11

Case Study 3: Industrial Properties

In This Module

THE CCIM INSTITUTE

Advancing the Commercial Real Estate Profession

Case Study 3: Industrial Properties

Case Study Goal

The goal of the industrial case study is to apply the CCIM Strategic Analysis Model to select the best location for a new distribution center. Consider three alternative properties which could possibly meet the needs of 1) potential prospect to be a lead tenant and or 2) determine the feasibility for a new development based on current supply and demand.

Case Study Objectives

- Delineate a target market area map using fifteen (15) mile radius from prospective user's location using STDB mapping tools.

- Create a layered map showing three (3) sites under consideration to determine if they are in the target market area using STDB mapping tools.

- Determine industrial demand based on 30-minute drive time from a given location using STDB.

- Determine the total cost of each site on a cost per net useable square foot after any demolition or reduction for unusable area of the site using provided assumptions.

- Discuss the political and legal issues for an identified location to identify a potentially go or no-go decision for an identified location.

- Determine what the developer can pay for a site based on future potential rental rates, absorption and demand for a given submarket site using a given rent comparison report.

- Conduct a Financial Feasibility Analysis to determine the required rent and land acquisition cost to achieve targeted investment yield.

- Prepare your site recommendation based on the strength and weakness of an identified site including both qualitative and quantitative facts identified in completed tasks.

Case Study 3: Industrial Property

Client Background

Your client, Centric Solutions, develops industrial buildings to lease and/or sell once stabilized. This client typically likes well located sites with good access in or near large industrial parks. This market is under served for product of this type and there is demand. The client will be able to address other needs created by today's changing dynamics (e-commerce), lack of developable land at affordable prices and overall lack of product.

Centric Solutions wants to identify a site that will be enticing to a prospective user. The user is looking at all options to accomplish the following:

- Locate approximately 500,000 sf in a single facility for manufacturing and warehouse use.

- Site should be within 15 miles of their current facility in Plano, Texas 75074.

- Be able to deliver space at costs lower than competing area markets.

Client Situation

Centric Solutions is looking to buy a 40-65-acre site for a future development in the Dallas area in effort to meet their prospective user's needs. Three sites are being considered and you and your team(s) have been asked to analyze the sites then present your findings.

- Site 1: McKinney, Texas; intersection of Wilmeth Road and US-75

  - 65 gross acres
  - Zoned Agriculture, but within an existing industrial park
  - Site issues: small creek running along southern side and encompasses approximately five acres, which is not developable
  - Cost of site is $2.40 psf on gross acreage

- Site 2: Mesquite, Texas; intersection of Interstate 635, Mesquite, and US-80

  - 50 net acres
  - Zoned Agriculture near a residential and industrial developments
  - No site issues
  - Cost of site is $2.80 psf on net acreage

- Site 3: Valwood/Farmers Branch Submarket; intersection of President George Bush Turnpike and I-635)

  ◘ 40 net acres
  ◘ Zoned Industrial
  ◘ Site Issues: two vacant, but functionally obsolete, 200,000 sf warehouse buildings with cost to demolish both; cleanup site is $250,000, this is in addition to cost to acquire the site
  ◘ Cost to acquire two buildings is $20.00 per building square foot

The prospective user's considerations and expectations include the following:

- The existing labor of user Company live within 10 miles of Plano, Texas, but the key personnel live in Plano, Texas.

- The user wants their facility to be within one 500,000 sf structure.

- The user desires to lease space for ten years with two options to renew for five years.

- Rental rate and operating expense costs are important.

- Legal and Political considerations and potential impact on time and money to be discussed and evaluated

The developer considerations and expectations include the following:

- Attracting the 500,000-sf user is desirable as it would reduce lease-up risk of overall project. Assume the user will need the building in 18 months.

- Assume each site will have a building coverage ratio of 50 percent. Assume the developer will build out the site to its full capacity.

- If not able to attract the prospective user, then choose the site that would give the best chance of leasing the site to other prospects given supply and demand dynamics.

- Assumed the cost of construction for buildings will be $50.00 per square foot. Cost for the site will be in addition to the construction cost and total cost will impact rental rates.

- Targeted developer profit is:

  - 15% mark-up on costs

    and

  - 1.5% spread between market cap rate and cost cap rate

Scope of Analysis

Each site has its own unique characteristics, which are different from the others. The developer will measure the pros and cons of each site to determine where they would be comfortable to invest in a new development. You will determine the viability of your assigned site for a new development.

Location and Site Analysis

Task 11-1: Target Markets for Prospective User

Objectives

- Delineate a target market area map using fifteen (15) mile radius from prospective user's location using STDB mapping tools.

- Create a layered map showing three (3) sites under consideration to determine if they are in the target market area using STDB mapping tools.

Rationale

The STDB mapping advanced options provides for an analysis of the desired area where the targeted user would consider locating their new facility.

Resources

STDB website https://www.stdb.com/

Use STDB to create two maps in this task, 15-mile radius around existing site for this task, then layer 30-minute drive time for each site location. The objective is twofold: (a) to determine the impact that increased commuting times will have upon the workforce of the prospective user; and (b) to compare the amount of available labor within a reasonable commuting distance of each of the three alternative sites.

Description of Steps

1. In STDB select Business Analyst panel

2. Load map and then zoom into the Dallas/Fort Worth metropolitan area (can double click or use Census Tract zoom level).

3. Drop a pin at the intersection of Jupiter Rd. and PGBT (in Plano, TX)

4. Draw a 15-mile radius around the above noted intersection.

5. Drop a pin for each of the 3-sites listed in the Client Situation narrative.

6. Create a 30-minute drive time polygon for each site.

Note Your Findings

1. Do all the prospective sites fall within the 15-mile radius?

_____
End of task

Task 11-2: Prospective Sites and Industrial Demand Analysis

Objective

Use STDB to determine the industrial demand within a 30-minute drive time from each of the three sites under consideration to determine how they compare for proximity to industrial using employees in the following sectors:

- Manufacturing

- Motor freight transportation

- Wholesale trade – durable goods

Rationale

The STDB hex bin tool enables the developer to determine the demand potential within a 30-minute drive time of each site. This is vital information to locate a site that has the best potential to attract demand.

Resource

STDB.com to create hex bins

Description of Steps

1. Center map on Dallas-Fort Worth and zoom to census tract level

2. Click "Add Data" then click "Web Maps and Layers"

3. Click "STDB Map Site" and then click " 1.5 Mile Hex Bins (2023)"

4. After the hex bins load onto the map, click "Create Maps" then "Smart Map Search"

5. Select "Browse All Variables" and then click "Map Layers"

6. Use the drop-down menu to search for and select:
   a. "Manufacturing Businesses"
   b. "Transportation/Warehouse Business"
   c. "Wholesale Trade Businesses"

7. After each of the variables have been selected, you should see the 3 selected variables in the upper right-hand corner of the screen and then click "Apply"

8. After the variables reload onto the map, a filter tool will open on the left side of the screen.

    a. For Manufacturing Businesses, adjust the left slider to "20"

    b. for Transportation/Warehouse Businesses, adjust the left slider to "10"

    c. for Wholesale Trade Businesses, adjust the left slider to "20"

Note Your Findings

1. Based on your analysis, do any of the sites have a locational advantage for being in closer proximity to a higher concentration of existing industrial using businesses?

_____

_____

_____

End of task

Task 11-3: Truck Drive Time Analysis

Objective

▪ Delineate a delivery service area for a 30-minute truck drive time from a given location using STDB mapping tools.

Rationale

The STDB tool provides a visual analysis of the distance a truck can travel from a given site. This is a useful tool to demonstrate to the prospective user the service areas they can cover compared to other location options.

Resources

▪ STDB.com

▪ Executive Summary Report (static report for backup)

Steps

1. Start with map in Task 11-2

2. Remove 15-mile radius

3. Select Reports to run an Executive Summary Report including each study area

Note your findings

1. What is the total population that can be serviced within a 30-minute drive time for each of the three sites?
   _____

2. What is the total number of households that can be serviced within a 30-minute drive time for each of the three sites?
   _____

3. Based upon customer access, does one site have a clear advantage over the others, and why?

   _____

   _____

End of task

Financial Analysis

Task 11-4: Land Basis Cost by Site

Objective

Determine the total cost of each site on a cost per net useable square foot after any demolition or reduction for unusable area of the site using provided assumptions.

Rationale

Understanding the total cost basis in each site including land, building, financing etc., is needed to determine the amount of rent needed to cover all the front-end costs.

Resources

- Client Situation set up information

Description of Steps

1. Determine the allocated land cost / SF of building for each of the three potential sites.

2. Determine the net buildable square footage for each of the three potential sites.

3. After the initial 500,000 SF building is constructed, determine how much additional building square footage can be constructed on each of the potential sites.

Note Your Findings

1. Which is the lowest allocated land cost/SF of the three potential sites?

   _____

   _____

   _____

2. Which of the three sites has the highest additional building area that could accommodate future potential construction? (Determine net sf for each

site.)

_____

_____

_____

3. Which of the three sites has the highest investment risk if the remaining
    excess land area isn't developed in the future? Why?

_____

_____

_____

4. Which of the three sites is likely to have the greatest challenges during the
    construction process? Why?

_____

_____

_____

End of task

Political and Legal Analysis

Task 11-5: Political and Legal Issues

Objective

Discuss the political and legal issues for an identified location to identify a potentially go or no-go decision for an identified location.

Considerations:

- Zoning (city website)

- Incentives (economic development corp.)

- Roll back taxes (central appraisal district)

- Environmental conditions (state environmental district)

- Site plan approvals (city planning department)

Use case set up information. Can do additional research at suggested resources.

Rationale

Political and legal issues can be detrimental to the project, add cost or time. You will need to know and understand political and legal issues so you can mitigate the effects or go on to the next deal.

Suggested Resources

- City Website (Zoning information, Long Range City Plan can be found here)

- TCEQ Website (Texas Commission for Environmental Quality) Environmental guidelines etc. can often be found here.

- Economic Development Corporations for each site, web site Key contacts for answers to questions like what incentives might be offered.

- Seller comments (questionnaire completed about land before sale) This is typically included in the Phase I Environmental Report and is an opportunity to gain knowledge and about a site.

Description of Steps

Divide the resources and conduct your research. Discuss your findings with your group, then note your findings.

Note Your Findings

1. Are there any environmental or regulatory issues to be considered prior to

   property purchase?

   _____

   _____

2. What incentives could be requested from the city by the purchaser?

   _____

   _____

3. What are potential political or legal barriers?

   _____

   _____

   _____

End of task

Market and Competitive Analysis

Task 11-6: Market Conditions Analysis

Objective

Determine what the developer can pay for a site based on future potential rental rates, absorption and demand for a given submarket site using a given rent comparison report.

Rationale

Current and future rental rates, absorption and demand can be used to help determine what the rents will be when this proposed project is ready for occupancy. The forecasted rental rates, absorption and demand are critical in determining what you can pay for the site. Each market has conditions and price points, and you may be able to pay more for land in one area than you could in another.

Resources

▪ Market InSites Distribution Warehouse Reports for the 3 submarkets

▪ Alternative resource: Google or other Internet sources to search for specific information about the targeted industrial property

Description of Steps

1. Identify the average asking rent for each submarket

2. Identify the average absorption rate and new deliveries

3. Consider the amount of Tenant Improvements being offered and paid for by the Landlord.

Note Your Findings

1. What is the average rent for the selected submarket?

   _____

2. What is the average vacancy rate for the selected submarket?

   _____

3. How does the asking rent growth rate trend over the past 12-months for the

selected submarket compare with Dallas overall?

_____

_____

_____

End of task

Financial Analysis

Task 11-7: Financial Feasibility Analysis

Objective

Conduct a Financial Feasibility Analysis to determine the required rent and land acquisition cost to achieve targeted investment yield.

Considerations:

- Current market

- Vacancy and absorption rates to estimate changes to the future market conditions over the next 24 months for the local industrial submarket.

- Determine the viability of a new development considering the cost to build, expected returns and what we think the market will provide in terms of rent.

Rationale

Conducting Financial Feasibility Analysis includes creating a front-door/back-door analysis spreadsheet to determine the financial feasibility for each site. A front-door approach determines how much market rent will be required to achieve the targeted investment yield. A back-door approach determines how much can be spent on land acquisition to achieve the targeted investment yield.

Resources

- Financial Feasibility Analysis Excel workbook

- Market InSites Distribution Warehouse Reports for the 3 submarkets

Description of Steps

1. Complete the financial analysis including all costs including 12-month lease up and carry cost.

    a. From Task 11-4: Input the Land Cost / Net SF for the selected submarket into the Development Budget Input (tab 3 / line 5) worksheet.

    b. From Task 11-6: Input the current average asking rent and average vacancy rate for the selected submarket into the Income & Expense Input (tab 4 / lines 2 & 3) worksheet.

    c. Press both "Calculate" buttons in Cost Mark-up Feasibility (tab 7) and the Rent Constant Feasibility (tab 8) worksheets.

Note Your Findings

1. Based upon the results in the Sale Proceeds (tab 10 / line 13), what is the Pro Forma Profit for your site?

    _____

2. Based upon the results in the Sale Proceeds (tab 10 / line 14), what is the Net Profit Mark-up on Cost for your site?

    _____

3. Based upon the results in the Sale Proceeds (tab 10 / line 15), what is the Net Rent Constant Spread for your site?

    _____

4. Based upon the Decision Chart (tab 11), what is the best hold versus sale strategy assuming a 12% reinvestment rate?

    _____

    _____

End of task

Task 11-8: Your Recommendation

Objective

Prepare your site recommendation based on the strength and weakness of an identified site including both qualitative and quantitative facts identified in previous tasks.

Rationale

With the notation of the pros and cons of your site, you can sell the Developer on all the attributes of your site which will be the best alternative to buy and develop.

Resources

Collective findings from Tasks 11-1 through 11-7.

Description of Steps

1. Identify the attributes of the site including industrial demand, rental rates and tell the story of why this is the best site to attract the potential user.

2. Using the metrics derived in previous tasks, tell the story of how this site would be an excellent site for potential unknown users.

3. Using the market knowledge of the area and subsequent cost structure to explain how well this project would lease if the Developer were to buy and build the project on a speculative basis.

Note Your Findings

Include the following:

1. What is the final solution you have arrived at based on the analyses conducted?

    a) Industrial submarket and why this is the best overall location

    _____

    _____

    b) Recommended site that best meets the desired location criteria and why

    this is the best choice

    _____

    _____

2. How does your solution address the prospective user's expectations and needs?

    _____

    _____

3. What is the associated risk for each site if you don't attract the prospective user to your site?

    _____

    _____

End of task