

**From: Zhengyu Tina Zhu**

**Date: Nov. 18, 2012**

**Course: PPD 631 GIS**

**Subject: Research on Retail Properties and Investment Opportunities**

## **BACKGROUND**

The Levered Asset Principal Investment Company (LAPINCO) was founded overseas in 1971 as an infrastructure contractor for multinational oil services companies. The firm established operations in Boston, Massachusetts in 1979 as a real estate developer specializing in the redevelopment of commercial properties located in densely populated urban areas. Over the past three decades, LAPINCO has evolved into a leading private real estate investment management firm with a proven track record of delivering above-average risk adjusted returns to capital deployed.

Currently the firm manages over one half million square feet of commercial property located in some of the most sought after property markets in the nation. As a fund manager, our investment classification is "Opportunistic/Value Added" due to our focus on the redevelopment and adaptive re-use of existing properties facing serious challenges in transitioning markets. LAPINCO is headquartered in Southern California with offices in Los Angeles, Orange County and Boston.

## **PROBLEM DEFINITION**

Till the Year 2012, LAPINCO itself has the ownership of a portfolio of 450,000 sq. properties in Los Angeles County, Orange County and Boston. As an ambitious fund manager, the company is negotiating over several financing deals to pour more money in. As a result, LAPINCO plans to expand its investment in commercial real estate (CRE) in Los Angeles County, especially in retail real estate investments because of its prior experience. Currently, the company has 14 retail properties in Los Angeles County.

In order to make wise investment, the company wanted to get a better idea of the market, specifically in:

- What factors should be taken into consideration when doing property acquisition?
- The company has a list of preferred locations (see appendix) to narrow down investment targets. Could the analysis provide any information to support, reject or revise the list?
- Summarize from the current properties.

Using GIS could help answer these questions for its powerful and flexible geographic setting. Location is the key for analysts to seek investment opportunities in real estate industry. Using different mapping layers to present geographical and demographic factors not only enables analysts to organize and visualize the information, but also helps the clients understand the results.

## METHODOLOGY

Retail real estate investments consist of shopping malls, strip malls, and other retail storefronts. In some cases, the landlord also receives a percentage of sales generated by the tenant store in addition to a base rent to incentivize them to keep the property in top-notch condition.

A small-scale real estate investment company like LAPINCO mainly targets at multi-level mixed-use buildings and retail storefronts. A typical example is the Fish Building in the Old Pasadena (See Picture on the right). The Fish Building was completed in 1929, and in 1960s, the late Mr.



Navasargian, the founder of LAPINCO saw the opportunities in Pasadena, which was still a blight area at that time. He purchased and redeveloped the Fish Building, and now it becomes one of the most profitable properties as well as historic landmarks in the area. LAPINCO let out the first level and basement for retail, and the second and third floor for offices.

The investment knack of Mr. Navasargian is unique, and proved to be successful. He went to the site, talked to the local people, and kept observing. His wisdom in real estate investment is inherited today, which is to do demographic and geographic analysis to forecast future profitability, and hopefully to construct a universal investment model.

A good retail real estate investment is not only represented in high profitability, but also the stable lease relationship between the owner and the tenant. In other words, the key of success also lies in how to make the retailers profitable and stable. Due to time and data limitation, I select the following factors to analyze based on the particularity of Los Angeles County.

### **1. Convenience to Public Transit**

Convenience to public transit has always been a golden rule for retail properties. Take a look at the famous shopping centers around the world- the 5<sup>th</sup> Avenue in New York, Ginza in Tokyo, and Nanjing Road in Shanghai- all of them are within walking distance to public transit. Preferential locations attract both local residents and customers outside the neighborhood, especially travellers, which in the end help keep the retailers in good business. In addition, I want to look at metro transit and bus transit separately to see the difference. I suppose metro transit adds more value than buses because metro is apparently faster and more punctual.

### **2. Public Parking**

Of course, Los Angeles County has its own characteristic. Largely different from other metropolitan cities, Los Angeles County is diverse and complex. It has mountains, deserts, beaches and islands. It is urban and suburban. Among all the cities, only Los Angeles metropolitan area is served by an extensive public transit system. The expanse and poor public transit make the county one of the

most car-populated urban sprawl in the world, with roughly 1.8 cars per household. Therefore, accessibility to public parking becomes a plus when considering retail property investment.

### **3. Retail Cluster**

The benefit of retail cluster is self-evident. Retail cluster attracts a lot of customers. In addition, in most cases there are comprehensive amenities and transit system around existing retail cluster. More and more retailers move to the place, share the customers, and join in the fierce business competition. After all, locations where retailers cluster attract competitive and stable tenants.

### **4. Local Factors**

As real estate investments involve local residents, tenant, local government and etc, some local factors in each city should be taken into account. Here I select two crucial ones: local rent control policy and population density.

In the next section, I will discuss how I conduct the analysis based on the assumptions made above.

## **DATA**

Based on the assumptions in the prior section, I chose the following data to conduct the analysis: current property information, Los Angeles County cities map, public transit maps, shopping centers list, and client's preference list.

### **1. Current Property Information**

In order to summarize the current retail investment of LAPINCO, I created an excel spreadsheet of property information, containing the address, specific floor, square feet of the area, effective rent, lease length and affiliated parking number if applicable.

### **2. Los Angeles County Cities Map & Boundary Map**

City is the lowest administrative level in California. Different cities have different local policies. That is why I chose cities map as the base map. As a base map, cities map shows city boundaries as well as city names. However, the cities map from census bureau does not have accurate county boundary. That is why I also need the boundary map.

### **3. Public Transit Station Maps**

I decided to use the public transit stations by Los Angeles Metro, because it is the largest public transit provider in Los Angeles County. The maps include all bus stops, and rail stops of all six lines, which are blue line, green line, Expo line, gold line and RP line.

### **4. Shopping Malls and Centers in Los Angeles County**




The list not only contains the chain shopping centers like Westfield all over the county, and famous shopping district like the Third Street Promenade in Santa Monica, but also contains small local


shopping districts, like fashion district in downtown LA. There is a column in the list shows the number of stores in each retail cluster. (See appendix A)

### 5. LAPINCO's Preference list

LAPINCO has a location preference list to narrow down the investment search. Of all the cities in Los Angeles County, they are interested in the southern part of the county, excluding North Antelope Valley, Agoura Hills, Los Angeles, and Newhall (see appendix B). The filter criteria are based on rent control policy, low population density and inconvenience to public parking.

After obtaining the data from various sources, I manipulate and symbolize the data with GIS in order to help answer the questions by the company.

CONTENTS	DATA	MANIPULATION	SYMBOLGY
LA County Cities	Los Angeles County Subdivisions.shp Los Angeles County Boundary.shp	Clip	Label the name of each subdivision, and create masks for better visualization.
Current Property	CurrentProperty.xls	Geocoding the data and present the properties on county map	 Bar chart to showcase the average rent of retail properties in Los Angeles County, which is \$1.92/mo (in light blue) versus the property rent per month (in dark blue).
Shopping Mall	ShoppingMalls.xls	Geocoding the data and present the properties on county map	<ul style="list-style-type: none"> <li>★ 30 - 66</li> <li>★ 67 - 120</li> <li>★ 121 - 189</li> <li>★ 190 - 237</li> <li>★ 238 - 300</li> </ul> Use graduated stars to symbolize the scale of the retail cluster (number of the stores)
Client Preferred Cities	LA County Cities.shp A list of cities	<ol style="list-style-type: none"> <li>1. Add a new field PREFER to the attribute table of LA County Cities.shp;</li> <li>2. Select the cities in the preferred list;</li> <li>3. Use the field calculator to set the selection fields as 1, and others as 0</li> </ol>	 Use graduated colors to make the preferred cities beige and others white.
Top Locations Walking Distance to Rail Stations	BlueLine.shp GreenLine.shp GoldLine.shp	<ol style="list-style-type: none"> <li>1. Create buffer for metro stops of each line;</li> <li>2. Set linear unit of distance =1</li> </ol>	 Use red to showcase golden investment

	Expo.shp RP.shp ClientPreferredCities.shp	mile (1 mile=20-30 min walking); 3. Merger the buffers of each line; 4. Intersect RailStations Buffer and ClientPreferredCities to create the top locations map.	locations: the area within walking distance to metro stations as well as in the preferred cities
2 <sup>nd</sup> Locations Walking Distance to Bus Stops	BusStop.shp ClientPreference.shp	1. Create buffer for each metro line; 2. Set linear unit of distance =1 mile (1 mile=20-30 min walking); 3. Merger the buffers of each line; 4. Intersect BusStops Buffer and ClientPreferredCities to create the secondary locations map.	 Use pink to showcase secondary investment locations: the area within walking distance to metro stations as well as in the preferred cities

*Date Source:*  
*Metro GIS Data*  
<http://developer.metro.net/introduction/gis-data/download-gis-data/>  
*Los Angeles County GIS Data Portal*  
<http://egis3.lacounty.gov/dataportal/>  
*TIGER, US Census Bureau*  
<http://www.census.gov/geo/maps-data/data/tiger.html>  
*Major Shopping Malls in Los Angeles County*  
<http://www.laalmanac.com/economy/ec15.htm>

Following the data manipulation table I mentioned above, I thereafter created the map: LAPINCO Properties and Investment Opportunities in Los Angeles County. The base map is subdivision map of Los Angeles County. According to the client’s preferred locations’ list, I divided the LA County subdivisions into while color and beige color. White represents excluded cities, and beige represents targeted cities.

Among targeted cities, I highlighted top locations (in mars red) and secondary locations (in pink). As I assumed in the prior session that convenience to public transit becomes a plus for retail properties investment. Therefore, top locations are those areas within walking distance to rail stations while secondary locations are those within walking distance to bus stops.

On the very top of the map is the layer of retail cluster. Each blue star represents a shopping center in Los Angeles County, which includes shopping malls, streets, and district. The size of the blue star symbols different number of stores within the shopping center, which shows the scale of retail cluster. As shown in the legend, some smaller shopping centers may have only 30-84 stores while largest ones may have more than 247 stores. Retail cluster help verify the effect of public transit, and at the same time becomes a plus for future investment.

Current properties of LAPINCO are symbolized in blue bar charts. Light blue represents the average rent per sq. per month in Los Angeles County, which is \$1.92. Dark blue represents the rent for the property. Clients could see the different by such symbolism. In addition, on top right side of the map is the table for current properties with LAPINCO. The table includes tenant name, tenant type and rent per sq. for reference.

## **CONCLUSIONS**

### **Current Properties**

Most of the current properties are in the top locations in Pasadena (walking distance to metro stations). The average rent/sq per month is \$2.91 while the average rent for the whole Los Angeles County is \$1.92. Among these properties, the average rent for first floor storefronts is \$4.33. 80% of the lease length is equal to or more than 10 years. That is to say, the current investment yield is stable.

### **Public Transit Matters**

Almost 90% of the shopping district falls in assumed preferred locations, either working distance to metro stations or bus stops. This means public transit convenience does play a key role in retail location determinations even in the county of Los Angeles where the average number of cars per household reaches 1.8.

There are some golden locations where enjoy the public transit convenience, and are close to retail cluster as well. When look at the map, I recommend the company to consider making future investment in the intersect part of South Bay Cities and Inglewood, middle Compton, northern Downey-Nowalk, and southern Long Beach.

### **Rail Vs. Bus**

Contrary to my assumption, there is no apparent difference between the factor of bus stops or rail stations from my analysis. Reason behind this is 1. The influence of the two public transit methods are intertwined because of the geographical overlapping; 2. The metro coverage in Los Angeles County is concentrated only in metro area that is not representative enough to the whole county. In this case, because of the special LA public transit design, there is no big difference between convenience to metro or bus. As long as it is within walking distance to either public transit stations, the property will be upgraded.

### **LA Metro Area?**

I understand that LAPINCO took the city of Los Angeles out of preference list because it is extremely difficult and expensive to park. However, my analysis shows the unparalleled strengths of downtown Los Angeles: much more intensive public transit than anywhere else; retail cluster, and mostly importantly office cluster. Of course, parking and traffic are always severe issues to consider when doing downtown LA property acquisitions.

## **LIMITATIONS**

Due to time and data limitations, I understand that my study is not comprehensive or even accurate.

### **1. A small sample of current properties**

Because LAPINCO is a small company, and its properties spans in the states, the small number of properties cannot represent the overall retail properties. That is why I used the retail cluster information, trying to find out the relationship between public transit and retail success. A better analysis will input more retail property information, both good investment and bad investment to get the conclusions.

### **2. Unfamiliarity with the County**

A better set of investment suggestions is based on the familiarity of geographic and demographics of the county, just as what Mr. Navasargian did- go to the site, talk to the local people, and keep observing. My unfamiliarity might lead to thinking incomprehensiveness and misleading.

### **3. Lack of interviews**

My assumptions for the analysis are solely based on the interviews with LAPINCO. Therefore, these assumptions are biased. A better way to do it is to reach out to more stakeholders, like brokers, retailers, customers and business associations.

### **4. Lack of other local information**

Despite of local rent control policy and population density, other factors might also influence the retail market, for instance, security, air condition, and etc. The local factors I analyze in this report are mainly based on LAPINCO preference list and indirectly relied on retail cluster. More detailed local information are required if the company wants to look at a specific area.

## Appendix A: Shopping Malls and Centers in Los Angeles County

Address	Stores	Opened
<b>Large Shopping Centers</b>		
889 Americana Way	60	2008
W 10th St & Ave P	140	1990
Crenshaw &	66	1947
La Cienega, San Vicente, Beverly Blvds	160	1982
Burbank Blvd & I-5	117	1991
Santa Monica, Constellation Blvds, Century Park West	170	1964
Slauson & Sepulveda	189	1975
Hawthorne Blvd, Sepulveda, Fashion Way & Madrona	300	1961/1975
2700 Colorado Blvd	65	1973
14006 Riverside Dr, 17	237	1962
Central & Colorado	222	1976
Third & Fairfax	52	2002
Lakewood Blvd, Clark Avendlewood St, Del Amo	225	1951
I-605 (San Gabriel River Fwy) & South St	180	1971
Tampa at Nordhoff	168	1971
Van Nuys & Roscoe Blvd	56	1955/2003
6100 Topanga Canyon Blvd	56	1973
Azusa Ave & Colima	184	1974
400 S Baldwin &	161	1974
Broadway @ south end of	120	1980
Paramount Blvd & Pomona Fwy	152	1985
Artesia & Hawthorne Blvds	140	1985
20700 S Avalon & Del Amo	87	1973
Lakewood & Firestone Blvds	137	1958
Topanga Canyon Blvd & Victory	230	1964
Magic Mt. Pkwy & Valencia Blvd	292	1990
San Bernardino Fwy at Vincent Ave	209	1975
10800 W Pico Blvd & Westwood Blvd	150	1985
<b>Medium Shopping Centers</b>		
Rodeo Dr	30	
Rodeo Dr & Dalton Way	30	
Third St between Burbank & Verdugo	30	
100 Citadel Dr	30	
Sepulveda @ Park Place	30	
Hollywood Blvd & Highland Ave	30	
Promenade North between Third St & Sixth St	30	
Shoreline Village Dr	30	
Fashion District, Ninth & Main	30	
Fashion District, Centered Ninth & Los Angeles	30	



317 S Broadway	30	
8800 Venice Blvd	30	
Fashion District, Centered Ninth & Main	30	
Wall St & Seventh St	30	
East First St between San Pedro & Central	30	
3250 W Olympic Blvd	30	
928 S Western Ave	30	
Melrose Ave & Highland Ave	30	
845 N Alameda St	30	
Fairfax Ave & Third St	30	
6081 Center Dr	30	
Fashion District, Santee St & Olympic Blvd	30	
Third St between Fairfax Ave & Orlando Ave	30	
Civic Center Way & Pacific Coast Hwy	30	
Sepulveda Blvd & Rosecrans Ave	30	
Colorado Blvd between Pasadena Ave & Arroyo Pkwy	30	
280 E Colorado Blvd	30	
Berth 75 & 79	30	
Third St Promenade between Broadway & Wilshire	30	
Main St between Pico Blvd & Navy St	30	
Montana Ave between Seventh St & 17 <sup>th</sup> St	30	
Ventura Blvd & Sepulveda Blvd	30	
100 Universal City Plaza	30	
Ocean Front Walk btwn Rose & Washington Blvd	30	
Greenleaf Ave & Philadelphia St	30	

For those medium shopping centers, I do not have the exact number of stores. Therefore I used the average amount of stores: 30.

## Appendix B: Client's Preferred Locations in Los Angeles County

Targeted Cities	South Antelope Valley
	San Fernando Valley
	Pasadena
	Upper San Gabriel Valley
	Southwest San Gabriel Valley
	East San Gabriel Valley
	Southeast
	Santa Monica
	Whittier
	Downey-Norwalk
	Compton
	Long Beach-Lakewood
	Inglewood
	South Bay Cities
	Torrance
	Palos Verdes
Excluded Cities	North Antelope Valley
	Newhall
	Los Angeles
	Agoura Hills-Malibu