



12

Case Study 4: Residential Properties

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Case Study 4:

Residential Properties

Case Study Goal

The goal of the residential case study is to apply the CCIM Strategic Analysis Model in identifying an apartment trade area for a developer among alternative locations to meet expected population and employment growth.

Case Study Objectives

- Identify number of basic employees to be employed by each corporation planning to locate in McKinney using results of completed Shift-Share Analysis.
- Search for permitted Multifamily land use that will allow multifamily development and select apartment trade area(s) which conform to the urban living (UL) as defined by the municipality's plan of development that allow apartment development.
- Determine the annual threshold income for a typical market rent for the selected district(s) for one- and two-bedroom apartment.
- Identify the qualifying trade area districts which allow apartment development through comparison of their lifestyle that meet client's parameters.
- Conduct a comparative analysis to determine which three or four of the selected districts that meet the client's parameters for future apartment growth.
- Identify pipeline data through CCIM InSites/Moody's Data, New Construction Report (Excel) on average rent trends, target area vacancy rate, absorption, operating cost, apartment supply and estimated demand and demand for the study area (Executive Summary).
- Develop an estimate of the development value by using a simple back-door estimate.
- Perform a Highest and Best Use Analysis using the target yield to estimate residual land value that the proposed apartment development can support.

- Create an PPT presentation supported by analyses results that determines whether there is demand for apartments in the study area and meets given client criteria.

NOTES

Case Study 4: Residential Properties

Client Background

Your team has been hired by an east coast apartment developer, C. Campbell Developers, LLC. The client is interested in expanding into growing apartment markets like Dallas-Fort Worth. The client favors existing apartment trade areas in growing markets that allow apartment development.

The client had learned that two corporations just announced new office development in McKinney, Texas. One being an international finance & insurance company which announced that they will be creating 5,000 new jobs and a Unicorn Tech company announced they will be creating 3,000 new jobs in McKinney. A recent report indicated that about 300 people move to Dallas-Fort Worth per day.

In addition, a news article ranked McKinney, Texas as the sixth fastest growing city in the United States.

Client Situation

Your client desires you to identify a residential trade area that can meet the expected growing population and employment growth. The client's preliminary research is focused on the McKinney 2040 Comprehensive Plan which identifies Districts that allow development of apartments. She used the Preferred Scenario map in the Comprehensive Plan to target some districts. She identified potential districts that are west of U.S. Route 75 and along and north of US Route 380 in McKinney TX.

Your assistance is needed to conduct an analysis to advise the client on which district(s) can support sustainable urban living UL =(apartments) in the targeted area with linkages to retail, medical services, schools, parks, public transportation, etc. Determine through a market analysis the demand for new apartments within the District(s) identified that supports the client's plan to developing 250 units with 125 one-bedroom and 125 two-bedroom. The client when analyzing potential locations looks at and compares average disposable income, median disposable income, education those with bachelor's degrees, renter occupied housing units and rented dwelling units. She also seeks a map showing the locations of new market rate apartments to identify growth patterns. In addition, the client weighs heavily their decision on lifestyle and its impact on those who rent.

The client needs this information for an upcoming board meeting.

Client Assumptions

- The client can obtain a 25-year mortgage at 4.0 percent with monthly payments at a 1.30 DSCR.
- The Client has an 8.0 percent target yield.
- Projects of this type have an estimated economic life of about 60 years.
- When utilizing Highest and Best use, the client uses 68% of value for improvements.

Scope of Analysis

In this residential case study, CCIM Strategic Analysis model components will be applied except for site specific location analysis. You will identify an apartment trade area within the Dallas sub-market of McKinney, Texas and provide market analysis results to delineate an apartment trade area based on the McKinney 2040 Comprehensive Plan in support of current and future apartment demand. Your market analysis should include use of the McKinney 2040 Comprehensive Plan, demographic research using STDB, third party market data from CCIM InSites/Moody's Analytics Reports, financial analysis using current market data.

Market Analysis

Task 12-1: Market Demand

Objective

Analyze current and future market rate apartment demand for McKinney, Texas.

Rationale

Determine if the study area has current and future demand for market rate apartments.

Resources

CCM InSite/Moody's Apartment Report for Dallas Metro and Plano/Allen/McKinney Submarket

Steps

Read CCM InSite/Moody's Apartment Report Executive Briefing (PDF) for Market Conditions and Plano/Allen/McKinney submarket conditions and indicate your findings and opinions.

Note your findings:

Note: Sample answers are based on data Q1 2022.

1. How many apartment units are there in the study area and how does it rank?

71,925 - largest of 25 submarkets

2. How many apartments have been added to the submarket in the last quarter? What is the annual growth rate?

25,559 apartments added; Growth Rate 4.5%

3. What has been the rent increase percentage in the last quarter?

13.0% 3Q 2021

4. What is the mean rent for one and two-bedroom units?

1BR \$1,411; 2 BR \$1,809

5. How many households were formed in the last quarter? In a Year?
9,460 HH Dallas; 2.0% Yr
6. What was the apartment submarket absorption in the last quarter? How did the study area rank vs. the metro?
Metro 13,572 Plano/Allen/M1; McKinney 1,700 units
7. What is the submarket vacancy rate? How does it compare to the metro?
Plano/Allen/McKinney 6.5%; Dallas 5.3% (pg7)
8. What is vacancy expected to be at the end of the current year? How many basis points did it rise or fall?
6.1% fell 230 basis points
9. What is the current operating expense ratio for apartments?
44.00% (pg 10)
10. After reviewing the STDB InSite/Moody's apartment report, should we pursue apartment development for our client?
Answers vary

End of task



Task 12-2: EBA and Shift-Share Analysis

Objective

Identify number of basic employees that will be employed by each new corporation planning to locate in McKinney using results of completed Shift-Share Analysis.

Rationale

Determining the additional basic employees is to determine the growth of the employment sector(s) and to estimate the demand for real estate.

Resources

- Shift Share Analysis - Collin County TX (Results of Economic Analysis for McKinney)

Steps

1. Identify the employment sector the two incoming companies represent.
2. Determine basic employees per employment sector.
3. Identify the estimated population growth these two companies may add in McKinney.
4. Identify the percentage and number of apartment households that could be in McKinney.

Note Your Findings

Note: Sample answers are based on data Q1 2022.

1. What percentage of the 5,000 Finance and insurance employees and what percentage of the 3,000 Professional and Technical services employees are basic employees?
 - a. Finance & Insurance

$$5,000 \times 51.85\% = 2,592.50 / 2,593$$
 - b. Professional & Technical services

$$3,000 \times 22.27\% = 668$$

End of task



Political & Legal Analysis

Task 12-3: Land Use

Objective

Search for land use that allow multifamily development and select apartment trade area(s) which conform to McKinney's Plan of Development that encourage urban living (UL) designation (UL = apartments).

Rationale

Confirming land use allows multifamily/apartments is critical to moving forward with analysis, in this case a multifamily development.

Resources

- McKinney 2040 Comprehensive Plan (PDF- preferred districts bookmarked) <https://www.mckinneytexas.org/292/Comprehensive-Plan>
- Preferred Scenario Map (PDF)
- McKinney-districts (zip file)

Steps

1. Review Preferred Scenario Map to identify which districts permit urban living (multifamily/apartments).
 - a. Preferred target area is West of US 75 and North and about US 380.
2. Import McKinney-districts zip file into STDB/BA to create interactive Districts Map (drag the file to your desktop).
3. Open BA-Open Projects> select Add Data> Import File > Browse. Select the file from your desktop > Open. Result - all McKinney districts are loaded to BA.
4. Eliminate all districts not in the study area.
 - a. Open Clear Map > Select All > Uncheck the districts within the study Area. Click clear.
5. Use the selection tool to draw a rectangle about the 5 districts (all 5 areas have hash marks).
6. Select Create site for combined district areas (Note: this site is used again for the next task).

Note Your Findings

Note: Sample answers are based on data Q1 2022.

1. What are the districts within the identified study area?
 - *Outer Loop*
 - *North Ridge*
 - *Scenic*
 - *Medical*
 - *Trinity Falls*
 - *Honey Creek*
 - *Collin Crossing*

2. Of the districts in the identified study area, which districts allow urban living (UL)?
 - *Outer Loop*
 - *Scenic*
 - *Medical*
 - *Trinity Falls*
 - *Collin Crossing*

Market Analysis

Task 12-4: Districts Analysis

Objective

To isolate Districts that allow multifamily development and analyze the characteristics of those districts; compare to McKinney.

Rationale

To determine market rate apartment demand.

Resources

- Modified District map created in the previous Task.
- STDB reports: Lifestyle, Comparison

Steps (two parts)

PART ONE

1. Starting with the modified District map created in the previous Task 12-3, eliminate those districts that do not allow urban living (same

process as in Step 3 of Task 12-3). Use the selection tool to draw a rectangle covering the remaining districts (remaining districts have hash marks when done.)

2. In Description box select “Create site for combined areas”.
3. Run a tapestry (Lifestyles) segmentation Report for the combined study area.

Note Your Findings

Note: Sample answers are based on data Q1 2022.

1. How many Lifestyles are there in the 5 districts?

four

2. What lifestyles comprise 75% or more of the population?

Boomburbs (31.1%), Up and Coming Families (30.2%) and Green Acres (26.7%)

3. What percent of households rent in each of those lifestyles?

Boomburbs 16.0%, up and Coming Families 26.1%, Green Acres 13.9%; Middleburg 26.6%

4. What is the median income and net worth for each of the lifestyles?

Boomburbs \$357,600 up and Coming Families \$122,700, Green Acres \$267,700; Middleburg \$115,300%

PART TWO

1. Using the selected combined districts, create a comparison report.
 - a. Click comparison reports, then comparison report.
 - b. Click add variables. To find next variable, click calendar type figure upper left. Add variables to note the following and answer the questions.
 - i. Total Population – Current year
 - ii. Average disposable income
 - iii. Median HH disposable income
 - iv. How many have a bachelor’s degree?
 - v. How many renter-occupied units are there within the study area?

Note Your Findings

(PART TWO)

1. How do these benchmarks compare to the data developed in the lifestyle analysis?

Answers will vary

2. How does the selected districts group compare to the McKinney ZIP code?

Answers will vary

End of task

Market Analysis



Task 12-5: Pipeline Data

Objective

Identify pipeline data through CCIM InSite/Moody's, New Construction Report (Excel) for rent trends, vacancy rate, absorption, operating cost, apartment supply, estimated demand for the study area.

Rationale

Understand market dynamics related to apartment rentals for McKinney.

Resources

- New Construction_raw data for filtering (Excel file)
- STDB/BA open interactive McKinney District Map (Task 12-3)

Steps

1. Use CCIM InSite/Moody's excel pipeline market rate construction data for Plano/Allen/McKinney (New Construction Excel file).
 - a. Delete subsidized housing row(s), Townhouses, Mixed use.
 - b. Add headings for address, town, state, save file.

2. Use McKinney Districts Map (from Task 12-3), add data, locate file, import, all new construction points should populate onto the map. Save.

Note Your Findings

Note: Sample answers are based on data Q1 2022.

1. Which of the selected Districts have new apartment development?

Medical District, Collin Crossing

2. Which District of those selected have new construction?

Medical District, Collin Crossing

End of task

Financial Analysis



Task 12-6: Threshold Income – Rent Setting

Objective

Determine the annual threshold income for a typical market rate rent for the selected district(s) for one- and two-bedroom apartments. Compare estimated rents to apartments.com, CCIM InSite/Moody's and HUD data for rent for analysis.

Rationale

Determine if the target area can support the proposed market rate apartment project.

Resources

- HUD Fair Market Rents (use current year)
<https://www.huduser.gov/portal/datasets/fmr.html>[Apartments.com](https://www.apartments.com)
- [Apartments.com](https://www.apartments.com)
- CCIM InSite/Moody's Analytics Apartments for Plano Allen McKinney (PDF)
- CCIM InSite/Moody's Analytics New Apartments New Construction for Plano Allen McKinney (Excel)
- STDB/ BA Market Research

Steps

1. Estimate the average or median market rate rent (review HUD and CCIM InSite/Moody's, apartments.com as sensitivity reference for market rate rents for 1- and 2-bedroom apartments) for McKinney ZIP 75071 (Rents, TX, Collin County, 75071). Check apartments.com for current McKinney market rate rents.
2. Use the CCIM InSite/Moody's PDF Report Apartments Plano Allen McKinney to obtain market rate rent data, vacancy, and operating expense dollar amount or ratio.
3. Determining threshold income (refer to residential module 8- Threshold Income): noting median income, less taxes, is disposable income.
 - a. Gross up base rent to estimate threshold income.

- b. Add expenses, annualize, gross up by percent spent on housing, gross up by after tax percentage to estimate annual threshold income (for Excel workbook input).
4. Compare threshold income to study area income.

Note Your Findings

Note: Sample answers are based on data Q1 2022.

1. Compare calculated threshold for market rate rents within market rents to CCIM InSite/Moody's Reports rents the subject area?
1BR \$1,411; 2 BR \$1,809
2. How does market rent from CCIM InSite/Moody's reports compare to HUD (current year) affordable and apartments.com rents for the McKinney market? Are they valid comparisons? (Zip Code 75071)
2022= 1 BR \$1,540; 2 BR \$1,830
3. What asking market rate rent would you recommend for McKinney 1 & 2 BR units today?
Answers vary
4. Will the targeted threshold income support one and two-bedroom rental units in the study area and why?
Answers vary

End of Task



Task 12-7: Study Area Analysis

Objective

Conduct a comparative analysis to determine which of the selected districts is the best for the client's project.

Rationale

A comparative analysis can help to determine which of the districts best meet client's criteria.

Resources

- STDB/BA comparative analysis (in STDB maps)
- STDB/BA: McKinney District Map
- Comparison Report_5 Districts (Excel)

Steps

1. Clear Map > Import McKinney-districts zip file, select the districts in the study area.
2. Use selection tool to select the districts. This time run a comparison report of the selected districts.
 - a. Run for variables: Total population, population density, Median Income, Renter occupied, current year rent, shelter.
3. Compare Districts and Discuss Districts comparison results considering the previous data and the current comparison report of the districts.

Note Your Findings

Note: Sample answers are based on data Q1 2022.

1. Which Districts best meet the client's criteria for apartment development?

Collin Crossing and or Medical District

End of Task



Task 12-8: Estimate Project Value & Market Land Value

Objective

Perform an Estimated Project Value and Highest and Best Use (HABU) Analysis using the target yield to estimate land value the project can afford.

Rationale

Estimate Project Value to be used to estimate project land value via Highest and Best Use Analysis. It tests sensitivity as to land value and determine if our estimated land value is within market parameter

Resources

- Client Assumptions
- Module 3 - Highest and Best Use Analysis
- Financial_Threshold_Income Project Value_HABU (Excel)

Steps for Estimated Project Cost

1. Estimate GSI, Apply Market Vacancy, less operating expenses.
2. Apply DCR to estimate ADS, calculate loan PV then gross up by LTV to estimate project value.

Steps for HABU

1. Use estimated project value to amortize the project cost over its estimate economic life by target yield.
2. Calculate the annual amortized payment.
3. Deduct annual amortized improvement payment from the gross NOI to achieve an NOI attributable to the land.
4. Capitalize the land residual NOI by the target yield (discount rate).

Note Your Findings

Note: Sample answers are based on data Q1 2022.

1. What is the calculated estimated land value?

Answers will vary (should be around \$1M+ using Q1 2022 data)

End of Task



Task 12-9: Client Recommendation

Objective

Create a PowerPoint presentation supported by your analyses results that determines whether there is demand for apartments in the study area and meets given client criteria. Identify the best district.

Rationale

Analyses results should provide supportable fact-based data/information derived from your market analysis to communicate recommendation to your client and their real estate committee.

Resource

- Results of completed analyses
- PowerPoint

Steps

Prepare a five-minute PowerPoint presentation which supports your recommendation for the target district(s) to be delivered to the client's real estate committee.

Note Your Findings

1. Note your recommendation on market:
 - a. Demand
 - b. Absorption
 - c. Rent levels for one & two-bedroom units in McKinney
 - d. Median threshold income for the target District(s)
 - e. Is there one district better than the other districts? Why?
2. Does the opportunity exist for a walking or transit-oriented community, with supporting linkages, employment node(s) and supporting lifestyle(s) for apartments? most errands require a car. Why?
Car dependent, most errands require a car
3. Will the selected district(s) support apartment development without being a walking or transit-oriented community?

Answers vary

End of Task