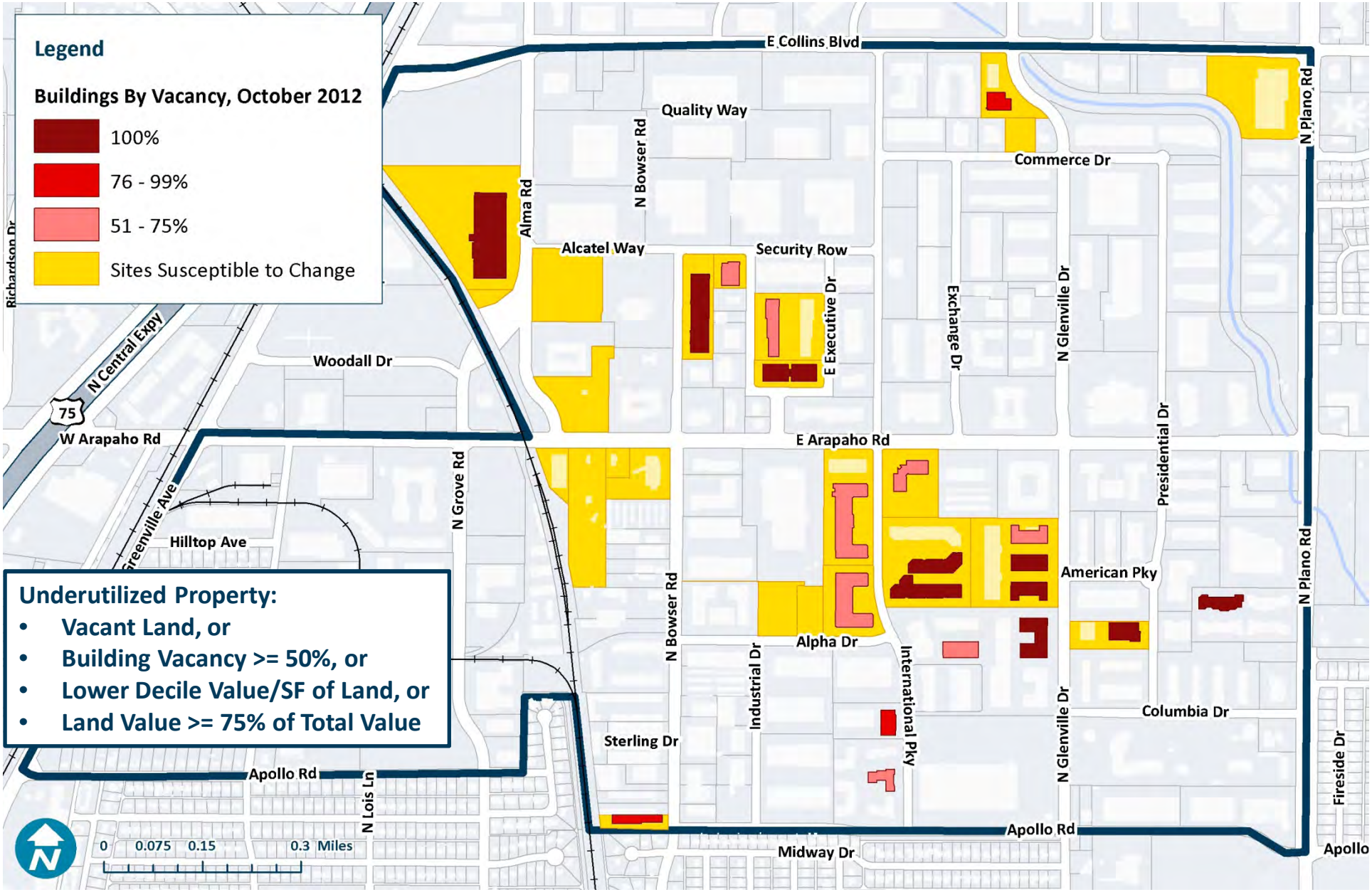
note that this is new product -- all in 3 parks or all new product in NE?

Tertile = Tier

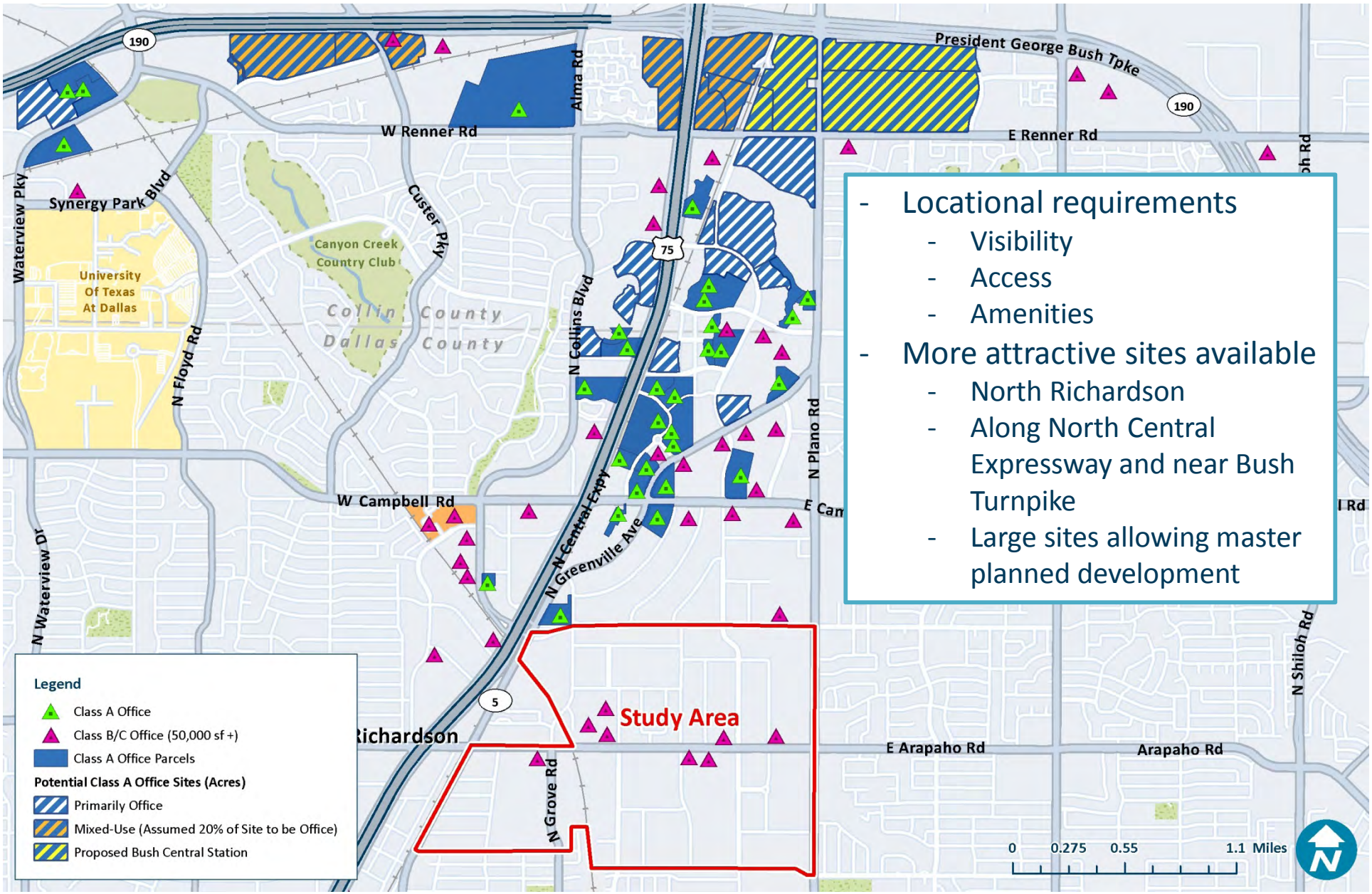
Probably need to look at this again -- Fix the big companies that we konw are Mgmt of Companies & Enterprise. Why so many Drug & Druggists' Sundries.

Floater, 1/17/2013

Sites Susceptible to Change



Potential Class A Office Sites



- Locational requirements
  - Visibility
  - Access
  - Amenities
- 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]	6,801,000
Avg. Annual Square Footage Delivered (last 20 years)	341,000
Years of Class A Development Capacity at Available Richardson Sites	20

[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