Market Analysis for Simsbury Commons Shopping Center

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Updated for consistency with Fanning, 2nd edition 2014.

Step 3: Demand in the Trade Area

Overall objective: As a commercial real estate appraisal assignment, this study performs market analysis for a property: Simsbury Commons, an open air community shopping mall located at 498-540 Bushy Hill Road, Simsbury, CT 06070 (Subject Site, SS). This appraisal is undertaken for investment analysis (purchase of the SS) and for evaluation of collateral for a mortgage loan.
SESSION OUTCOMES

- the ability to evaluate the demand for proposed or existing land uses (e.g. anchor stores)
  - measure the number of customers by demographic segment (e.g. singles, families, empty nesters, income range, occupation and/or place of work)
  - determine what customers care about - what do they want and what are their needs?
    - search the internet for survey research relevant to similar demographic segments
      - advanced search for market data
      - limit searches to spreadsheet files, to government or to education sites
    - select relevant information from government studies of consumer expenditures
      - locate potential customers, typically by residential neighborhood or workplace
      - apply database management (DBMS) functions such as query, select, and join, to find customers within trade areas.
- use ratio methods to estimate demand
  - estimate square footage per capita of the subject property type
  - evaluate presence or absence of retail saturation
  - compare to sales per capita estimates
- reconcile demand estimates from different methods

Thesis for Demand at Simsbury Commons

This thesis is based on the analysis presented in the rest of this document and on information presented in Step 1 and 2.

- Simsbury Commons had negative growth in demand during the decade 2000-2010
- Demand may grow slowly until 2015, but strong growth is unlikely.
  - CoStar estimates of expenditures generally appear too optimistic
  - CoStar may underestimate expenditures for transportation and apparel.
  - Any assumptions about retail sales growth should be stress tested
- Site visits revealed low foot traffic visiting in-line stores and Borders. The movie theater, Walgreens, BB&B and Super Stop and Shop are doing well.
- EMS moved around the corner. Can SC compete for the the demand segment that wants luxury goods?
- Borders went into bankruptcy and chose to close the store at SC. This is a red flag and it leaves a large hole at SC – a new anchor store is needed. What will be the target demand segment?
• The “ribbon of retail” containing SC is successfully drawing customers from surrounding areas: there is a retail surplus, not a leakage.
• Simsbury Commons is already doing a good job of attracting customers for the “food at home” category with its Super Stop and Shop.
• Walgreens is appealing to the health care segment and convenience goods.
• Simsbury Commons needs to increase its appeal to discount shoppers for apparel, furniture and appliances.
  o They could build on BB&B and Bob’s which are oriented towards these segments.
  o Dress Barn might make a good tenant.
• Electronics (TV and sound equipment) is another segment that might be suitable for SC’s new anchor.

Analysis following the outline for Session Outcomes

measure the number of customers by demographic segment (e.g. singles, families, empty nesters, income range, occupation and/or place of work)\(^1\)

And

locate potential customers, typically by residential neighborhood or workplace

• The basic unit of demand is a household
  o A household is defined as people living in a housing unit (for example, one person living in an apartment is a single person household)
  o Roommates form a household
  o A married couple form a family household
  o Single adults may have children living with them in either family or nonfamily households

• Step 3.1: Demographic trends. See Tab 3.1 in Fanning_Step_3.xls
  o Fanning Step 1 established that the Farmington Valley submarket is growing faster than the rest of the county, the metro area and CT
  o That is, the submarket is in the path of growth which is moving into the suburbs
  o But, CT has a slowly growing population

• Click the tabs in Fanning_Step_3.xls to see details of the following demand side analysis
  o Tab 3.2. CoStar estimates that population in the 3 to 5 mile TA is growing at 0.5% to 0.8%/yr.

\(^1\) In the Ling-Archer text, these are the questions: “who are the consumers?” and “where are they now?”
A Note on Method: We believe that CoStar’s 2010 numbers are estimates, because demographic data is not available for 1 to 5 mile rings.

- They are more like forecasts than hard numbers.
- Most forecasts are extrapolations of past trends. This appears to be true of CoStar’s demographic forecasts.

- We used Census data for broader geographic areas (Hartford county and Connecticut state) to check the accuracy of CoStar.

- These comparisons suggest that population in the 3 and 5 mile rings are growing at twice the state and county rate and that Population in the 1 mile ring is growing roughly in line with the state and county.

- Next we checked CoStar for internal consistency by comparing Costar estimates of household growth to population growth. See Tab 3.2.

- The growth rates are roughly consistent: .3 to .8% per year for population vs. .5 to .9% for households.

- But the differences of .1 and .2 percentage points per year suggest noise in CoStar data.
  - Household size may be increasing during the recession (e.g., adult children live with parents) so it is likely that households grow more slowly than population.
  - CoStar estimates suggest the reverse.

- Overall, we conclude that the Census data revealed by our web search supports CoStar’s estimates of size and growth of population in the one mile ring around the SS.

- But, the broader rings appear to have aggressive (possibly high) estimates of population and household growth.

- CoSTar forecasts to 2015 appear to be simply extrapolations of trends from 2000 to 2010. We accept this as a reasonable method.

- Step 3.3(1)&(2), lines 28 and following: median household income in the PTA

- Negative estimates for growth, 2000-2010 are reasonable, given that 2000 was a high year and 2010 a low year.

- Income estimated by CoStar in the 3 and 5 mile rings is growing about 1.5 percentage points more slowly than the state and county rate estimated by Census.

- A slower growth estimate gives conservative numbers for our SS, which is a good thing. But, more research is needed on the reasons for this slower growth.

- Average annual growth estimates do not account for economic cycles or disruptions (i.e. the housing crisis). The further out the projection, the less confident we are in the accuracy of the growth estimate.

- Is the turn-around in income growth projected by CoStar for 2015 reasonable?
  - Depends on global, national and regional growth
  - Need stress testing
  - Step 6 addresses this in more detail
Determine what customers care about - what do they want and what are their needs?

- This will be recognized as one of Ling-Archer’s five questions
- Fanning_Step_3.xls , Tab 3.3(1)&(2)addresses this question
  - CoStar has detailed breakdowns of expenditure by category.
  - For example, about 20K HHs live within 5 miles of the SS, spending $315 each on reading material per annum: This implies that Borders is competing for a $6.3M market.
- Problem: CoStar data may contain substantial inaccuracies, especially when it breaks down expenditures at this level of detail. See Attachment #3 for an evaluation of expenditure by category.
- Summary of conclusions from Attachment #3.
  - Conclusion #1: generally, CoStar expenditures may be too optimistic
  - Conclusion #2: CoStar may underestimate expenditures for transportation and apparel.
  - Conclusion #3: We need other data to evaluate the reasonableness of the CoStar expenditure data. E.g., try to find surveys of household expenditures for households with socioeconomic status similar to those around Simsbury Commons.
- Conclusions from evaluation of CoStar and survey information from:
  
  http://www.visualeconomics.com/how-the-average-us-consumer-spends-their-paycheck/

  - Simsbury Commons is already doing a good job of attracting customers for the “food at home” category with its Super Stop and Shop. Also Walgreens is appealing to the health care segment and convenience goods.
  - Simsbury Commons needs to increase its appeal to upscale shoppers for apparel, furniture and appliances. They could build on BB&B and Bob’s which are oriented towards the bargain shopping end of these segments.
  - Electronics (TV and sound equipment on Tab 3.2(3 and (4)) is another area where SC could compete for a substantial demand segment within 5 miles. This is part of the high income demand profile of the trade area.

- Site visits provide a direct check on how well the SS is meeting demand
  - i.e. does direct observation confirm that the SS is providing goods and services that customers care about?
  - We followed protocols in Attachment 1 and 2
    - A “bag count” of customers at the SS to see what percentage are buying
    - A traffic count of customers and parking at the SS
  - Results raised red flags
    - Sunday 11/21 Clapp at SC, 4-5pm: bag counts 6/10; 8/10, 5/10.
      - Traffic was low. Hard to complete 3 groups of 10 in an hour.
      - I did not count the people coming out of Borders with coffee as a bag.
• Central lot was 95% full, peripheral near Borders 50%; near BBB, 20.
  • Main parking is full, but probably because of the movie theater, not shopping
• General impression: low traffic – Movie theater doing well, but stores are not.
• **Main conclusion** (red flag): Customer traffic at Borders (an anchor store) and, especially, in-line stores appeared to be low. We now know that Border’s chose to close this store, indicating that SC was not competitive for this segment.

**NOTE TO STUDENTS:** Site visits to your subjects are important for a Bag Count and Traffic estimate. Also, some websites allow current estimates of traffic on nearby roads at particular times of day.

**Use the internet as a source of information NOTE:** our search results may differ from yours as the web is dynamic

• First advanced Google search
  o "average us household" "consumer spending" filetype: xls
  o This did not yield a usable result in the first 20 results
• Second advanced Google search
  o "average us household" "consumer spending"
  o This yielded the following useful site:


**Apply database management (DBMS) functions such as query, select, and join, to find customers within trade areas.**

• Done when we queried CoStar database.
  o For example, we asked for data on demographics within a 5 mile ring around our SS.
    • For the database join see Fanning_Step_3.xls Tab 3.2(3) and (4). US data has been joined by category.

**Use ratio methods to estimate demand**

• See two tabs: sales per household Sales per capita
  o These calculations are based on Fanning's discussion in chapters 8 and 13.
• The study team estimated leakages/surplus in the primary TA:
  o i.e., is the TA drawing shoppers in from outside the area (surplus)?
  o Or, are more expenditures “leaking” outside the TA?
  o Conclusion: there are surpluses. See Attachment 3 for details.
• Qualification: while surplus makes sense, numbers could also be inflated
  o The reason: CoStar data is not true retail sales.
- Consumer spending can include many categories such as travel, health and education not relevant to the SS.

**reconcile demand estimates from different methods**

- The study team will defer this analysis until steps 5 and 6 (i.e., we punt)
- Reason: this is when we can do stress testing and pessimistic/optimistic scenario analysis
  - At with these later steps, the different methods are useful to indicate a range of possible outcomes

**Attachment 1**

**Protocol for a “Bag Count” of Activity at a Retail Center**

The basic idea is to count the percentage of shoppers who are carrying bags with merchandise that they may have bought in the stores in the shopping center. This document outlines procedures for conducting a bag count.

1. Count the first 10 people you see coming out of stores. Do not count those who are:
   a. going into stores or getting out of their cars.
   b. coming out of movie theaters or restaurants.
   c. coming out of grocery stores.
   d. coming out of bookstores with coffee cups.
2. Count a family group as one person.
   a. Do not count children separately from their parents.
   b. Count a couple as one person. **Rationale:** One member of the couple may be carrying all of the bags while the other carries the baby. Or it may simply be that one is carrying all the bags.
3. Groups of friends should be counted as separate people.
   a. Some judgment may be required to determine whether they are groups of friends or a family group.
4. The best time to count is on a Saturday from 10:00am to 3:00pm. Weekdays 4:00pm to 6:00pm and after 7pm are ok too.
5. After counting a group of 10, write down the number carrying bags containing goods purchased.
   a. Be sure to record the day of week, the time of day and the date.
   b. Count at least 5 groups of 10 and write down each one.
   c. You can then calculate an average of the 5.
   d. If you accumulate at least 10 of these counts, you can construct a histogram of the results, provided that they are comparable in terms of day of the week and time.
6. Standards (poor, fair, good, excellent) to be developed separately.
 Protocol for a Count of the Amount of Shopping Activity at a Retail Center

The basic idea is to estimate the volume of traffic at the center. When doing the bag count (a separate protocol), you should be able to count 5 groups of 10 in 50-60 minutes. Next you can estimate the percentage of parking spaces that are empty.

1. From the bag count, write down the number of groups of 10 exiting shoppers that you can count in a 1 hour period. Write the total number down along with the day of week, time and date.
2. Pick a row of parking near the stores.
   a. Count the total number of spaces and the number empty. Write down these two numbers.
   b. Repeat this process for 5 rows that are near shopping.
3. Now count a row distant from the stores (peripheral parking) and repeat this process for 5 such rows.
4. The percentage of spaces empty will be compared to standards to be developed separately.
Attachment 3

Evaluation of the Accuracy of CoStar’s Breakdown of Expenditure by Category

See Fanning_Step_3.xls, Tab 3.3(3) and (4) for the breakdown of expenditure by category

- All the detailed numbers on income and HH type at this level of geography (one, three and five mile rings) are based on the 2000 Census
  - So the hard numbers are far out of date
  - Some statistical methods are used to estimate expenditure patterns for 2010, and forecast to 2015.
  - We checked population, households and income – much easier numbers to estimate – and we found some inaccuracies: see discussion above of Tab 3.2(1 and 2).

- What are the strengths and weaknesses of these statistical methods?
  - The study team spoke to a CoStar rep, and he said that all the data comes from ESRI – historical and forecasts
  - An exception is the traffic count data, which is from Datametrics.
  - The CoStar rep we talked with could not find any information on the forecast methods used by ESRI.
  - ESRI is not forthcoming about methods used in developing their forecasts.
  - The study team found similar problem with InfoUSA expenditure analysis.
  - See Cell B82 on the step 3.2(3 and 4) sheet for more on our critique of CoStar data
  - Conclusion #1: The data vendors are not accountable for the accuracy of their data
  - Conclusion #2: The forecasts are only suggestions, and should not be treated as fact.
  - Conclusion #3: We need other data to evaluate the reasonableness of the CoStar expenditure data

- Could there be a “wizard behind the curtain?” – Let’s try to find out by using other data to evaluate the reasonableness of the CoStar expenditure data
  - If so, let us hope that he/she is more capable than the Wizard of Oz
  - The study team gathered Bureau of Labor Statistics (BLS) data on expenditures by category for a typical US household
  - See columns M and N, especially rows 84-93 for detailed information.
  - The BLS numbers say that about 41% of income is spent on the selected categories of goods and services whereas CoStar says the percentage is 52%
    - Red flag: CoStar may be overstating

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2 “The Wizard of Oz is a wizard because ... well, er, uh ... because of the things he does.”
• However, the SS market is much higher income than the typical US HH.
• Much more is spent on shelter at lower income, so some of the 11% difference is explained.
• Another 3 percentage points of the difference might be explained by expenditure categories included (?) by CoStar but excluded in BLS totals.
• It makes sense that the SS demographic is inclined to spend more on education, day care, furniture and appliances versus other categories.
• However, the very big differences for transportation and apparel are questionable.

  ▪ Conclusion #1: generally, CoStar expenditures by category may be too optimistic
  ▪ Conclusion #2: CoStar may underestimate expenditures for transportation and apparel.
  ▪ Conclusion #3: try to get more data here, but a full evaluation is beyond the scope of this report.
Use CoStar to Evaluate Leakage and Surplus Parameters

The leakage or surplus idea is discussed in Fanning’s Step 3. For Simsbury Commons, we estimate that the leakage/surplus parameter is 1.32

1.32 means that stores in the TA attracts shoppers from outside the TA. I.e., there are enough attractive stores within the TA that 32% more dollars per household are spent inside the TA than one would predict just from households and income. This is a “surplus.”

Similarly, a leakage occurs if the parameter is less than one. A parameter of .8 means that households within the TA spend 20% of their purchasing outside the TA.

The number in cell F33 is calculated by comparing typical household spending inside the TA to a broader area. The 1.32 compared the average household spending in the 1 mile TA to the average in the Avon, Canton and Simsbury towns.

Qualification: while surplus makes sense, numbers could also be inflated because CoStar data is not true retail sales. Consumer spending can include many categories such as travel, health and education not relevant to the SS.

To evaluate this number, we will compare expenditure per household for much larger areas around the SS, and for several widely spaced locations.

Next we will implement this approach

Implementation: Using CoStar to get HH spending and number of HH’s within 10 miles. This is a broader market relevant to leakage/surplus: 10 miles includes more than the subject site TA.

This is done by using a radius search. Start with a property analytic search, choose retail and set a minimum square footage.
For SC, we chose 110,000 as the minimum sf because we wanted to compare expenditures per household for a few widely spaced large shopping centers.

Go to Step 2 and Input the SS address

Choose 10 miles as the radius

Get results

Click the demographics tab and choose 10 miles for the demographics. The result:
Here is an analysis of these results. We use the New Britain avenue address as a benchmark shopping center for comparison to SC:

<table>
<thead>
<tr>
<th></th>
<th>SC</th>
<th>10-mile</th>
<th>5-mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ttl Consumer Spending</td>
<td>$3,600,000,000</td>
<td></td>
<td>$887,000,000</td>
</tr>
<tr>
<td>household</td>
<td>121,000</td>
<td></td>
<td>19,453</td>
</tr>
<tr>
<td>Spending per HH</td>
<td>$29,752</td>
<td></td>
<td>$45,597</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1445 New Britain Ave</th>
<th>10-mile</th>
<th>5-mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ttl Consumer Spending</td>
<td>$6,100,000,000</td>
<td>$2,343,000,000</td>
<td></td>
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<tr>
<td>household</td>
<td>237,000</td>
<td>104,592</td>
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<tr>
<td>Spending per HH</td>
<td>$25,738</td>
<td></td>
<td>$22,401</td>
</tr>
</tbody>
</table>

Leakage/surplus estimates supported:
Method 1 = SC/NB Ave, 10mi  
1.16 = 29752/25738
Method 2 = SC 5mi/SC 10mi  
1.53 = 45597/29752

**Conclusion:** This analysis supports the 1.3 number developed in Step 3. However, the Hartford county number suggests parameters as low as .72. It may be more attractive to go to NYC, Boston or the Casinos to shop.