



Control Number: 46429



Item Number: 557

Addendum StartPage: 0

SOAH DOCKET NO. 473-17-1552 RECEIVED  
PUC DOCKET NO. 46429

APPLICATION OF BRAZOS  
ELECTRIC POWER COOPERATIVE,  
INC. TO AMEND ITS CERTIFICATE  
OF CONVENIENCE AND NECESSITY  
FOR A 138-KV TRANSMISSION LINE  
IN COLLIN COUNTY, TEXAS

§  
§  
§  
§  
§  
§

2017 APR 28 PM 1:49  
BEFORE THE STATE OFFICE  
PUBLIC UTILITY COMMISSION  
FILINGS CLERK  
OF  
ADMINISTRATIVE HEARINGS

**DIRECT TESTIMONY OF JAMES A. ROHRIG, MAI, CPA**

This Direct Testimony of James A. Rohrig, MAI, CPA is being filed on behalf of the TMF Intervenors. TMF Intervenors stipulate that this Direct Testimony can be treated by all parties as if the answers were filed under oath.

Respectfully submitted,

THE MAJORIE FIRM LTD.

By: Thomas J. Annis  
Francis B. Majorie  
Texas Bar No. 12851420  
Thomas J. Annis  
Texas Bar No. 24077478  
4901 Lyndon B. Johnson Freeway  
Fourth Floor  
Dallas, Texas 75224  
214-522-7400 (telephone)  
214-522-7911 (fax)

ATTORNEYS FOR TMF INTERVENORS

**CERTIFICATE OF SERVICE**

I certify that a copy of this document will be served on all parties of record on April 28, 2017, in accordance with Public Utility Commission Procedural Rule 22.74.

Thomas J. Annis  
Thomas J. Annis

## **TABLE OF CONTENTS**

	<b>Page</b>
<b>I. INTRODUCTION.....</b>	<b>.....3</b>
<b>II. PURPOSE OF TESTIMONY .....</b>	<b>.....4</b>
<b>III. ANALYSIS .....</b>	<b>.....5</b>
<b>IV. CONCLUSION .....</b>	<b>.....7</b>

## **ATTACHMENTS**

Attachment JR-1      Report

1 **I. INTRODUCTION**

2  
3 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

4 **A.** My name is James A. Rohrig. My business address is 2021 McKinney Ave., Suite  
5 900, Dallas, TX 75201.  
6

7 **Q. WHAT IS YOUR OCCUPATION?**

8 **A.** I am a certified general real estate appraiser in the States of Oklahoma and Texas. I  
9 have received the designation of MAI by the Appraisal Institute, which is a  
10 professional association. I am also a certified public accountant in the State of Texas.  
11

12 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

13 **A.** I joined Cushman & Wakefield Texas, Inc. in June 2012 as a Director in its Valuation  
14 & Advisory office in Dallas, Texas. I am also a member of its Dispute Analysis &  
15 Litigation Support practice group.  
16

17 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND**  
18 **PROFESSIONAL EXPERIENCE.**

19 **A.** I have BA from Wittenberg University (Springfield, OH) in Business Administration.  
20

21 My appraisal and consulting assignments have included all major property types,  
22 including office, retail, industrial, medical use properties, special purpose properties,  
23 golf courses, multi-family, subdivision development, restaurant, and other property  
24 types primarily in Texas and Oklahoma. I also have experience in real estate litigation  
25 assignments including eminent domain, property partitioning, estate tax matters,  
26 general real estate litigation, and environmentally contaminated properties and have  
27 testified in administrative hearings for eminent domain matters in Tarrant, Hill,  
28 Collin, Denton and Dallas Counties, Texas.  
29

1 In addition to my appraisal and valuation experience, I have over 15 years of  
2 experience in financial and operational accounting with companies involved in real  
3 estate development, land development, and homebuilding.

4  
5 My curriculum vita is included at pages 38-41 of the attached report. It provides a list  
6 of articles I have published as well as more details about my background and  
7 experience.

8  
9 **II. PURPOSE OF TESTIMONY**

10  
11 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

12 **A.** I am testifying on behalf of the intervenor group known in this proceeding as the  
13 “TMF Intervenors.” Neither I nor my firm has a present or prospective interest in any  
14 of the TMF Intervenors’ properties nor have we performed prior services involving  
15 those properties within three years of accepting this assignment.

16  
17 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

18 **A.** The purpose of my testimony is to determine the reasonableness of the estimate of  
19 right-of-way costs given by Brazos Electric Power Cooperative, Inc. (“Brazos  
20 Electric”) in its Application for the properties on the south side of State Highway 121  
21 (Sam Rayburn Tollway) along Segments 3, 7, 9, 11 and 27 of the proposed  
22 transmission line. My analysis concludes that the market value of the easement  
23 interest of land along those segments (the “Subject Property”) is much higher than  
24 Brazos Electric’s estimate of \$15 per square foot. My analyses and conclusions are  
25 contained in the report attached hereto.

26  
27 **Q. WHAT MATERIALS DID YOU REVIEW PRIOR TO THE PREPARATION**  
28 **OF YOUR TESTIMONY?**

29 **A.** I reviewed the portions of Brazos Electric Power Cooperative, Inc.’s (“Brazos  
30 Electric”) Application concerning its method of estimating right-of-way costs, Brazos

Electric's Responses to TMF Intervenors' First Requests For Information, and the materials referenced in the "Research" section on page 10 of the attached report.

**Q. PLEASE DESCRIBE THE RESEARCH YOU PERFORMED IN CONNECTION WITH COMPLETING THE ATTACHED REPORT.**

**A.** First, I physically inspected the Subject Property and its environs. Then, I obtained additional types of information from numerous sources. Physical information on the Subject Property was obtained from public records or third-party sources. Regional economic and demographic trends and data on the local and regional property market was obtained through interviews with regional or local market participants, primary research, available published data, and other various sources.

**Q. WAS YOUR TESTIMONY AND SUPPORTING DOCUMENTATION PREPARED BY YOU OR UNDER YOUR SUPERVISION?**

**A.** Yes.

### **III: ANALYSIS**

**Q. PLEASE DESCRIBE THE SUBJECT PROPERTY AND THE LOCAL AREA IN WHICH IT IS LOCATED.**

**A.** The Subject Property is located on the south side of State Highway 121 (the Sam Rayburn Tollway) from east of Lake Forest Drive to Alma Drive.

The local area is a rapidly growing area that is experiencing strong demand for vacant land parcels. The area is in the growth phase of its real estate life cycle. In addition, the City of Allen has favorable economic demographics compared to the Dallas-Fort Worth CBSA and the State of Texas. For example, the 2016 average household income within a one, three, and five mile radii of city of Allen is higher than the Dallas-Fort Worth CBSA and the State of Texas average. Those very favorable economic demographics attract development. The outlook for the subject local area is positive with increasing real estate values.

1 The improvements within the local area consist of commercial uses along State  
2 Highway 121 and the primary thoroughfares, including Exchange Parkway, S. Custer  
3 Road, and McDermott Road. The local area between US Highway 75 and the Dallas  
4 North Tollway also has single-family residential and multi-family residential uses,  
5 generally behind the commercial uses.  
6

7 **Q. HOW IS THE SUBJECT PROPERTY ZONED?**

8 **A.** Zoning of the Subject Property is generally commercial with district CC-Commercial  
9 Corridor and PD-Planned District zoning. These zoning districts allow for the typical  
10 uses that are prevalent along a major freeway or toll road, including retail, retail  
11 service, office and other commercial uses. The PD-Planned Development district  
12 allows for mixed-use commercial uses.  
13

14 **Q. WHAT IS YOUR OPINION OF THE HIGHEST AND BEST USE OF THE**  
15 **SUBJECT PROPERTY?**

16 **A.** The highest and best use of the Subject Property is generally commercial use  
17 including retail, retail service, restaurant, hotel, office, or other uses consistent with  
18 tracts of land located on a state highway or primary thoroughfare.  
19

20 **Q. WHICH METHODOLOGY DID YOU USE TO DEVELOP YOUR OPINION**  
21 **OF THE EASEMENT VALUE OF THE SUBJECT PROPERTY?**

22 **A.** The attached report employs the sales comparison approach. I examined current  
23 offerings and analyzed prices buyers have recently paid for comparable sites. A  
24 summary chart and a location map of the comparables as well as my analysis of the  
25 sales is presented on pages 25 to 26 of the attached report.  
26  
27  
28  
29  
30  
31

1 IV: CONCLUSIONS

2

3 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS CONCERNING THE**  
4 **EASEMENT VALUE OF THE SUBJECT PROPERTY.**

5 **A.** Based on my analysis, the data presented, the current strong demand for vacant land  
6 tracts in the Allen area, and my discussions with real estate brokers that market  
7 vacant land in the Allen area, in my opinion the market value of easements on the  
8 Subject Property will range from \$22.50 per square foot to \$30.00 per square foot.  
9 The average cost of the comparables was \$26.15. Brazos' estimate of \$15 per square  
10 foot for the Subject Property is therefore not reasonable based on the analysis I  
11 performed as set forth in the attached report.

12

13 **Q. DOES THIS CONCLUDE YOUR TESTIMONY AS OF APRIL 28, 2017?**

14 **A.** Yes.



**CUSHMAN &  
WAKEFIELD**

## APPRAISAL OF REAL PROPERTY

Market Research Report  
KittyHawk 138-Kv Transmission Line  
Segments 3, 7, 9, 11 and 27  
Allen, Collin County, TX 75002

## IN AN APPRAISAL REPORT

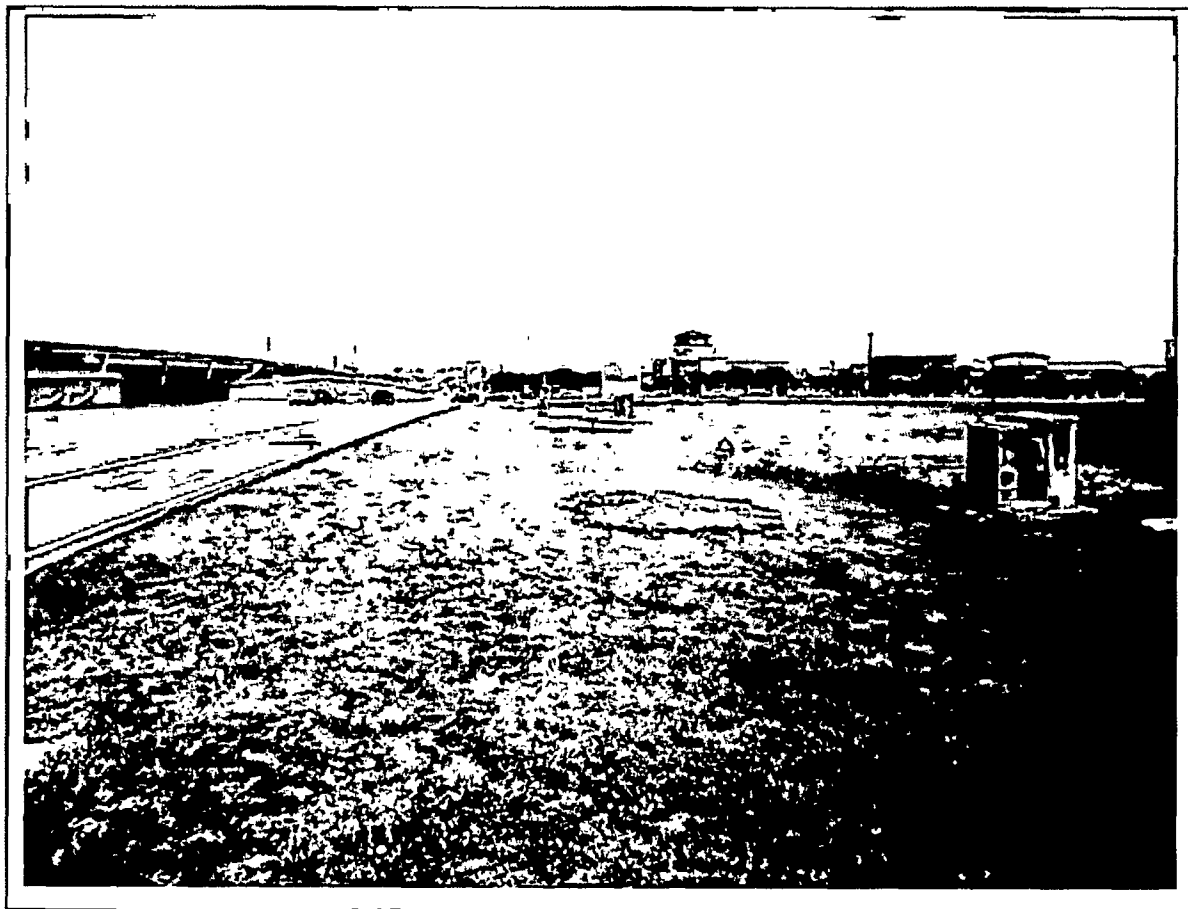
As of April 24, 2017

### Prepared For:

The Majorie Firm  
4901 Lyndon B Johnson Freeway, Fourth Floor  
Dallas, TX 75244

### Prepared By:

Cushman & Wakefield of Texas, Inc.  
Valuation & Advisory  
2021 McKinney Avenue, Suite 900  
Dallas, TX 75201  
Cushman & Wakefield File ID: 17-53003-900430-001



**Market Research Report**

**Segments 3, 7, 9, 11 and 27**

**Allen, Collin County, TX 75002**



2021 McKinney Avenue, Suite 900  
Dallas, TX 75201  
Tel +1 (972) 663-9600  
cushmanwakefield.com

April 24, 2017

Mr. Thomas Annis  
**The Majorie Firm**  
4901 Lyndon B Johnson Freeway, Fourth Floor  
Dallas, TX 75244

Re: Market Research Report

**Market Research Report**  
KittyHawk 138-Kv Transmission Line  
Segments 3, 7, 9, 11 and 27  
Allen, Collin County, TX 75002

Cushman & Wakefield File ID: 17-53003-900430-001

Dear Mr. Annis:

In fulfillment of our agreement as outlined in the Letter of Engagement copied in the Addenda, we are pleased to transmit our appraisal of the above referenced property in the following Appraisal Report.

This is an Appraisal Report, which is intended to comply with the reporting requirements set forth under Standards Rule 2-2(a) of the Uniform Standards of Professional Appraisal Practice. As such, it presents limited discussions of the data, reasoning, or analyses used in the appraisal process to develop the appraisers' opinion of value. Additional supporting documentation concerning the data, reasoning, and analyses is retained in our files. The depth of discussion contained in this report is specific to the needs of the client and for the intended use stated below.

The subject property consists of segments 3, 7, 9, 11 and 27 of a route for a 138-Kv transmission power line by Brazos Electric Cooperative, Inc., known as the Kittyhawk 138-Kv transmission line. The power line route begins on the north side of State Highway 121 (Sam Rayburn Tollway) at a substation just east of S. Lake Forest Drive, continues south across State Highway 121 then runs along the south side of State Highway 121 to Alma Drive, then turn north across State Highway 121 to another substation.

This Appraisal Report has been prepared in accordance with our interpretation of your institution's guidelines and the *Uniform Standards of Professional Appraisal Practice* (USPAP).

Based on the agreed-to Scope of Work, and as outlined in the report, we developed the following opinion of Market Value of land along the subject segments as follows:

<b>Value Conclusions</b>			
<b>Appraisal Premise</b>	<b>Real Property Interest</b>	<b>Date Of Value</b>	<b>Value Conclusion Per Square Foot</b>
Market Value As-Is	Easement Value	April 24, 2017	\$22.50 - \$30.00

*Compiled by Cushman & Wakefield of Texas, Inc.*

The specific value of a tract will depend on the size, shape, flood zone status, zoning and other physical characteristics of the site.

The value opinion in this report is qualified by certain assumptions, limiting conditions, certifications, and definitions, and does not employ any extraordinary assumptions and hypothetical conditions.

### Extraordinary Assumptions

For a definition of Extraordinary Assumptions please see the Glossary of Terms & Definitions. The use of extraordinary assumptions, if any, might have affected the assignment results.

This appraisal does not employ any extraordinary assumptions.

### Hypothetical Conditions

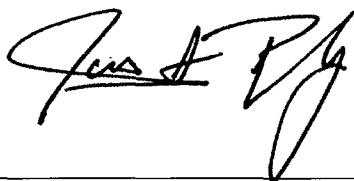
For a definition of Hypothetical Conditions please see the Glossary of Terms & Definitions. The use of hypothetical conditions, if any, might have affected the assignment results.

This appraisal does not employ any hypothetical conditions.

This letter is invalid as an opinion of value if detached from the report, which contains the text, exhibits, and Addenda.

Respectfully submitted,

**CUSHMAN & WAKEFIELD OF TEXAS, INC.**



---

James A Rohrig, MAI, CPA  
Senior Director  
Tx Certified General Appraiser  
License No. 1335174-G  
james.rohrig@cushwake.com  
972-663-9662 Office Direct

## Summary of Salient Facts and Conclusions

Client:	The Majorie Firm.
Intended Use:	This market study report is intended to provide an opinion of the Market Value of the Easement Value interest of land along a specific route consisting of several segments within the study area. This report will be used by the client in a hearing conducted by the Texas Public Utilities Commission to assist in the determination of a route for the Brazos Electric Power Cooperative, Inc.'s 138-Kv transmission power line, referred to as the Kittyhawk line. This report is not intended for any other use.
Intended User:	This Appraisal Report was prepared for the exclusive use of The Majorie Firm and their authorized representatives. Use of this report by others is not intended by the appraiser.
Identification of Real Estate:	Market Research Report. Segments 3, 7, 9, 11 and 27. Allen, Collin County, TX 75002.
Highest & Best Use (As if Vacant):	The highest and best use of the subject area will vary, based on the zoning, location and physical characteristics of a specific tract of land. However, based on our analysis, the highest and best use is generally commercial use including retail, retail service, restaurant, hotel, office or other uses consistent with tracts of land located on a state highway or primary thoroughfare,
Type of Value	Market Value (defined later in this report).
Real Property Interest Valued:	Easement Value.
Current Ownership:	The subject property study area has many owners.
Sale History:	To the best of our knowledge, the property has not transferred within the past three years.
Current Disposition:	Some tracts are being marketed for sale.
Personal Property:	Personal property was excluded from our valuation.
Date of Inspection:	April 24, 2017
Effective Date(s) of Valuation:	

**As Is:** April 24, 2017

**Date of Report:** April 24, 2017

**Extraordinary Assumptions:** This appraisal does not employ any extraordinary assumptions.

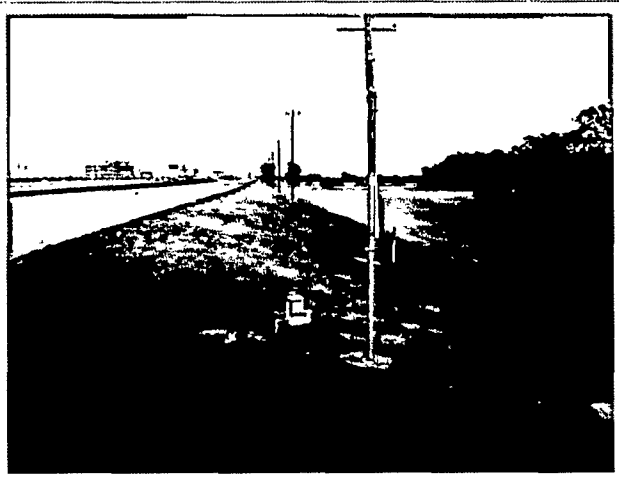
**Hypothetical Conditions:** This appraisal does not employ any hypothetical conditions.

# AERIAL PHOTOGRAPH

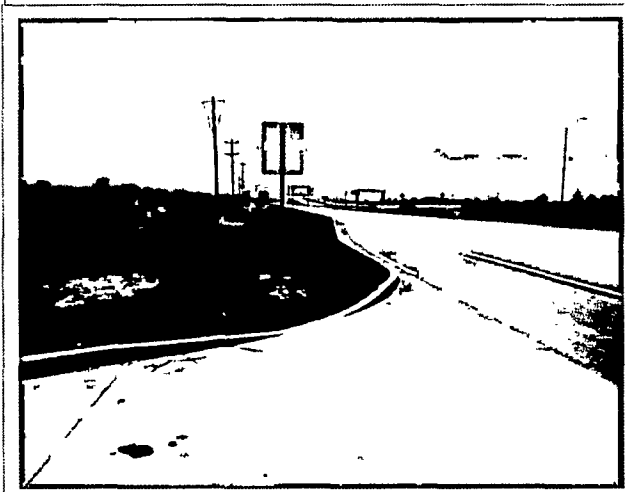




View of segment area



View of the segment area



View of segment area



View of segment area



View of segment area



View of segment area

## Table of Contents

Summary of Salient Facts and Conclusions .....	5
Property Photographs .....	7
Scope of Work.....	10
Overview .....	10
Report Option Description.....	10
Valuation Process .....	11
Regional Analysis.....	12
Introduction.....	13
Economic & Demographic Profile .....	13
Local Area Analysis.....	17
Location Overview.....	18
Conclusion.....	19
Segment Site Description.....	20
Zoning .....	22
Valuation .....	23
Highest and Best Use .....	23
Land Valuation .....	24
Assumptions and Limiting Conditions .....	28
Certification of Appraisal .....	30
Addenda Contents .....	31

# Scope of Work

## Overview

Scope of work is the type and extent of research and analyses involved in an assignment. To determine the appropriate scope of work for the assignment, we considered the intended use of the market study report, the needs of the user, the relevant characteristics of the subject property, and other pertinent factors. Our concluded scope of work is summarized below, and in some instances, additional scope details are included in the appropriate sections of the report:

## Research

- We inspected the property and its environs. Physical information on the subject was obtained from the property owner's representative, public records, and/or third-party sources.
- Regional economic and demographic trends, as well as the specifics of the subject's local area were investigated. Data on the local and regional property market (supply and demand trends, rent levels, etc.) was also obtained. This process was based on interviews with regional and/or local market participants, primary research, available published data, and other various resources.
- Other relevant data was collected, verified, and analyzed. Comparable property data was obtained from various sources (public records, third-party data-reporting services, etc.) and confirmed with a party to the transaction (buyer, seller, broker, owner, tenant, etc.) wherever possible. It is, however, sometimes necessary to rely on other sources deemed reliable, such as data reporting services.
- We interviewed local real estate brokers that are marketing vacant land tracts along State Highway 121 (Sam Rayburn Tollway) generally between US Highway 75 and the Dallas North tollway.

## Analysis

- Based upon the subject property characteristics, prevailing market dynamics, and other information, we developed an opinion of the property's Highest and Best Use.
- We analyzed the data gathered using generally accepted appraisal methodology to arrive at a probable value indication via each applicable approach to value.
- The results of each valuation approach are considered and reconciled into a reasonable value estimate.

For the purpose of this report, the easement value is 95-99 percent of the fee simple value.

This report is intended to comply with the reporting requirements outlined under USPAP for an Appraisal Report.

Cushman & Wakefield of Texas, Inc. has an internal Quality Control Oversight Program. This Program mandates a "second read" of all appraisals. Assignments prepared and signed solely by designated members (MAIs) are read by another MAI who is not participating in the assignment. Assignments prepared, in whole or in part, by non-designated appraisers require MAI participation, Quality Control Oversight, and signature.

For this assignment, Quality Control Oversight was provided by Sid Womack, MAI, FRICS, AI-GRS.

## Report Option Description

USPAP identifies two written report options: Appraisal Report and Restricted Appraisal Report. This document is prepared as an Appraisal Report in accordance with USPAP guidelines. The terms "describe," "summarize," and

“state” connote different levels of detail, with “describe” as the most comprehensive approach and “state” as the least detailed. As such, the following provides specific descriptions about the level of detail and explanation included within the report:

- Summarizes the real estate and/or personal property that is the subject of the appraisal, including physical, economic, and other characteristics that are relevant
- States the type and definition of value and its source
- Summarizes the Scope of Work used to develop the appraisal
- Summarizes the information analyzed, the appraisal methods used, and the reasoning supporting the analyses and opinions; explains the exclusion of any valuation approaches
- States the use of the property as of the valuation date
- Summarizes the rationale for the Highest and Best Use opinion (if included)

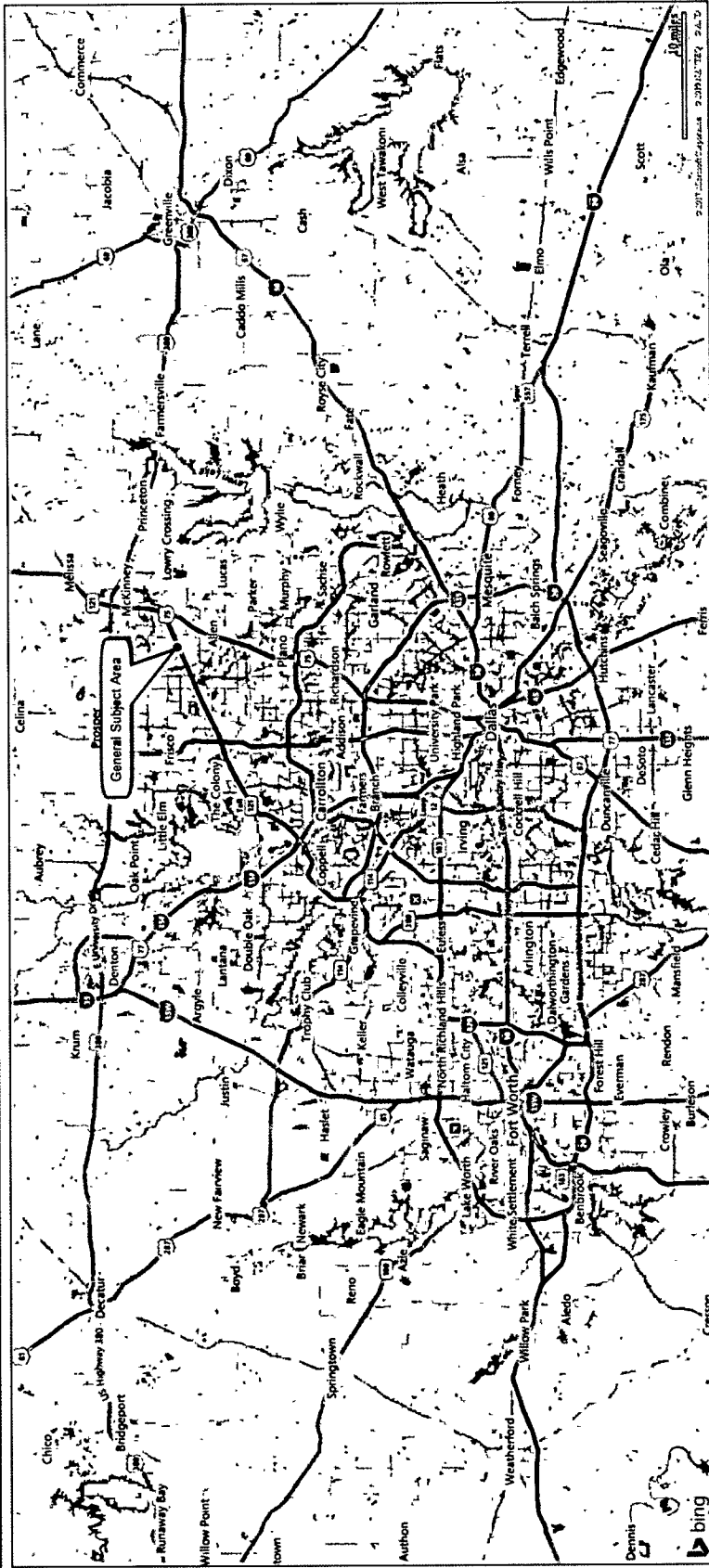
## Valuation Process

There are three generally accepted approaches to developing an opinion of value: Cost, Sales Comparison and Income Capitalization. We considered each in this appraisal to develop an opinion of the market value of the subject property. In appraisal practice, an approach to value is included or eliminated based on its applicability to the property type being valued and the quality of information available. The reliability of each approach depends on the availability and comparability of market data as well as the motivation and thinking of purchasers.

This appraisal employs only the Sales Comparison Approach. Based on our analysis and knowledge of the subject property type and relevant investor profiles, it is our opinion that this approach would be considered necessary and applicable for market participants. Typical purchasers do not generally rely on the Cost or Income Capitalization Approaches when purchasing a property such as the subject of this report. Therefore, we have not employed the Cost Approach or the Income Capitalization Approach to develop an opinion of market value. The absence of these approaches does not diminish the reliability of the analysis.

# Regional Analysis

REGIONAL MAP



# Regional Analysis

## Introduction

The short- and long-term value of real estate is influenced by a variety of interacting factors. Regional analysis identifies those factors that affect property value, and the role they play within the region. The four primary forces that determine the supply and demand for real property, and consequently affect market value, are: environmental characteristics, governmental forces, social factors, and economic trends.

The subject property segment area is located in the City of Allen in the north central portion of the Dallas-Fort Worth CBSA.

## Economic & Demographic Profile

The following profile of the Dallas-Fort Worth CBSA was provided by Moody's Analytics, whose core assets of proprietary editorial and research content as well as economic and financial databases are a source of information on national and regional economies, industries, financial markets, and demographics.

Moody's Analytics approach to the analysis of the U.S. economy consists of building a large-scale, simultaneous-equation econometric model, which they simulate and adjust with local market information, creating a model of the U.S. macro economy that is both top-down and bottom-up. In this model, those variables that are national in nature are modeled nationally while those that are regional in nature are modeled regionally. Interest rates, prices, and business investment are modeled as national variables; key sectors such as labor markets (employment, labor force), demographics (population, households, and migration), and construction activity (housing starts and sales) are modeled regionally and then aggregated to national totals. This approach allows local information to influence the macroeconomic outlook. Therefore, changes in fiscal policy at the national level (changes in tax rates, for example) are translated into their corresponding effects on state economies. At the same time, the growth patterns of large states, such as California, New York, and Texas, play a major role in shaping the national outlook.

In addition, on a regional basis, the modeling system is explicitly linked to other states through migration flows and unemployment rates. Moody's Analytics model structure also takes into account migration between states.

## ECONOMIC DRIVERS



## EMPLOYMENT GROWTH RANK

2016-2018  
**10**  
1st quintile

Best=1, Worst=408

2016-2021  
**6**  
1st quintile

## RELATIVE COSTS

LIVING  
**108%**

U.S.=100%

BUSINESS  
**93%**

## VITALITY

RELATIVE  
**134%**

U.S.=100%

RANK  
**12**

Best=1, Worst=401

## BUSINESS CYCLE STATUS

»	EXPANSION	«
<input type="checkbox"/>	Recovery	<input type="checkbox"/>
<input type="checkbox"/>	At Risk	<input type="checkbox"/>
<input type="checkbox"/>	Moderating Recession	<input type="checkbox"/>
<input checked="" type="checkbox"/>	In Recession	<input checked="" type="checkbox"/>

## STRENGTHS & WEAKNESSES

### STRENGTHS

- » Stable demand for professional services due to many corporate headquarters.
- » Well-positioned distribution center for Southwest as international trade grows
- » Favorable migration trends, age structure.

### WEAKNESSES

- » Exposure to volatile high tech, which is sensitive to the business cycle.
- » Diminished housing affordability as metro division matures.

## FORECAST/RISKS

### SHORT TERM



### LONG TERM



RISK EXPOSURE  
2017-2022

**32**

1st quintile

Highest=1  
Lowest=402

### UPSIDE

- » Strong income and job gains accelerate housing recovery more than expected.
- » Lower oil prices boost transportation businesses more than projected.

### DOWNSIDE

- » Rising relative costs of living and doing business limit growth.
- » High-tech manufacturing weakens further because of global competition.

## MOODY'S RATING

**Aaa**

COUNTY  
AS OF JUN 26, 2015

## ANALYSIS

**Recent Performance.** Dallas-Plano-Irving ranks among the nation's best-performing large metro areas, with payroll growth still double the national average. A variety of private services have led the way, notably well-paying financial and professional. Consequently, high-wage employment is rising significantly faster than the national average. The labor force is up at triple the national pace over the past year, and the strong job growth has kept the unemployment rate at about 3.7%. Although house prices are decelerating, they are still rising faster than the national average. Residential construction remains strong, with total permits exceeding the peak prior to the Great Recession.

**Professional and financial services.** Corporate expansions will drive solid growth in professional and financial services employment in 2017. The biggest is Toyota's relocation of its North American headquarters from California to Plano, leading to several thousand workers relocating from California, Kentucky and New York. Texas' business-friendly environment and lower costs of doing business were elements in the company's decision to choose DAL. Other factors were the well-educated labor pool and the presence of centrally located transportation facilities, including Dallas-Fort Worth Airport and BNSF Railroad. Even the lower cost of housing in DAL than in California played a role; Toyota employees who were consulted about where to move the headquarters indicated that more affordable housing would add significantly to their quality of life. Liberty Mutual has been another large arrival. AT&T also will expand its downtown corporate headquarters and increase its local payroll by about 10%.

**Housing.** Residential construction will remain strong over the coming year, lifted by in-migration of well-paid employees. Single-family permits have risen to their highest point since 2006 in the midst of the last housing boom. Further,

although new permits for multifamily units are down from their peak in 2015, they are nonetheless much higher than in the last cycle even as apartment rents have risen substantially. The new supply of units on the market has resulted in some deceleration in house price gains, but the pace of increase is still above average. The downside risk is that affordability is diminishing, especially in some parts of the metro division. If the labor market would begin to cool off, construction could slow significantly.

**Nonresidential construction.** Both major segments of nonresidential commercial real estate, office and retail, will grow over the coming year. In terms of office space, Toyota's new billion-dollar campus, intended to meet the needs of its relocation, is scheduled to be completed in the second half of the year. Likewise, Liberty Mutual will be completing its construction in Plano's Legacy West in the coming months. In terms of retail space, solid personal income growth is steadily lifting demand for new shopping centers. Retail space occupancy has risen to its highest point since the 1980s, as developers in recent years avoided the speculative overbuilding that used to characterize the metro division. Now new construction has begun to accelerate, and the trend should last over the next couple of years.

**The Dallas-Plano-Irving economy will grow at an above-average pace over the coming year. Professional, managerial and financial services will be at the forefront, led by a number of corporate expansions. The attendant growth in income will also lift the housing market. Longer term, the concentration of corporate headquarters, technology businesses and financial services, combined with above-average population growth, will contribute to higher than average performance.**

Edward Friedman

March 2017

1-866-275-3266

help@economy.com

2011	2012	2013	2014	2015	2016	INDICATORS	2017	2018	2019	2020	2021	2022
246.5	255.9	265.0	278.0	289.6	296.2	Gross metro product (C09\$ bil)	305.6	319.7	330.6	339.9	351.7	364.6
3.2	3.8	3.6	4.9	4.1	2.3	% change	3.2	4.6	3.4	2.8	3.5	3.7
2,102.4	2,155.2	2,219.5	2,308.4	2,405.5	2,500.1	Total employment (th)	2,593.8	2,660.5	2,710.0	2,752.3	2,797.1	2,843.0
2.3	2.5	3.0	4.0	4.2	3.9	% change	3.7	2.6	1.9	1.6	1.6	1.6
7.5	6.6	6.0	5.0	4.0	3.7	Unemployment rate (%)	3.3	3.2	3.2	3.4	3.6	3.7
14.1	5.9	2.5	7.4	6.0	3.1	Personal income growth (%)	5.6	7.2	6.8	6.0	5.5	5.5
56.8	57.5	58.3	60.0	62.1	62.3	Median household income (\$ th)	63.6	66.2	68.8	70.9	72.9	75.0
4,334.5	4,429.8	4,506.9	4,601.7	4,700.4	4,790.6	Population (th)	4,887.3	4,984.8	5,080.8	5,174.1	5,269.4	5,368.7
2.0	2.2	1.7	2.1	2.1	1.9	% change	2.0	2.0	1.9	1.8	1.8	1.9
44.2	55.1	39.2	54.5	59.6	50.5	Net migration (th)	56.4	56.8	54.8	51.7	53.4	57.1
10,688	14,694	16,999	18,499	22,018	23,021	Single-family permits (#)	24,342	27,207	29,285	29,638	29,352	29,883
9,520	14,048	13,927	14,973	24,767	18,446	Multifamily permits (#)	19,053	18,464	15,151	13,144	14,725	16,475
159.5	161.3	170.3	185.8	204.1	225.6	FHFA house price (1995Q1=100)	241.1	245.3	243.5	242.6	245.2	250.1

### ECONOMIC HEALTH CHECK

3-MO MA

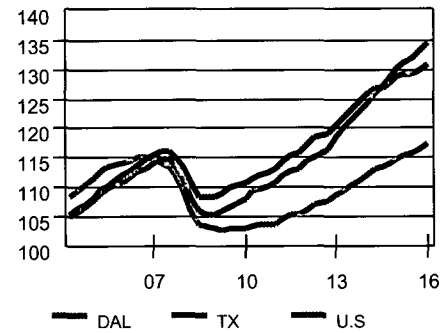
	Sep 16	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17
Employment, change, ths	8.8	9.2	10.7	10.9	12.2	10.5
Unemployment rate, %	3.7	3.8	3.8	3.8	3.8	3.9
Labor force participation rate, %	69.0	69.2	69.4	69.6	69.6	69.7
Employment-to-population ratio, %	66.4	66.5	66.8	66.9	67.0	67.0
Average weekly hours, #	36.0	36.2	36.1	36.1	36.0	ND
Industrial production, 2007=100	105.5	105.6	105.6	105.9	106.0	ND
Residential permits, single-family, #	23,055	23,323	22,429	23,680	25,905	26,281
Residential permits, multifamily, #	21,850	17,099	18,559	17,792	24,425	25,323

Better than prior 3-mo MA
Unchanged from prior 3-mo MA
Worse than prior 3-mo MA

Sources: BLS, Census Bureau, Moody's Analytics

### BUSINESS CYCLE INDEX

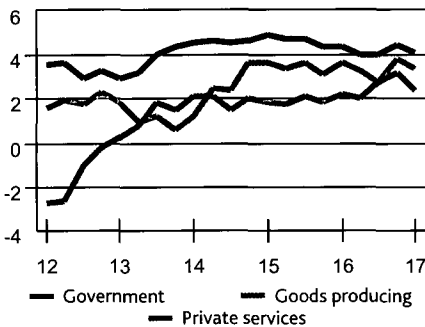
JAN 2002=100



Source: Moody's Analytics

### CURRENT EMPLOYMENT TRENDS

% CHANGE YR AGO



Sources: BLS, Moody's Analytics

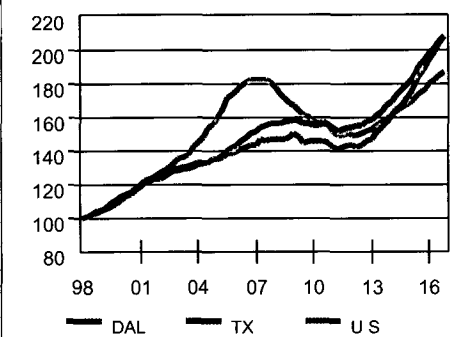
% CHANGE YR AGO, 3-MO MA

	Jun 16	Oct 16	Feb 17
Total	3.7	3.8	4.1
Mining	-17.4	-14.9	-5.4
Construction	6.7	6.9	7.1
Manufacturing	2.2	1.2	1.0
Trade	2.7	2.6	3.1
Trans/Utilities	7.7	8.7	9.1
Information	3.2	2.9	2.5
Financial Activities	3.2	3.5	4.6
Prof & Business Svcs.	4.2	4.7	5.4
Edu & Health Svcs.	4.0	3.8	2.8
Leisure & Hospitality	5.9	4.1	6.4
Other Services	4.0	4.4	4.4
Government	2.0	3.0	2.1

Sources: BLS, Moody's Analytics

### HOUSE PRICE

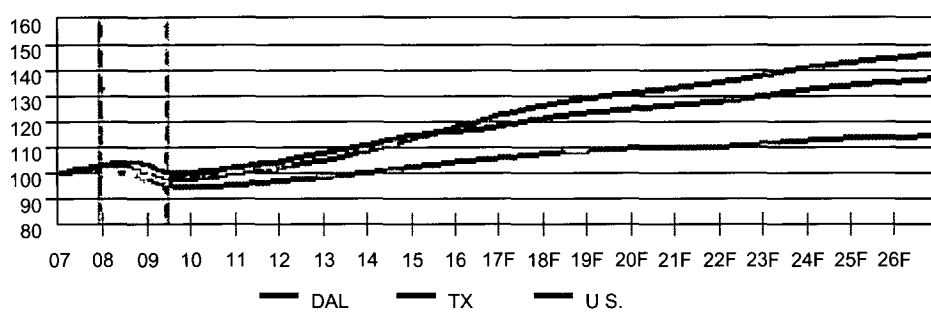
1998Q1=100, NSA



Sources: FHFA, Moody's Analytics

### RELATIVE EMPLOYMENT PERFORMANCE

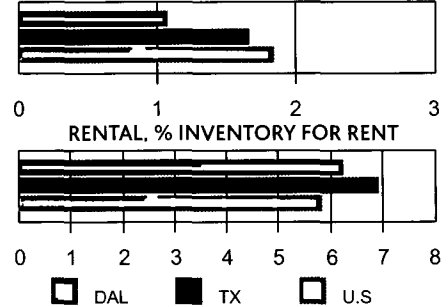
JAN 2007=100



Sources: BLS, Moody's Analytics

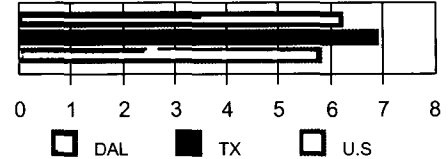
### VACANCY RATES

HOMEOWNER, % HOUSES FOR SALE



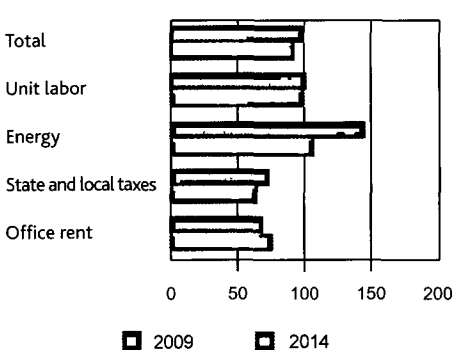
Sources: Census Bureau, ACS, Moody's Analytics, 2015

RENTAL, % INVENTORY FOR RENT



### BUSINESS COSTS

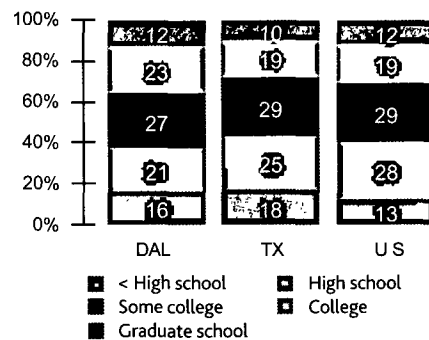
U.S.=100



Source: Moody's Analytics

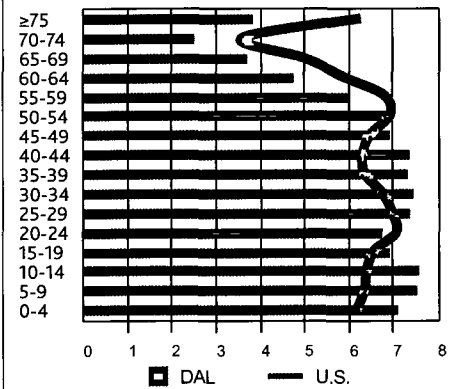
### EDUCATIONAL ATTAINMENT

% OF ADULTS 25 AND OLDER

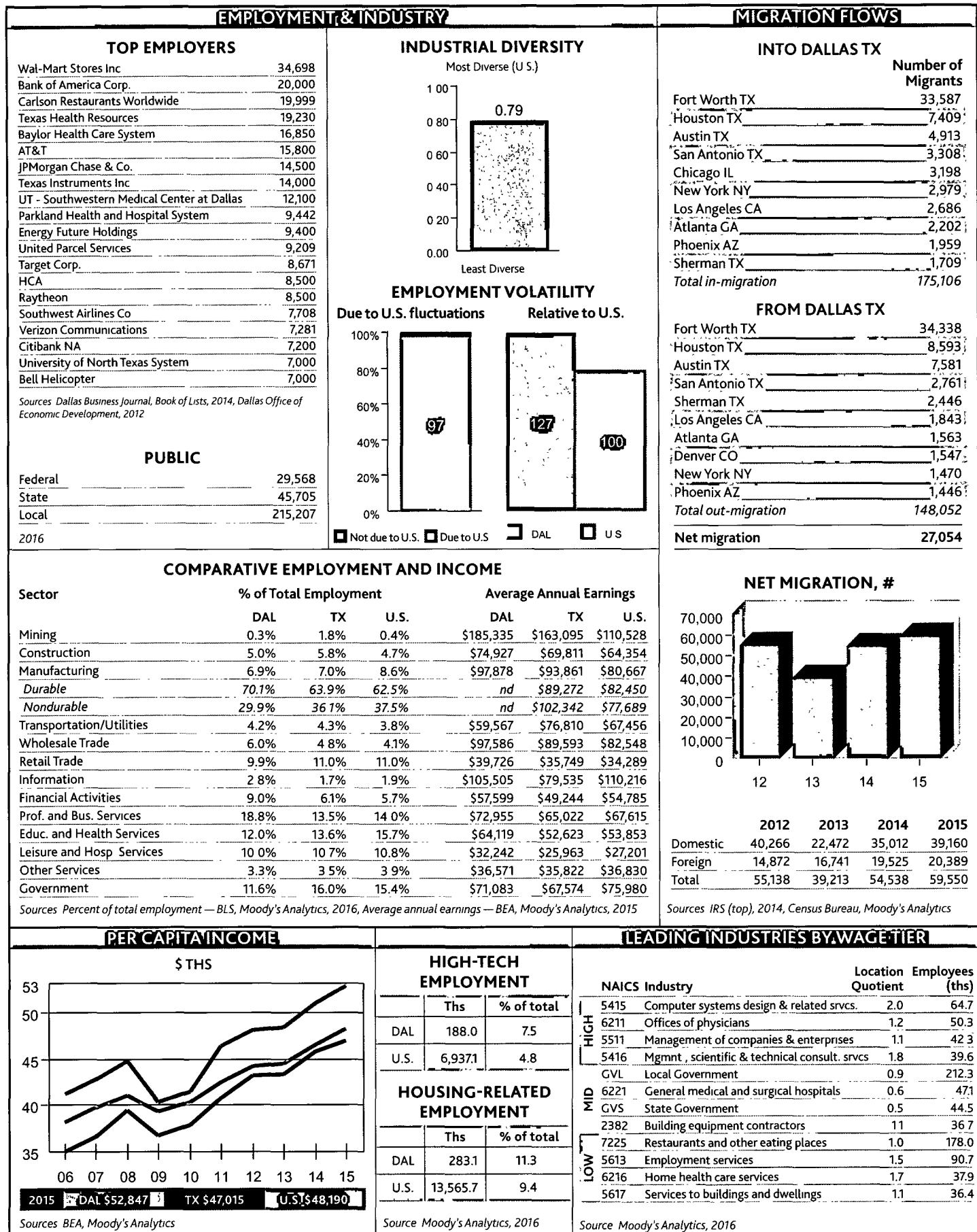


Sources: Census Bureau, Moody's Analytics, 2015

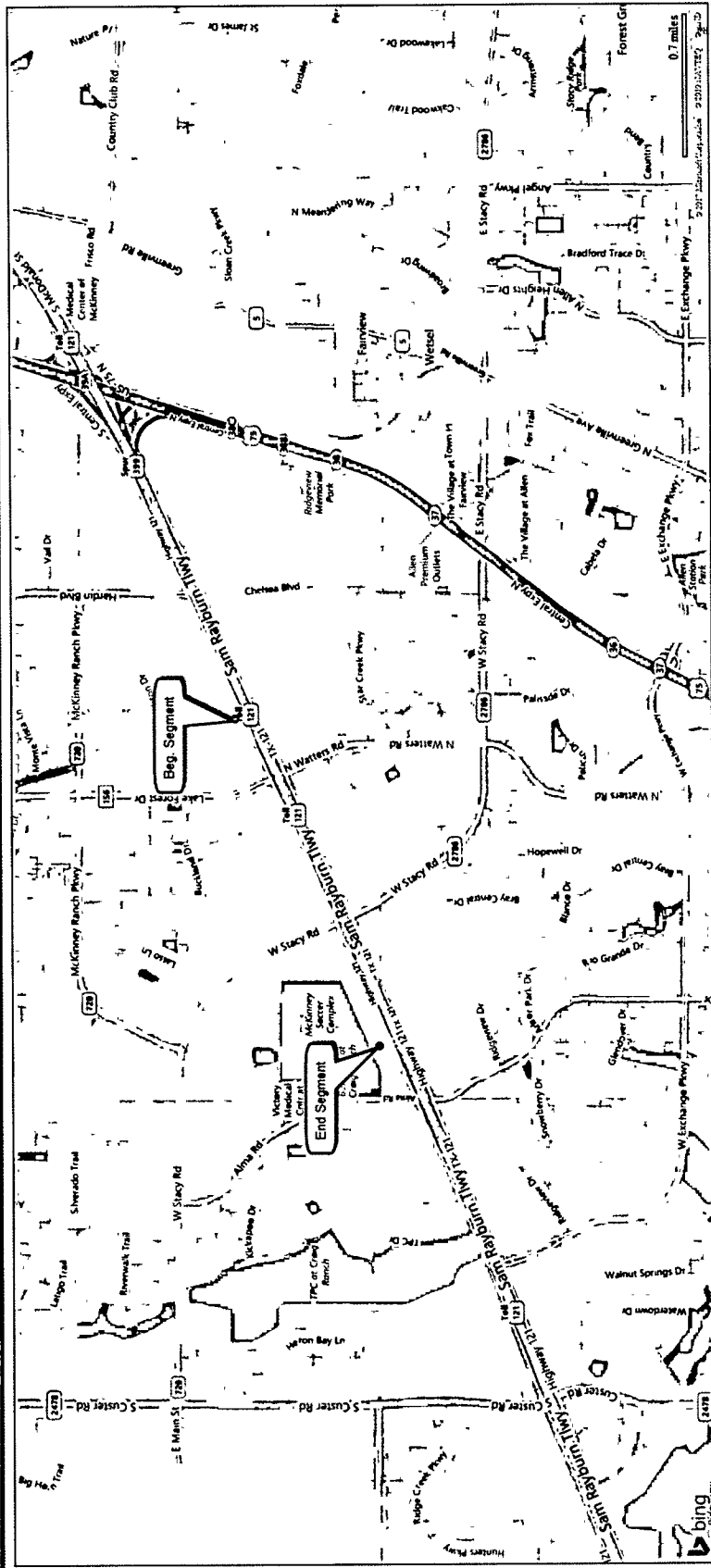
### POPULATION BY AGE, %



Sources: Census Bureau, Moody's Analytics, 2015



## LOCAL AREA MAP



## Location Overview

The subject property segments are located on the south side of State Highway 121 (the Sam Rayburn Tollway) from east of Lake Forest Drive to Alma Drive. The local area can be defined as the area east of US Highway 75 and west of the Dallas North Tollway and south of State Highway 121. The local area includes portions of the city of Allen, Frisco and Plano.

The improvements within the local area consists of commercial uses along State Highway 121 and the primary thoroughfares, including Exchange Parkway, S. Custer Road, and McDermott Road. The local area between US Highway 75 and the Dallas North Tollway also has single-family residential and multi-family residential uses, generally behind the commercial uses.

One of the largest commercial developments within the local area is the Allen Premium Outlets shopping center. This 450,000 square foot outlet mall was originally constructed in 2000 and is located on the north side of Stacy Road and US Highway 75. The center features 100 stores and is in the process of adding an additional 122,000 square feet of retail and restaurant space on the north side.

## Special Hazards or Adverse Influences

We observed no detrimental influences in the local market area, such as landfills, flood areas, noisy or air polluting industrial plants, or chemical factories.

## Demographics

The following table summarizes the demographics of the one, three and five mile radii of the area near the start of the segment, compared to the city of Allen, State of Texas and the United States:

<b>DEMOGRAPHIC SUMMARY</b>							
	1.0-mile Radius	3.0-mile Radius	5.0-mile Radius	City of Allen	Dallas-FTW CBSA	State of Texas	
<b>POPULATION STATISTICS</b>							
2000	1,007	37,019	97,367	41,926	5,197,532	20,851,711	
2016	6,864	91,187	234,186	100,223	7,132,820	27,604,013	
2021	8,686	106,942	271,922	116,565	7,663,480	29,433,556	
<b>Compound Annual Change</b>							
2000 - 2016	12.74%	5.80%	5.64%	5.60%	2.00%	1.77%	
2016 - 2021	4.82%	3.24%	3.03%	3.07%	1.45%	1.29%	
<b>HOUSEHOLD STATISTICS</b>							
2000	325	12,167	33,483	13,737	1,895,221	7,393,353	
2016	2,216	31,216	81,252	33,030	2,574,852	9,787,070	
2021	2,800	36,953	95,008	38,574	2,775,502	10,479,143	
<b>Compound Annual Change</b>							
2000 - 2016	12.75%	6.07%	5.70%	5.64%	1.93%	1.77%	
2016 - 2021	4.79%	3.43%	3.18%	3.15%	1.51%	1.38%	
<b>AVERAGE HOUSEHOLD INCOME</b>							
2000	\$117,959	\$92,428	\$91,181	\$88,993	\$64,080	\$54,441	
2016	\$151,540	\$131,882	\$124,029	\$135,372	\$87,253	\$78,024	
2021	\$182,644	\$160,164	\$150,843	\$164,236	\$102,405	\$91,707	
<b>Compound Annual Change</b>							
2000 - 2016	1.58%	2.25%	1.94%	2.66%	1.95%	2.27%	
2016 - 2021	3.80%	3.96%	3.99%	3.94%	3.25%	3.28%	
<b>OCCUPANCY</b>							
Owner Occupied	81.76%	73.17%	71.38%	78.46%	60.81%	62.86%	
Renter Occupied	18.24%	26.83%	28.62%	21.54%	39.19%	37.14%	

SOURCE: © 2016 Experian Marketing Solutions, Inc. • All rights reserved

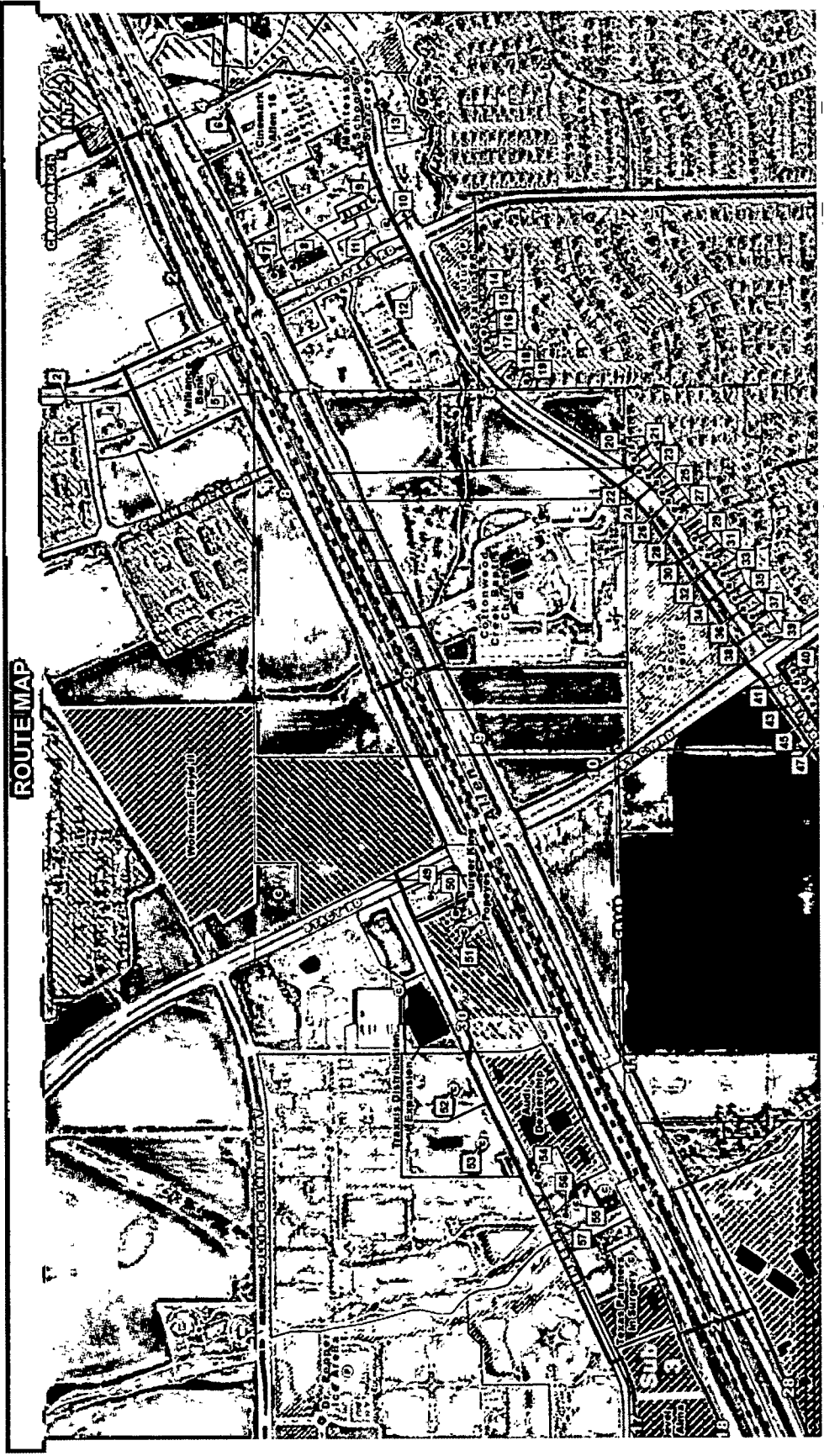
The 2016 average household income within the one, three, five mile radii and the city of Allen is higher than the Dallas-Fort Worth CBSA and the State of Texas average. The city of Allen has very favorable economic demographics that attract development.

## Conclusion

The local area is a rapidly growing area that is experiencing strong demand for vacant land parcels. The area is in the growth phase of its real estate life cycle. In addition, the city of Allen has favorable economic demographics compared to the Dallas-Fort Worth CBS and the State of Texas. The outlook for the subject local area is positive with increasing real estate values.

\_\_\_\_\_





The subject segments are 3, 7, 9, 11 and 27.

## General Information

**ALLEN ZONING MAP**

# Valuation

## Highest and Best Use

### Highest and Best Use of Site as though Vacant

We considered the legal issues related to zoning and legal restrictions. We also analyzed the physical characteristics of the site to determine what legal uses would be possible, and considered the financial feasibility of these uses to determine the use that is maximally productive. Considering the subject site's physical characteristics and location, as well as the state of the local market, it is our opinion that the highest and best use of the subject area will vary, based on the zoning, location and physical characteristics of a specific tract of land. however, based on our analysis, the highest and best use is generally commercial use including retail, retail service, restaurant, hotel, office or other uses consistent with tracts of land located on a state highway or primary thoroughfare, as demands warrants.

### Most Likely Buyer

The subject property consists of several segments of a proposed 138-Kv transmission line route. The subject's most likely buyer will depend of the specific size, type, and configuration of each tract of land within the segments. Some tracts within the segments may be purchased by end-users, other tracts may be purchased by investors.

## Land Valuation

### Methodology

We used the Sales Comparison Approach to develop an opinion of the easement value of the land. We examined current offerings and analyzed prices buyers have recently paid for comparable sites. A summary chart and a location map of the comparables as well as our analysis of the sales is presented on the following pages.

### Analysis of Comparable Data

Based on the location of the subject segments and a typical transmission power line easement size and width, we have researched land sales that are approximately 1.0 to 3.0 acres in size. Our search area included the area west of US Highway 75, south of State Highway 121 (Sam Rayburn Tollway) and east of the Dallas North toll way.

The comparable sales range in size from 0.90 acres to 2.10 acres. Comparable 8 is a set of pad sites that range in size from 1.80 acres to 2.30 acres. The dates of sale range from November 2013 to two comparables that are under contract and expected to close in 2017. The sales prices per square foot range from \$20.00 to \$33.50.

For the purpose of this report, the easement value is 95-99 percent of the fee simple value.

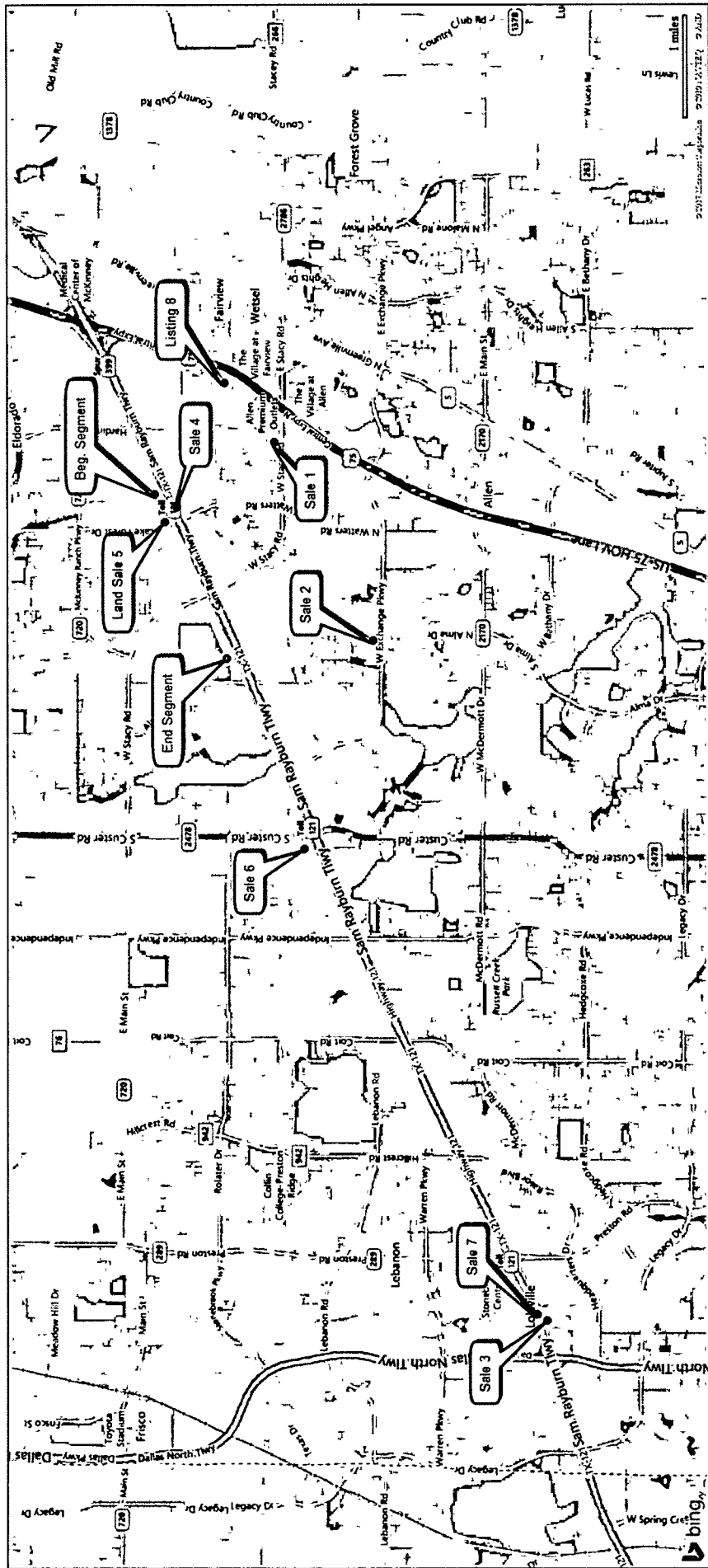
A summary chart and a location map of the comparables are presented on the following pages.

**SUMMARY OF LAND SALES**

TRANSACTION INFORMATION											
No.	Location	Size (sf)	Size (Acres)	Zoning	Site Utility	Public Utilities	Grantor	Grantee	Sale Date	Sale Price	\$/SF Land
1	Pad Site 850 W Stacy Road Allen, TX	60,766	1.39	C	Average	All Available	Car Spa, Inc	Not Avail	4/17	\$1,215,300	\$20.00
2	Pad Site Southwest corner of Alam Drive and Exchange Allen, TX	91,476	2.10	CC	Good	All Available	Green Center Investment, Ltd	Not Avail	4/17	\$2,286,900	\$25.00
3	Pad Site 5728 State Highway 121 Plano, TX	39,204	0.90	C	Good	All Available	Seapines Partners, LP	MidSouth Bank, NA	7/16	\$1,313,300	\$33.50
4	Pad Site South side of State Highway 121 east of Watters Drive Allen, TX	50,878	1.17	C	Average	All Available	TD Watters 121 Land, LP	Jefflyn Properties VII, Ltd	11/16	\$1,017,500	\$20.00
5	Pad Site NEC State Highway 121 Lake Forest Drive McKinney, TX	80,003	1.84	PD, Planned Development	Good	All Available	MC SRT, LP	Boilermaker Investments, LLC	7/15	\$1,840,000	\$23.00
6	Custer Bridges Outparcel NWC Custer Road and SH-121 Frisco, TX	60,000	1.38	C	Excellent	All Available	Custer Road Commons Ltd	Custer Corner Ltd	2/15	\$1,900,000	\$31.67
7	Racetrac site SWC SH-121 and Parkwood Boulevard Plano, TX	52,333	1.20	CE, Commercial Employment	Good	All Available	USL Frisco II	Mountain Prize Inc	11/13	\$1,360,658	\$26.00
8	Allen Commerce Center West Side of US Highway 75 north of Stacy Road	Varies	1.8 to 2.3	Commercial	Good	All Available	N/A	N/A	Listing	Varies	\$30.00
STATISTICS											
Low		39,204	0.90						11/13	\$1,017,500	\$20.00
High		91,476	2.10						4/17	\$2,286,900	\$33.50
Average		62,094	1.43						1/16	\$1,561,951	\$26.15

Compiled by Cushman &amp; Wakefield of Texas, Inc.

LAND SALE LOCATION MAP



## Conclusion of Subject Segment Land Value

Based on our analysis, the data presented, the current strong demand for vacant land tracts in the Allen area, and our discussions with real estate brokers that market vacant land in the Allen area, in our opinion, the market value of easements on vacant land along the subject segments will range from \$22.50 per square foot to \$30.00 per square foot.

<b>Value Conclusions</b>			
<b>Appraisal Premise</b>	<b>Real Property Interest</b>	<b>Date Of Value</b>	<b>Value Conclusion - Per Square Foot</b>
Market Value As-Is	Easement Value	April 25, 2017	\$22.50 - \$30.00

*Compiled by Cushman & Wakefield of Texas, Inc.*

- Our estimate of the easement value is not an appraised value of any specific site. The specific easement value of a tract will depend on the size, shape, flood zone status, zoning and other physical characteristics of the site.
- Our estimate of the easement value for the land along the subject segment does not include any damages that may be caused by the location of the transmission line on any specific site. If awarded by a court, such damages would increase the acquisition cost of the right-of-way.

## Assumptions and Limiting Conditions

"Report" means the appraisal or consulting report and conclusions stated therein, to which these Assumptions and Limiting Conditions are annexed.

"Property" means the subject of the Report.

"Cushman & Wakefield" means Cushman & Wakefield, Inc. or its subsidiary that issued the Report.

"Appraiser(s)" means the employee(s) of Cushman & Wakefield who prepared and signed the Report.

The Report has been made subject to the following assumptions and limiting conditions:

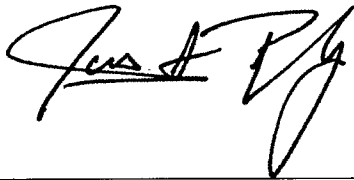
- No opinion is intended to be expressed and no responsibility is assumed for the legal description or for any matters that are legal in nature or require legal expertise or specialized knowledge beyond that of a real estate appraiser. Title to the Property is assumed to be good and marketable and the Property is assumed to be free and clear of all liens unless otherwise stated. No survey of the Property was undertaken.
- The information contained in the Report or upon which the Report is based has been gathered from sources the Appraiser assumes to be reliable and accurate. The owner of the Property may have provided some of such information. Neither the Appraiser nor Cushman & Wakefield shall be responsible for the accuracy or completeness of such information, including the correctness of estimates, opinions, dimensions, sketches, exhibits and factual matters. Any authorized user of the Report is obligated to bring to the attention of Cushman & Wakefield any inaccuracies or errors that it believes are contained in the Report.
- The opinions are only as of the date stated in the Report. Changes since that date in external and market factors or in the Property itself can significantly affect the conclusions in the Report.
- The Report is to be used in whole and not in part. No part of the Report shall be used in conjunction with any other analyses. Publication of the Report or any portion thereof without the prior written consent of Cushman & Wakefield is prohibited. Reference to the Appraisal Institute or to the MAI designation is prohibited. Except as may be otherwise stated in the letter of engagement, the Report may not be used by any person(s) other than the party(ies) to whom it is addressed or for purposes other than that for which it was prepared. No part of the Report shall be conveyed to the public through advertising, or used in any sales, promotion, offering or SEC material without Cushman & Wakefield's prior written consent. Any authorized user(s) of this Report who provides a copy to, or permits reliance thereon by, any person or entity not authorized by Cushman & Wakefield in writing to use or rely thereon, hereby agrees to indemnify and hold Cushman & Wakefield, its affiliates and their respective shareholders, directors, officers and employees, harmless from and against all damages, expenses, claims and costs, including attorneys' fees, incurred in investigating and defending any claim arising from or in any way connected to the use of, or reliance upon, the Report by any such unauthorized person(s) or entity(ies).
- Except as may be otherwise stated in the letter of engagement, the Appraiser shall not be required to give testimony in any court or administrative proceeding relating to the Property or the Appraisal.
- The Report assumes (a) responsible ownership and competent management of the Property; (b) there are no hidden or unapparent conditions of the Property, subsoil or structures that render the Property more or less valuable (no responsibility is assumed for such conditions or for arranging for engineering studies that may be required to discover them); (c) full compliance with all applicable federal, state and local zoning and environmental regulations and laws, unless noncompliance is stated, defined and considered in the Report; and (d) all required licenses, certificates of occupancy and other governmental consents have been or can be obtained and renewed for any use on which the value opinion contained in the Report is based.
- The physical condition of the improvements considered by the Report is based on visual inspection by the Appraiser or other person identified in the Report. Cushman & Wakefield assumes no responsibility for the soundness of structural components or for the condition of mechanical equipment, plumbing or electrical components.
- The forecasted potential gross income referred to in the Report may be based on lease summaries provided by the owner or third parties. The Report assumes no responsibility for the authenticity or completeness of lease information provided by others. Cushman & Wakefield recommends that legal advice be obtained regarding the interpretation of lease provisions and the contractual rights of parties.

- The forecasts of income and expenses are not predictions of the future. Rather, they are the Appraiser's best opinions of current market thinking on future income and expenses. The Appraiser and Cushman & Wakefield make no warranty or representation that these forecasts will materialize. The real estate market is constantly fluctuating and changing. It is not the Appraiser's task to predict or in any way warrant the conditions of a future real estate market; the Appraiser can only reflect what the investment community, as of the date of the Report, envisages for the future in terms of rental rates, expenses, and supply and demand.
- Unless otherwise stated in the Report, the existence of potentially hazardous or toxic materials that may have been used in the construction or maintenance of the improvements or may be located at or about the Property was not considered in arriving at the opinion of value. These materials (such as formaldehyde foam insulation, asbestos insulation and other potentially hazardous materials) may adversely affect the value of the Property. The Appraisers are not qualified to detect such substances. Cushman & Wakefield recommends that an environmental expert be employed to determine the impact of these matters on the opinion of value.
- Unless otherwise stated in the Report, compliance with the requirements of the Americans with Disabilities Act of 1990 (ADA) has not been considered in arriving at the opinion of value. Failure to comply with the requirements of the ADA may adversely affect the value of the Property. Cushman & Wakefield recommends that an expert in this field be employed to determine the compliance of the Property with the requirements of the ADA and the impact of these matters on the opinion of value.
- If the Report is submitted to a lender or investor with the prior approval of Cushman & Wakefield, such party should consider this Report as only one factor, together with its independent investment considerations and underwriting criteria, in its overall investment decision. Such lender or investor is specifically cautioned to understand all Extraordinary Assumptions and Hypothetical Conditions and the Assumptions and Limiting Conditions incorporated in this Report.
- In the event of a claim against Cushman & Wakefield or its affiliates or their respective officers or employees or the Appraisers in connection with or in any way relating to this Report or this engagement, the maximum damages recoverable shall be the amount of the monies actually collected by Cushman & Wakefield or its affiliates for this Report and under no circumstances shall any claim for consequential damages be made.
- If the Report is referred to or included in any offering material or prospectus, the Report shall be deemed referred to or included for informational purposes only and Cushman & Wakefield, its employees and the Appraiser have no liability to such recipients. Cushman & Wakefield disclaims any and all liability to any party other than the party that retained Cushman & Wakefield to prepare the Report.
- Unless otherwise noted, we were not given a soil report to review. However, we assume that the soil's load-bearing capacity is sufficient to support existing and/or proposed structure(s). We did not observe any evidence to the contrary during our physical inspection of the property. Drainage appears to be adequate.
- Unless otherwise noted, we were not given a title report to review. We do not know of any easements, encroachments, or restrictions that would adversely affect the site's use. However, we recommend a title search to determine whether any adverse conditions exist.
- Unless otherwise noted, we were not given a wetlands survey to review. If subsequent engineering data reveal the presence of regulated wetlands, it could materially affect property value. We recommend a wetlands survey by a professional engineer with expertise in this field.
- Unless otherwise noted, we observed no evidence of toxic or hazardous substances during our inspection of the site. However, we are not trained to perform technical environmental inspections and recommend the hiring of a professional engineer with expertise in this field.
- Unless otherwise noted, we did not inspect the roof nor did we make a detailed inspection of the mechanical systems. The appraisers are not qualified to render an opinion regarding the adequacy or condition of these components. The client is urged to retain an expert in this field if detailed information is needed.
- By use of this Report each party that uses this Report agrees to be bound by all of the Assumptions and Limiting Conditions, Hypothetical Conditions and Extraordinary Assumptions stated herein.

## Certification of Appraisal

We certify that, to the best of our knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- We have no present or prospective interest in the property that is the subject of this report, and no personal interest with respect to the parties involved.
- We have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
- Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics & Standards of Professional Appraisal Practice of the Appraisal Institute, which include the Uniform Standards of Professional Appraisal Practice.
- The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- James A Rohrig, MAI, CPA did make a personal inspection of the property that is the subject of this report.
- We have not performed prior services involving the subject property within the three-year period immediately preceding the acceptance of the assignment.
- No one provided significant real property appraisal assistance to the persons signing this report.
- As of the date of this report, James A Rohrig, MAI, CPA has completed the continuing education program for Designated Members of the Appraisal Institute.



---

James A Rohrig, MAI, CPA  
Senior Director  
Tx Certified General Appraiser  
License No. 1335174-G  
james.rohrig@cushwake.com  
972-663-9662 Office Direct

## Addenda Contents

- Addendum A: Glossary of Terms & Definitions
- Addendum B: Qualifications of the Appraiser

# Addendum A:

## Glossary of Terms & Definitions

The following definitions of pertinent terms are taken from *The Dictionary of Real Estate Appraisal*, Sixth Edition (2015), published by the Appraisal Institute, Chicago, IL, as well as other sources.

### As Is Market Value

The estimate of the market value of real property in its current physical condition, use, and zoning as of the appraisal date (Proposed Interagency Appraisal and Evaluation Guidelines, OCC-4810-33-P 20%)

### Band of Investment

A technique in which the capitalization rates attributable to components of a capital investment are weighted and combined to derive a weighted-average rate attributable to the total investment

### Cash Equivalency

An analytical process in which the sale price of a transaction with nonmarket financing or financing with unusual conditions or incentives is converted into a price expressed in terms of cash.

### Depreciation

1 In appraising, a loss in property value from any cause, the difference between the cost of an improvement on the effective date of the appraisal and the market value of the improvement on the same date 2 In accounting, an allowance made against the loss in value of an asset for a defined purpose and computed using a specified method

### Disposition Value

The most probable price that a specified interest in real property is likely to bring under all of the following conditions

- Consummation of a sale will occur within a limited future marketing period specified by the client
- The actual market conditions currently prevailing are those to which the appraised property interest is subject
- The buyer and seller is each acting prudently and knowledgeably
- The seller is under compulsion to sell
- The buyer is typically motivated
- Both parties are acting in what they consider their best interest.
- An adequate marketing effort will be made in the limited time allowed for the completion of a sale
- Payment will be made in cash in U.S. dollars or in terms of financial arrangements comparable thereto
- The price represents the normal consideration for the property sold, unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Note that this definition differs from the definition of market value. The most notable difference relates to the motivation of the seller. In the case of Disposition value, the seller would be acting under compulsion within a limited future marketing period.

### Ellwood Formula

A yield capitalization method that provides a formulaic solution for developing a capitalization rate for various combinations of equity yields and mortgage terms. The formula is applicable only to properties with stable or stabilized income streams and properties with income streams expected to change according to the J- or K-factor pattern. The formula is

$$RO = [YE - M (YE + P \frac{1}{S n} - RM) - \Delta O \frac{1}{S n}] / [1 + \Delta I J]$$

where

RO = Overall Capitalization Rate

YE = Equity Yield Rate

M = Loan-to-Value Ratio

P = Percentage of Loan Paid Off

$\frac{1}{S n}$  = Sinking Fund Factor at the Equity Yield Rate

RM = Mortgage Capitalization Rate

$\Delta O$  = Change in Total Property Value

$\Delta I$  = Total Ratio Change in Income

J = J Factor

Also called mortgage-equity formula.

## Exposure Time

1 The time a property remains on the market 2 The estimated length of time the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal, a retrospective estimate based on an analysis of past events assuming a competitive and open market. See also marketing time

## Extraordinary Assumption

An assumption, directly related to a specific assignment, as of the effective date of the assignment results, which, if found to be false, could alter the appraiser's opinions or conclusions

Comment. Extraordinary assumptions presume as fact otherwise uncertain information about physical, legal, or economic characteristics of the subject property; or about conditions external to the property, such as market conditions or trends, or about the integrity of data used in an analysis

## Fee Simple Estate

Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power, and escheat.

## Easement

An interest in real property that conveys use, but not ownership, of a portion of an owner's property

## Highest and Best Use

The reasonably probable use of property that results in the highest value. The four criteria that the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum productivity.

## Highest and Best Use of Property as Improved

The use that should be made of a property as it exists An existing improvement should be renovated or retained as is so long as it continues to contribute to the total market value of the property, or until the return from a new improvement would more than offset the cost of demolishing the existing building and constructing a new one

## Hypothetical Conditions

A condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results, but is used for the purpose of analysis

Comment Hypothetical conditions are contrary to known facts about physical, legal, or economic characteristics of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis

## Insurable Replacement Cost/Insurable Value

A type of value for insurance purposes.

## Intended Use

The use or uses of an appraiser's reported appraisal, appraisal review, or appraisal consulting assignment opinions and conclusions, as identified by the appraiser based on communication with the client at the time of the assignment

## Intended User

The client and any other party as identified, by name or type, as users of the appraisal, appraisal review, or appraisal consulting report by the appraiser on the basis of communication with the client at the time of the assignment

## Leased Fee Interest

A freehold (ownership interest) where the possessory interest has been granted to another party by creation of a contractual landlord-tenant relationship (i.e., a lease)

## Leasehold Interest

The tenant's possessory interest created by a lease See also negative leasehold, positive leasehold

## Liquidation Value

The most probable price that a specified interest in real property is likely to bring under all of the following conditions:

- Consummation of a sale will occur within a severely limited future marketing period specified by the client.
- The actual market conditions currently prevailing are those to which the appraised property interest is subject
- The buyer is acting prudently and knowledgeably
- The seller is under extreme compulsion to sell.
- The buyer is typically motivated
- The buyer is acting in what he or she considers his or her best interest
- A limited marketing effort and time will be allowed for the completion of a sale
- Payment will be made in cash in U.S. dollars or in terms of financial arrangements comparable thereto.
- The price represents the normal consideration for the property sold, unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Note that this definition differs from the definition of market value The most notable difference relates to the motivation of the seller. Under market value, the seller would be acting in his or her own best interests The seller would be acting prudently and knowledgeably, assuming the price is not affected by undue stimulus or atypical motivation. In the case of liquidation value, the seller would be acting under extreme compulsion within a severely limited future marketing period.

## Market Rent

The most probable rent that a property should bring in a competitive and open market reflecting all conditions and restrictions of the lease agreement, including permitted uses, use restrictions, expense obligations, term, concessions, renewal and purchase options, and tenant improvements (TIs)

## Market Value

As defined in the Agencies' appraisal regulations, the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus.

Implicit in this definition are the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- Buyer and seller are typically motivated,
- Both parties are well informed or well advised, and acting in what they consider their own best interests,
- A reasonable time is allowed for exposure in the open market,
- Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto, and
- The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale<sup>1</sup>

## Marketing Time

An opinion of the amount of time it might take to sell a real or personal property interest at the concluded market value level during the period immediately after the effective date of an appraisal. Marketing time differs from exposure time, which is always presumed to precede the effective date of an appraisal (Advisory Opinion 7 of the Appraisal Standards Board of The Appraisal Foundation and Statement on Appraisal Standards No. 6, "Reasonable Exposure Time in Real Property and Personal Property Market Value Opinions" address the determination of reasonable exposure and marketing time) See also exposure time.

## Mortgage-Equity Analysis

Capitalization and investment analysis procedures that recognize how mortgage terms and equity requirements affect the value of income-producing property.

## Operating Expenses

**Other Taxes, Fees & Permits** - Personal property taxes, sales taxes, utility taxes, fees and permit expenses.

**Property Insurance** - Coverage for loss or damage to the property caused by the perils of fire, lightning, extended coverage perils, vandalism and malicious mischief, and additional perils.

**Management Fees** - The sum paid for management services. Management services may be contracted for or provided by the property owner. Management expenses may include supervision, on-site offices or apartments for resident managers, telephone service, clerical help, legal or accounting services, printing and postage, and advertising. Management fees may occasionally be included among recoverable operating expenses.

<sup>1</sup> "Interagency Appraisal and Evaluation Guidelines." Federal Register 75:237 (December 10, 2010) p. 77472.

**Total Administrative Fees** – Depending on the nature of the real estate, these usually include professional fees and other general administrative expenses, such as rent of offices and the services needed to operate the property. Administrative expenses can be provided either in the following expense subcategories or in a bulk total: 1) Professional Fees – Fees paid for any professional services contracted for or incurred in property operation, or 2) Other Administrative – Any other general administrative expenses incurred in property operation.

**Heating Fuel** - The cost of heating fuel purchased from outside producers. The cost of heat is generally a tenant expense in single-tenant, industrial or retail properties, and apartment projects with individual heating units. It is a major expense item shown in operating statements for office buildings and many apartment properties. The fuel consumed may be coal, oil, or public steam. Heating supplies, maintenance, and workers' wages are included in this expense category under certain accounting methods.

**Electricity** - The cost of electricity purchased from outside producers. Although the cost of electricity for leased space is frequently a tenant expense, and therefore not included in the operating expense statement, the owner may be responsible for lighting public areas and for the power needed to run elevators and other building equipment.

**Gas** - The cost of gas purchased from outside producers. When used for heating and air conditioning, gas can be a major expense item that is either paid by the tenant or reflected in the rent.

**Water & Sewer** - The cost of water consumed, including water specially treated for the circulating ice water system, or purchased for drinking purposes. The cost of water is a major consideration for industrial plants that use processes depending on water and for multifamily projects, in which the cost of sewer service usually ties to the amount of water used. It is also an important consideration for laundries, restaurants, taverns, hotels, and similar operations.

**Other Utilities** - The cost of other utilities purchased from outside producers.

**Total Utilities** - The cost of utilities net of energy sales to stores and others. Utilities are services rendered by public and private utility companies (e.g., electricity, gas, heating fuel, water/sewer and other utilities providers). Utility expenses can be provided either in expense subcategories or in a bulk total.

**Repairs & Maintenance** - All expenses incurred for the general repairs and maintenance of the building, including common areas and general upkeep. Repairs and maintenance expenses include elevator, HVAC, electrical and plumbing, structural/roof, and other repairs and maintenance expense items. Repairs and Maintenance expenses can be provided either in the following expense subcategories or in a bulk total: 1) Elevator - The expense of the contract and any additional expenses for elevator repairs and maintenance. This expense item may also include escalator repairs and maintenance. 2) HVAC - The expense of the contract and any additional expenses for heating, ventilation and air-conditioning systems. 3) Electrical & Plumbing - The expense of all repairs and maintenance associated with the property's electrical and plumbing systems. 4) Structural/Roof - The expense of all repairs and maintenance associated with the property's building structure and roof. 5) Pest Control - The expense of insect and rodent control. 6) Other Repairs & Maintenance - The cost of any other repairs and maintenance items not specifically included in other expense categories.

**Common Area Maintenance** - The common area is the total area within a property that is not designed for sale or rental, but is available for common use by all owners, tenants, or their invitees, e.g., parking and its appurtenances, malls, sidewalks, landscaped areas, recreation areas, public toilets, truck and service facilities. Common Area Maintenance (CAM) expenses can be entered in bulk or through the sub-categories: 1) Utilities - Cost of utilities that are included in CAM charges and passed through to tenants. 2) Repair & Maintenance - Cost of repair and maintenance items that are included in CAM charges and passed through to tenants. 3) Parking Lot Maintenance - Cost of parking lot maintenance items that are included in CAM charges and passed through to tenants. 4) Snow Removal - Cost of snow removal that are included in CAM charges and passed through to tenants. 5) Grounds Maintenance - Cost of ground maintenance items that are included in CAM charges and passed through to tenants. 6) Other CAM expenses are items that are included in CAM charges and passed through to tenants.

**Painting & Decorating** - This expense category is relevant to residential properties where the landlord is required to prepare a dwelling unit for occupancy in between tenancies.

**Cleaning & Janitorial** - The expenses for building cleaning and janitorial services, for both daytime and night-time cleaning and janitorial service for tenant spaces, public areas, atriums, elevators, restrooms, windows, etc. Cleaning and Janitorial expenses can be provided either in the following subcategories or entered in a bulk total: 1) Contract Services - The expense of cleaning and janitorial services contracted for with outside service providers. 2) Supplies, Materials & Misc. - The cost of any cleaning materials and any other janitorial supplies required for property cleaning and janitorial services and not covered elsewhere. 3) Trash Removal - The expense of property trash and rubbish removal and related services. Sometimes this expense item includes the cost of pest control and/or snow removal. 4) Other Cleaning/Janitorial - Any other cleaning and janitorial related expenses not included in other specific expense categories.

**Advertising & Promotion** - Expenses related to advertising, promotion, sales, and publicity and all related printing, stationary, artwork, magazine space, broadcasting, and postage related to marketing.

**Professional Fees** - All professional fees associated with property leasing activities including legal, accounting, data processing, and auditing costs to the extent necessary to satisfy tenant lease requirements and permanent lender requirements.

**Total Payroll** - The payroll expenses for all employees involved in the ongoing operation of the property, but whose salaries and wages are not included in other expense categories. Payroll expenses can be provided either in the following subcategories or entered in a bulk total: 1) Administrative Payroll - The payroll expenses for all employees involved in on-going property administration. 2) Repair & Maintenance Payroll - The expense of all employees involved in on-going repairs and maintenance of the property. 3) Cleaning Payroll - The expense of all employees involved in providing on-going cleaning and janitorial services to the property. 4) Other Payroll - The expense of any other employees involved in providing services to the property not covered in other specific categories.

**Security** - Expenses related to the security of the Lessees and the Property. This expense item includes payroll, contract services and other security expenses not covered in other expense categories. This item also includes the expense of maintenance of security systems such as alarms and closed circuit television (CCTV), and ordinary supplies necessary to operate a security program, including batteries, control forms, access cards, and security uniforms.

**Roads & Grounds** - The cost of maintaining the grounds and parking areas of the property. This expense can vary widely depending on the type of property and its total area. Landscaping improvements can range from none to extensive beds, gardens and trees. In addition, hard-surfaced public parking areas with drains, lights, and marked car spaces are subject to intensive wear and can be costly to maintain.

**Other Operating Expenses** - Any other expenses incurred in the operation of the property not specifically covered elsewhere.

**Real Estate Taxes** - The tax levied on real estate (i.e., on the land, appurtenances, improvements, structures and buildings); typically by the state, county and/or municipality in which the property is located.

## **Prospective Opinion of Value**

A value opinion effective as of a specified future date. The term does not define a type of value. Instead, it identifies a value opinion as being effective at some specific future date. An opinion of value as of a prospective date is frequently sought in connection with projects that are proposed, under construction, or under conversion to a new use, or those that have not yet achieved sellout or a stabilized level of long-term occupancy.

## **Prospective Value upon Reaching Stabilized Occupancy**

The value of a property as of a point in time when all improvements have been physically constructed and the property has been leased to its optimum level of long-term occupancy. At such point, all capital outlays for tenant improvements, leasing commissions, marketing costs and other carrying charges are assumed to have been incurred.

## **Special, Unusual, or Extraordinary Assumptions**

Before completing the acquisition of a property, a prudent purchaser in the market typically exercises due diligence by making customary enquiries about the property. It is normal for a Valuer to make assumptions as to the most likely outcome of this due diligence process and to rely on actual information regarding such matters as provided by the client. Special, unusual, or extraordinary assumptions may be any additional assumptions relating to matters covered in the due diligence process, or may relate to other issues, such as the identity of the purchaser, the physical state of the property, the presence of environmental pollutants (e.g., ground water contamination), or the ability to redevelop the property.

## Addendum B: Qualifications of the Appraiser



## JAMES A. ROHRIG, MAI, CPA

DIRECTOR | VALUATION & ADVISORY

PRACTICE GROUP MEMBER | DISPUTE ANALYSIS & LITIGATION SUPPORT

CUSHMAN & WAKEFIELD OF TEXAS, INC.

Mr. Rohrig joined Cushman & Wakefield of Texas, Inc. in June 2012 as a Director in the Dallas Valuation & Advisory office. In addition to Mr. Rohrig's appraisal and valuation experience, he has over 15 years of experience in financial and operational accounting with companies involved in real estate development, land development and homebuilding.

### EXPERIENCE

Appraisal and consulting assignments have included all major property types, including office, retail, industrial, medical use properties, special purpose properties, golf courses, multi-family, subdivision development, restaurant, and other property types primarily in Texas and Oklahoma. Mr. Rohrig has experience in real estate litigation assignments including eminent domain, property partitioning, estate tax matters, general real estate litigation and environmentally contaminated properties and has testified in administrative hearings for eminent domain matters in Tarrant, Hill, Collin, Denton and Dallas Counties, Texas.

### EDUCATION

- Wittenberg University (Springfield, OH)
  - Degree: Bachelor of Arts – Business Administration, emphasis in Accounting

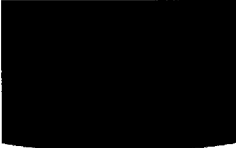
### APPRAISAL EDUCATION

Appraisal Institute, Course 800 – Fundamentals of Separating Real Property, Personal Property, and Intangible Business Assets.

Appraisal Institute – Review Theory-General

### MEMBERSHIPS, LICENSES AND PROFESSIONAL AFFILIATIONS

- Designated Member, Appraisal Institute
  - As of the current date, James Rohrig, MAI has completed the requirements of the continuing education program of the Appraisal Institute.
- Appraisal Institute
  - Member, Board of Directors, North Texas Chapter 2011-2013
  - Chapter Treasurer, North Texas Chapter, 2014
  - Chapter Secretary, North Texas Chapter, 2015
  - Chapter Vice President, North Texas Chapter, 2016
  - Chapter President, North Texas Chapter, 2017
- Certified Public Accountant, State of Texas

- 
- Certified General Real Estate Appraiser in the following states:
    - Oklahoma – 12919CGA
    - Texas – 1335174-G
  - Member Real Estate Financial Executives Association

#### OTHER ACCOMPLISHMENTS AND AWARDS

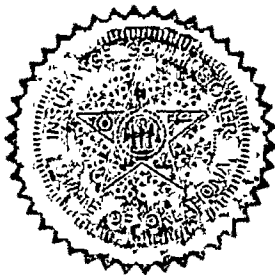
- Co-Authored article “Highest and Best Use in Eminent Domain Valuation”, presented at the 2007 CLE International Eminent Domain Conference.
- Authored article “LEED Certification and the Appraisal Process” published in the September 2011 edition of The Commercial Real Estate Network magazine.
- Authored article “Real Estate Valuation in Condemnation” published in the June 2013 edition of The Commercial Real Estate Network magazine.

*State of Oklahoma**John D. Doak, Insurance Commissioner****Oklahoma Real Estate Appraiser Board****This is to certify that:****James A. Rohrig***

*has complied with the provisions of the Oklahoma Real Estate Appraisers Act to transact business as a **Certified General Real Estate Appraiser** in the State of Oklahoma.*

*In Witness Whereof, I have hereunto set my hand and caused the seal of my office to be affixed at the City of Oklahoma City, State of Oklahoma, this 16th day of May A.D. 2014.*

*John D. Doak, Insurance Commissioner*  
*Chairperson, Oklahoma Real Estate Appraiser Board*

*Members, Oklahoma Real Estate Appraiser Board*
*Expires: 5/31/2017**Oklahoma Appraiser Number: 12919CGA*

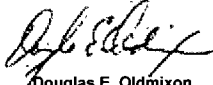
*You may wish to laminate the pocket identification card to preserve it.*


JAMES ANTHONY ROHRIG  
1370 LEEWARD DRIVE  
ROCKWALL, TX 75087

The person named on the reverse is licensed by the Texas Appraiser Licensing and Certification Board.

Inquiry as to the status of this license may be made to

Texas Appraiser Licensing and Certification Board  
P.O. Box 12188  
Austin, Tx 78711-2188  
[www.talcb.texas.gov](http://www.talcb.texas.gov)  
(512) 936-3001  
Fax: (512) 936-3899

<b>Texas Appraiser Licensing and Certification Board</b> P.O. Box 12188 Austin, Texas 78711-2188			
<b>Certified General Real Estate Appraiser</b>			
Number#	<b>TX 1335174</b>	<b>G</b>	
Issued	<b>08/21/2015</b>	Expires	<b>08/31/2017</b>
Appraiser	<b>JAMES ANTHONY ROHRIG</b>		
<small>Having provided satisfactory evidence of the qualifications required by the Texas Appraiser Licensing and Certification Act, Texas Occupations Code, Chapter 1103, is authorized to use this title, Certified General Real Estate Appraiser</small>			
			 <b>Douglas E. Oldmixon</b> Commissioner

<b>Texas Appraiser Licensing and Certification Board</b> P.O. Box 12188 Austin, Texas 78711-2188			
<b>Certified General Real Estate Appraiser</b>			
Number:	<b>TX 1335174</b>	<b>G</b>	
Issued:	<b>08/21/2015</b>	Expires:	<b>08/31/2017</b>
Appraiser:	<b>JAMES ANTHONY ROHRIG</b>		
<small>Having provided satisfactory evidence of the qualifications required by the Texas Appraiser Licensing and Certification Act, Texas Occupations Code, Chapter 1103, is authorized to use this title, Certified General Real Estate Appraiser.</small>			
			 <b>Douglas E. Oldmixon</b> Commissioner