

JAMES A. GRAASKAMP COLLECTION OF TEACHING MATERIALS

II. CLASSES AT THE UNIVERSITY OF WISCONSIN--MADISON

- N. Business 857/757: Seminar in Feasibility and Appraisal Reports--Seminar in Feasibility and Real Estate Counseling as of Spring of 1981
 - 3. Lecture and Discussion Notes
 - b. Small collection of student notes

Business 857
Feasibility
Monday 3-7-88
Charles F. Davis

Test This Wednesday !

Housing Market Analysis

Traditionally: Segmented by Demographic Studies

- * Income
- * Family Status
- * General Preference for SF Detached or Multi-Family

This scaled the project for the market and the developer.

Today: Starts with demographics, and spends most of it's time on micro-research, realizing the segmentation is a matter of:

- (1) Lifestyle
- (2) Worksytyle of the Family
 - * Husband and Wife double career
 - * Traditional Family
 - * 1 Breadwinner household, 25% of all households

Most residential market research is very micro-market studies.

Ex. 24 unit apartment = >\$1MM investment, supported with \$200,000/yr in sales, only 24 customers. If you have a 1 and a 2 unit, you are talking of 2 submarkets, each with 12 customers in it. Furthur mods. such as mezzanines, etc., you are furthur subdividing.

The best data comes from those already in the business, operating:

- * Subdivisions
- * Multi-Family Projects

Initial Studies: Those that had a predetermined base of people to survey and analyze their patterns of response.

Ex. Multi-Con: Successful Multi-Family Developer
Did all of their market reasearch with post cards.

- 2 Basic Questions asked of prospects:
 - (1) What do you like most about the model you just saw ?
 - (2) What do you like least about the model...
- 2 Basic Question asked of those leaving their projects.
 - (1) What was the principle reason you moved out ?
 - (2) Was it something wrong with the project that made you move out ?

Most Marketing of Residential Homes behins w/ these 2 questions.

- (1) Like most about your present accomodations ?
- (2) Like least about your present accomodations ?

Pattern of features people like most define the competitive standard.

- * Minimum set of attributes to be competitive, threshold of their interest so far as your project is concerned.

Overcoming inertia: (inherent in all of us)

- * competitive edge that determines the success of the project w/r/t Absorption Rate, and Capture Rate that will be achieved

Competitive Edges: 4 Basic Questions Research Looks At

(1) Can this Res. unit contribute to Efficiency with which I live and occupy space ?

- * Gourmet Kitchen
- * Controlled Storage
- * Floorplans and Furniture Fit to Modern Styles and patterns

(2) What does it do for your Self-Esteem

- * Kaplan, Berkely, Eichler tract home study, most folks buying a second home had to have an attribute they could talk about with their friends showing arrival...solarium, jacuzzi.

(3) Security

- * subtle and sensitive

(4) Physical Comfort

- * Climate controlled
- * Landscape marketing-Best use of sun, climate, breezes

These 4 elements in some combination represent the marketing theme of housing today.

Some developers are too direct ! IE, do you feel insecure ? Therefore, they put a guard shack out front.

You need to have a balance between the elements. You can market a prestige address, but if the finish quality is inferior, it won't work. Don't overrespond to one single element of the four elements.

How Do You Get This Type of Information

(1) Telephone: Poor, can only ask bean counting questions

(2) Mail Surveys: Can qualify people for locational preferences, space requirements, income, brs, baths, patios, etc. Can put across limited graphic info with floorplans that you can't do on phone. Mental imagery is tough over phone. Ex. Rowhouse, SF detached mean many things to different people- tough to do mentally, uncontrolled response. Mail surveys can send pictures of these.

(3) Focus Study Groups: Panel of 8-15 drawn at random to fit the profile of the basic consumer group you think you can reach.

- * age
- * income
- * area of town

common bond may be they all shop at the same market, and often researchers select them at the grocery, and ask them to participate in a study group on design etc.

Advantages of a Focus Study Group:

1. Allows for interaction of interviewer and interviewee
2. Much more detailed maps and photos can be shared of project concept or alternative concepts. Begin to discover subtle but significant dicotomies.

Ex. 4" shiplap siding preferred to 6" with same floorplans
Members are identical otherwise in age, family status, etc. Colonial vs. Contemp. vs. Modern are three distinct markets.

The percentage distribution comes out much more clearly with the focus study groups.

3. Allow you to observe how a member responds under peer pressure

Ex. A rational one-on-one answer may be altered under the dynamics of the group situation because you often get a broader perception of the situation, like loft BR not being private, but others use it as an artists loft. Alternative uses discovered for same things. Market it differently with different furnishings.

Focus Groups repeated 3-4 times-

- * to reach different demographic profiles
- * Reach other parts of the city
- * to confirm conclusions of what first group provided

Alot of planning before the study groups meet:

- * What are the questions we need to address ?
- * What can we present (materials) ?

Advertising/Marketing firms have used this approach for products, advertising themes, for many years, new for Real Estate. 2 way mirrors and taping setups in a controlled atmosphere.

Focus Groups can focus in on very specific types of choices.

Ex. Certain Architectural Styles presented...Tamarak Trails Presented 4 different types of colonial styles, from New England Colonial to Savannah Colonial to California Contemp. with saltbox shapes, to NW Seattle Style colonial.

Code of form, texture and material that gave folks continuity with their historical ownership patterns in the past, and was a very contemporary product inside. This was not discovered by accident.

Focus Groups Commitment:

- * 2 Hours
- * \$20 or nothing for their trouble

Issue grading sheets and tour them past the competition by bus, and then feed them lunch, and go over their grading sheets to get a consensus on what they liked. Compare reesults with your projects.

Use 2 groups for ongoing development.

- * Those who already own
- * Prospects who haven't bought yet. Don't mix the two !

Key:

(1) Choose group that by their current status in life would make them interested in what you are talking about.

Ex. Elderly

Ex. First Time Buyers

Then they are delighted to be asked their opinion !

(2) Make the presentation entertaining, flattering, and educational.

(3) Generates a preferred prospect list as a by product. Have them send a post card to the study conductor, (not developer), if they want more information. This is kept seperate from the focus group materials.

To the degree that you make them feel they have an impact on the design proposal, you can really lock them in.

Commercial Uses of Focus Groups: (Retail and Office)

Much more difficult because people feel they are sophisticated enough and they know all there is to know about retail space and office buildings, particuarlly if it is tied to a coffee clutch cultural event. Easier to get the manager to participate in a coffee clutch discussion on residential than to talk with him about the workplace.

* Talk with the Indians quietly on a Saturday, with the girls in the office, office mgr., department heads, down the ladder of authority. Not the fellow who signs the lease.

Ask them what doesn't work well, and you get the low down on the inefficiencies of their office layouts...coffee machine in wrong place, no brown bag room...etc.

Developer then takes this and makes pitch to the big cheese. If indians find out about the proposal, he is dead meat and can't back off. Use to trap upper echelon into what they should be doing anyway.

Housing Market Research Has Moved From:

- * Aggregate Research
- * Survey Research
- * Motivational Research

Bringing people on the site is critical, and get them to overcome your inertia. What questions do you want to ask ?

- * What do you see first ?
- * Who do you talk to first ?
- * Bullet Messages ?
- * How much can people absorb at one sitting ?
- * Are people buying price, location, prestige ?

Ex. \$5000/quarter page in major paper, 25 people come to prospect equals \$200/prospect to get them buy. What is the point of sale method of communication. Most builders train their own sales force.

Also concerned with colors, patterns, and textures that people can relate to. What would you improve on if it were your home ?

If you discover a pattern that turns people off, then change say a dark kitchen and can sell one more prospect, you will increase your profits, and reduce your selling costs dramatically. Replace bad features, don't resist because it will cost you money.

Alot of \$ spent researching the point of sale motivation of the product. RE is its own media, w/ customer standing in the middle of it. The whole unit taken together is the medium.

Merrill Lynch defines market value as that at what it would sell for minus costs to get it to the Merrill Lynch neutral.

Train people to qualify and subaggregate that customer via casual conversation. Ex. Who is watching the kids. Ex. I suppose you always get Saturdays off.

Don Samuelson: Pines of Perrington, where he repositioned the entire project by overcoming the objectionable architecture with IVY and pine trees and the subsidy aspect by pushing the full price units.

Was dieing in foreclosure. Put in spruce floors. W/D in a separate shed. (drywall wet when on second floor, also alot of noise.) Changed the codes with a very limited budget. Changed the image of what the people's friend's who would live there.

RE B57
3-2-1988
Lecture Transcribed and Outlined
by
Evan D. Harrison

The handout for today is a from the home builders, and has a lot of useful comments for this course. One of the more intriguing concepts is that development feasibility is concerned with where the market will be 60 months from now. Give the lead time of a project, that is probably not a bad statement of the problem. Given the necessity of acquiring sites, designing, building, and advertising the product, etc., the major problem for marketing research is anticipation 60 months from where you start. You may find some of the speeches relevant, also the comment that RE salespeople are under trained and under educated for what they do. He points out that they're selling an environment that will change the life of each inhabitant. It is a move away from their roots and habits and they are selling the most expensive house in the history of housing in terms of price per square foot, and at the very least the average price is equal to the cost of two Mercedes, or six Cadillacs, nine Pontiacs, or 15 light trucks. Yet they have far less info. at their fingertips than anyone who sells any of those products. So it is not surprising that real estate brokerage is one of the most obsolete areas of marketing today. It is extremely vulnerable to replacement by an alternative system, both in terms of information gathering and information dissemination and the technical training of the sales force. If you think of how many people are sitting around in Madison trying to sell a house every two months and trying to survive on that, as opposed to having a more effective clearinghouse of information and more effectively trained people why they could sell a couple of houses a week and replace about 60% of the brokerage personnel and put them in a solid line of work. There is probably no line of work more obsolete than the single family brokerage business unless it is the single family appraisal business.

The subject matter is real estate market segmentation especially with respect to office buildings. We have already talked about the kinds of market research sectors, those that will be displaced, those that need to move, and those that will be newly created, and economic modeling really refers only to the latter segment of the market. We've also indicated that the market in office buildings can be segmented further by the type of building they're in, the location, parking facilities, architectural styling, the efficiency the building can be adapted to tenant fit in terms of office modules and related elements.

Further segmentation is in terms of the package that is provided to the tenant in terms of services as opposed to space and related facilities. One type of package is to focus the office space on a particular type of tenant. There is a reasonably successful chain in the west which leases two-three floors of a major office building, builds a major legal library into the middle of it then leases to a group of small legal firms who could not afford a law library or

librarian or subscription to a variety of law periodicals. They lease the space in gross at a low net cost, taking on the responsibility of tenant finish, then they market in effect an information network to small law firms who would otherwise find that a very significant fixed cost relative to a limited number of attorneys. They may expand that with word processing equipment and so forth.

A second type of service would be a pooling of word processing and communication services, starting with a phone answering service, a secretarial service, and word processing equipment, a fax machine, a computer network with a central processor, so they can market to the small tenant at a very high price per square foot. You can market at \$3-4 per sq. foot per month to a manufacturers agent or a RE broker just getting under way or someone who owns his own little RE investment firm, and for that exorbitant rent he gets a package which enables him to avoid paying a salary to a secretary and doing all the book work and maintaining all that equipment which is a lot less expensive collectively. That is being used more and more to market to the significant expansion of one and two person service firms whether they be engineers, sales agents, or entrepreneurs pursuing their own investments and what have you.

A third type of service function, maybe related to the second, but generally goes further and provides a labor pool to certain types of tenants, and may even go into an industrial area where Kelly Services or Manpower Inc. will provide a support. Let's say a direct mailing service that has very cyclical needs for clerical help to get out major mailings and so forth may be a little erratic will locate in a building where a temporary service might provide those services on demand, and there may be others in the same building who might have need for direct mailing, packaging, stuff for distribution and Christmas kinds of mailings and so forth, and as a result the service that is provided is one of handling all the payroll functions and allowing you to adapt to a very cyclical labor environment, generally unskilled, but perhaps including computer entry personnel and so on.

The fourth kind of specialty may relate to people with a common advertising and marketing base; certainly the trade marts that began primarily for retailers like the classic one which Trammel Crow started and Portman picked up on were really wholesale marts in which furniture dealers or gift shop suppliers would be able to display their ware and become a central wholesaling point-- a sort of semi sales office semi retail outlet. But now they're moving into more of the software. One of the hottest trade marts now is a computer trade mart where the various computer operations have essentially a display not only of their hardware but also their software, and have a resident service center - trouble shooter -- the kind of people you contact instead of calling up on the telephone and saying help you can go out there and he'll paw through the manual with you and hopefully find a solution to your problem.

One of the new hot markets is called a service center where you might have the kind of person who does your income taxes, and someone

who repairs vacuums, watches, cameras, and so forth and some other domestic kinds of domestic repair and support services. You go up to a drive in window which serves the entire entity and you can drop off your watch for repair or your income tax documentation etc. and they are tagged and shuttled by the business management to the appropriate business in the building. Someone is proposing such a center on the west side of Madison. The assumption is the people make enough of these kinds of trips that they can consolidate it at one location and there would be a synergistic relationship. The building management would do the pick up window and perhaps guarantee you would get your stuff back.

As a result you are getting that kind of compartmentalization within commercial structures, where it isn't the space component that is significant, but the service related component that comes with it. Particularly in the case of employment and office equipment services, medical libraries, legal libraries, that type of thing it is generally a high fixed cost variable revenue type of service that provides significant economies to the tenant, not to mention the release from managing all those sorts of things. You can't appreciate unless you are in a small business how much time you waste doing management kinds of functions. We estimate in our own little shop that Jean spends two to three days a week doing management kinds of things rather than productive billable kinds of things. Whether it is negotiating with the state auditor of unemployment compensation or managing payroll accounting or income tax accounting or just getting the guy in to fix the computer because it goes out when you are doing 10,000 mailings. That's a major element. For a small business with 2-3 people to be able to discard that whole problem by going into a building that provides that at a fixed cost the nominal or even significant increase in the rent is a minor item. So to market office space they are now tying it to a whole range of service which would be proportionately too expensive for the small office occupant to do efficiently himself, and that becomes a whole new segment of the market that wasn't there very long ago.

Another significant element in segmentation of the office market has really been accessibility to the automobile, or combination of accessibility to the automobile in relation to the truck, and so forth. You've probably seen a whole range of products, let's say a U-shaped building which at the outer perimeter presents a handsome contemporary appearance in which there is a small office area and 5-6 parking spaces directly in front with a sign out front not only for the customers who might visit that location but for the sales force which might work out of that location, and the back side, perhaps 2/3 of the area is essentially a warehouse-distribution facility with one dock door and one flap entry at the back - truck port court yard at the back side of the building inside the U. An extremely popular combination of office space for district sales or servicing plus the warehouse space necessary to be supportive of that industry. A blending of high-finish office area and high-ceiling warehouse type area. That's one of the hottest products on the market because the rent per square foot you can get for that type of space is significantly higher than the cost of creating the space. It is an

attempt to get more spread so you have a higher leverage factor on the building. Any type of service component you add to the revenue stream is generally incorporated into the net operating income to the property, not unlike the hotel, at a capitalization rate that is closer to that of real estate than that of a small business. And this inability of the lender to distinguish between income to the space and income from the services being provided with the space, which should be capped at the much higher rate of small business management means a much higher financial leverage on that service-product combination, and therefore a higher probability of being able to mortgage out on the property. Hence this effort to combine and obfuscate the collateral value to the real estate versus the value created by management. When appraisers are able to sort that out accurately and properly, there will be a good deal of deflation in the values of many properties that are around in the office market today. But of course appraisers are not encouraged to do that because they are hired by the borrowers and the bankers just want to cover their tracks anyway.

Q. re day care centers. A: Proper method would be to determine the rental value of the center's space and the business would have to stand on its own. If the developer wants to observe the form, he'll overcharge on the rent and understate the income of the Day Care center. The impact of that is the assumption that the space will absorb more quickly and be able to rent at a somewhat lower rent because he had that facility to be able to absorb the employment problem of the tenant (where D. C. is in larger building) and if he's drawing tenants from closer in town where day cares are established, he can nix the move because employees could no longer stop in on the kids. It should help his absorption.

Q re parking. A: It depends on whether we are talking about basement parking or surface parking. If you have a rule that you get one free parking space for every 3,000 s.f. of rentable space, or is it flexible - every man for himself - what is your rental policy. It is obvious that you build the parking to support the rental space. Some of the rent is for parking and some for a desk, but it is still space. It is very dangerous for the appraiser to distinguish between parking and structure value. the question is are you getting space or some kind of machine or people kind of help. The basic element of RE is space-time.

Let me give you a couple more examples. The rental value of a parking ramp is not what is taken at the window, but what you could lease the whole ramp for to an operator. That's the RE value. Everything you get between getting PK to come in & run it for you and what you actually get is service income.

Another example. A couple of years ago we were called in to suggest what to do about the observation floor of the John Hancock building. They bring people up at \$3-4/s.f. to look down on the cloud ceiling. It was being argued that their tremendous gross from that was part of the value of the building. Not so. The question is what would it rent for as RE space, and that's the RE income. The

spread between that and the return to the marketing entrepreneur who is managing that and paying all the tour busses to show up and so on is management income.

Keep in mind what's the space time product, and what ever is paid over and above that is for the management abilities on that particular project. It's a really tough problem in RE which has been deliberately smudged over. Developers typically find RE cap rates in the area of 9% to be the lowest. You wouldn't buy a service business at a 9% cap, 25% maybe, but not 9. But on the other hand you can't borrow money any cheaper than on a mortgage. If you can get a loan at all on a business, they are going to want an arm and a leg, but for RE, the rate is whatever market rates are for that type of property. So in the industry they have learned to smudge that over, and attribute the income from restaurants and bars to the hotel RE, and that has now been carried over to a variety of other types of space as well.

The parking issue relative to office buildings is this: different types of tenancies require diff. levels of parking support. Some tenants need the parking for their own sales forces and their own in house clerical support unit. One reason for locating the business is to increase productivity so employees are not out circling the block looking for a parking place or running out pumping nickels into a meter or simply being distraught as to whether their car is safe or not. It is better off in the ramp than out in the street where it might be run into by the snow plow and so on.

The second type of parking issue relates to the nature of the customer base of the client. If you are a pediatrician, you need 8-10 parking spaces per doctor. Because of the very nature of the way medicine is practiced some are coming in for their shots w/ a cursory comment from the Dr., and he has 3-4 kids lined up in a row and goes from one office to another. So by the time you have them ready for his inspection, then the visit, and the treatment he tells the office nurse to provide, then you have to get them bundled up and out the door, and you may have 8-10 kids and their parents per Dr. in the office at a time. A very high, intensive utilization. Restaurants, for example, You can have an office building which is just fine, but you bring a restaurant into an office bldg., part. if it draws from elsewhere, and you really screw up the parking ratio. Some office buildings are going to have to select tenants which draw a relatively small amount of parking demand. For example the Park Regent building has a very small amount of parking for its medical tenants and its a stinker of a problem. One problem is that students drive in and stay all day. How do you weed them out? If you have tickets to stamp, you might scare away clients. Or if you tell your medical staff they have to park three blocks away in what they perceive as a crummy neighborhood, they're going to get restless and go work for somebody else on the west side who has plenty of parking. It's a really tough problem. finding tenants who have a really low parking reqmnt. Other buildings may have a surplus of parking and may use that as a marketing device. A building in Milwaukee drew in two key tenants initially by giving 65% of the

parking ramp to 50% of the space. If you really have extra space, that's a real advantage.

The other parking issue is how accessible is it. Canazeros project in New Orleans called Canal Place has a number of high end shops - Nieman Marcus is the anchor in the first floor. The premise is that folks will come in and shop immediately adjacent to the French Q. and so forth. The fact is they don't come because of the spiral ramp. The spiral ramp is such that the ladies - I don't mean to sound chauvinistic, this is their report - can't seem to crank it over on the Cadillac and hold it there, and the sides of the ramp are done in every possible color of imported auto paint. So you have segmented your market by the accessibility of your parking ramp. Others set up the module wrong, so to get two cars between the columns means nobody gets out of the car. For employees to park in some kind of difficult parking ramp doesn't matter, but for a customer it means he goes elsewhere. The nature of the parking begins to segment over the long term nature of the project the kind of tenant likely to go there.

When you begin talking about the office market, whether it is oversupplied or undersupplied, is extremely misleading until you have segmented it out in terms of what is truly a competitive market for tenants whose customers come to them or what is suitable for organizations like accounting or lawyers where the majority of people employed in the building are not drawing customers into the building. So there is probably not such a thing as the office space market. It is one of those terms of agglomeration which has lost all sensitivity to the critical information about what you are marketing.

One other comment on office buildings and their tendency to specialize. It obviously successful to create some element of monopoly for an office building - the law library, etc. One of the most successful gambits is giving away space to the premier men's club - luncheon club in town. If there is any one thing in the downtown area that you could do to secure the tenancy in your office building is to have the Madison club, etc., there where people can see and be seen and communicate. the State of Wisc. Investment Board has a building in San Antonio which would be a disaster except the petroleum club is on the top floor. the Pet. club is so superior in terms of finish over the rest of the building you can't believe it. We gave it to them free, so it occupies 8% of the building, and we have essentially 92% occupancy, which in S. A. is pure gold. We have another one in Nashville which is the same thing. They got the luncheon club site in exchange for two floors in their building. You can't do any better than that.

Another critical way of locking in is to have a connection to the courthouse of statehouse or whatever. A good example is the Tenny building here in town, but it has a new connector to the First Wisconsin bank building - the #1 building in town, so they get rent of \$14-15/s.f. just because of that connector.

A third type of monopoly is quite often a view of that which is regarded as quite important in the community. In Norfolk the premier building has a view of the yacht club, and every office is a corner office because they are laid in diagonally and it creates a little diamond shaped window in the corner of each space. 100% occupancy.

Other buildings are linked to some kind of transportation facility. For example in Chicago the Northwestern Depot building is very successful because of its linkage to the folks who sign leases. Monopolies are created by that type of structural-functional edge.

One last item is the reciprocity characteristic of many types of services business with respect to the major tenant who is able to force its law firm, investment banking firm, title co., insurance agency, accounting firm, all get dragged willy-nilly into the building. So it comes as no surprise that the F. Wisc. Bldg. has Arthur Anderson and Robert Baird and Co. A certain irony is that accountants must state that they have no sig. econ. interest in the firm they are auditing. Wouldn't it be embarrassing to be paying \$18/s.f. and lose the account. You could get \$12 space on the edge of town. Those nuances of vested interest don't seem to affect the market very much. the Ed Meese school of business ethics.

Let's begin to establish a housing market. H. Mkt. segmentation has trad. been done on age and income cohorts. but those have been found to not control the marketing of any project. In the aggregate they may control the gen. pattern in the community, but most projects are working in a highly segmented area in terms of both amenities and timing as to when they come on the market. As a result, housing marketers have shifted to psychographics. Very narrowly defined lifestyle patterns with a time dimension that defines the # of units to be req. during a rel short window in the market. A subdiv. that comes on with 60 lots over 3 years is only looking for 20 consumers at a time. A 24 unit apt. bldg. that costs \$50,000/unit is \$1,200,000 in capital, and we're talking only 24 customers who have to pay min. \$200,000 gross/yr. to make it work. that is not a toothpaste or food sale business, but an extremely unique market, where they are paying 9-10000/yr. With elderly housing you are taking 40-50% of their annual 24-30,000 revenue. You are looking for a very discreet # of people who are willing and can afford to do that. You are asking them to buy the equiv. of 2 Mercedes and change all of their prev. living patterns. They have to move from where they were and go through a whole series of acclimation, break a series of old habits and make a series of new habits, and given the basic level of insecurity, inertia, and affection most have for their current residences, that's an incredible marketing job. Rational-functional may be the initiation of the housing change, but the decision is really irrational-emotional, and that is why the researcher has to get at the hot buttons you can push. And that is why the housing market is distinguished by psychographics more than in any other market.

Real Estate 857
3-23-88
Transcribed by
Evan D. Harrison

Announcement re RE club. Todd Mansfield from Disney Dev. Friday at Edgewater. Field Trip will be back Saturday about 6-7 p.m. Jewisky at JM looking to expand staff. Next week will be elderly housing with Jean Davis and an architect.

SHOPPING CENTER ANALYSIS

The basic classic Riley's model of shopping centers was sq. ft. retail area in the numerator divided originally by distance, s^2 in the denominator. A refinement on that was time to travel to the shopping center. Different types of shopping centers were typically given conventional driving times. A supermarket convenience center perhaps a five minute driving time, a community shopping center 10-12 minutes, a regional center 20 minutes, and that would presumably provide an index of draw. Since that time developers and researchers themselves have expanded to a somewhat more elaborate model which nevertheless had its origins in measuring diversity of goods with a proxy of square foot of area and access with a proxy of time. Today we want to take that formula and expand it to be more in tune with current feasibility. Even developers, the Mel Simons and Taubmans and so forth still work on a relatively crude basis for measuring the retail draw of a site, and aside from accumulating the demographic profiles etc. tend to simply take that basic data base and restructure it to suit particular customer profiles of major tenants they pursue. They anticipate the tenants themselves will do a market trade area study which is germane to their specific type of business retail outlet line, because they can use analogue models which reflect how they are doing in other stores in similar centers, and the analogue model is the most reliable from a retail trade standpoint for measuring the sales which can be captured on a particular site.

The change in the numerator really represents three elements:

First, the square footage is a proxy for diversity.

Second, they measure average square footage per store, and distinguish between the anchors and the non-anchors. The non-anchors having an average size per square foot, and that average size is very revealing of how recently the store has been built, as the average size has been declining steadily over the past ten or fifteen years. Part of that is that you have better retailing display techniques, and inventories can be kept off site, and transportation can be more frequent, and part is because specialty groups are becoming more specialized. So they have a narrower range of goods which they do more intensively, but they don't have the diversity which they had in the past.

The second element is a judgment call which we label "perceived bargain." Do they see this not only as diversity, but do they perceive it as being well priced or fairly priced.

Finally, they would look at something we would call **frequency of visit**. The frequency of visit is sometimes modified by the **average stay per visit**. A variety of studies have found that the expenditure per visit rises gradually with the amount of time spent. So you have a number of convenience outlets which may have a high frequency where people don't stay very long and don't spend very much. At some point also I'm sure the curve begins to decline if they spend all day there sitting on a bench or standing by a heater. So the duration as well as frequency, and all of that is part of the numerator.

In the denominator there are three basic components.

One of those is the **time factor** - how long it takes to get there. The Fed. Gov't now also maintains capacity statistics, and that will affect the time factor. So for the major freeways and the major arterials, for ex. in Milwaukee Co., the Gov't would tell you what the capacity of that arterial was and what % of Capacity it is running at now, and in many cases you would find that it is over 100% of the engineered capacity. That is generally a guide for the Gov't for determining whether to add lanes or somehow move that traffic.

The second is the **actual cost**. Actual cost is not simply the mileage cost of running the automobile, but will reflect traffic engineering studies, as to the frequency of accident along major routes and the average amount of property damage and the frequency of bodily injury. You can get very elaborate data from the SE WI regional planning commission as to the flows and the frequency of accidents, the cost per accident, etc. So there is a good deal of data available from the public sector that feeds those first two items, the time factor which is a function of the road capacity system, and the cost factor which is a function of out of pocket cost in the broad sense which includes accidents and bodily injury, etc.

The third is the **stress factor**. This is a somewhat more subjective factor. The stress factor in a shopping center is probably the most critical design concern that developers currently have. Let's begin with the premise that ultimately the success of the center is the frequency with which people visit and the amount of money they spend per visit. Both of these are affected by stress. There are **three major areas of stress**.

One of them is the **approach process** by which the presumed customer gets from wherever they are coming from into the shopping center. Part of that is the road system, but not entirely. Part is the degree of confusion they feel in figuring out how the road system brings them onto the premises and then how they find out where they are. Very small changes in perception time have very big changes on sales. When you are coming down the Interstate one of these big signs that says Mobil, and a little green sign that says exit 19, will change your recognition time by maybe 5 seconds, yet will change the # of gallons pumped at that filling station by 150,000 to 250,000 gallons a month. It simply means woops, I can change lanes in an orderly fashion without a high degree of confusion. The same is true

of the shopping center. AS you approach the shopping center it should read well for someone coming off the beltline or a main road. They should be able to figure out quickly where the main entrance is and where Pennies is versus Sears, so ultimately you have an architecture of overstatement. So you have high parapet walls saying yoo hoo, Sears is over here. You have some really goofy, if you look at it, architectural treatments, so mom isn't saying "you idiot Sears is over there to the south, and you're going north, and now we've got to go around the whole center." You get enough family friction, or they start cutting gally wampus across the parking lot and someone just abouts hits them broadside, those kinds of things create stress. It is the kind of stress which creates very subtle, but nevertheless cumulative and residual resistance to going back to that center, and will have a very real impact on the frequency with which the customer goes back to that center. So you need to be aware of the approach zones and the visibility lines and the interrelationship with the speed of the traffic to determine how much time that customer has to figure out where he is and how he gets off the interstate and where the left turn lane is, etc. By the same token, you need to have sufficient que space so he can get off the shopping center lot in reasonably good order. So the first area of stress is simply the approach zone and getting them on the site.

The second major area of stress is getting them from the car into the shopping center and out of the center back to the car. A sense of security as well of comfort is important to that. People don't want to walk uphill, they don't want to walk more than 300 feet, they don't want to feel as they are moving through the parking lot they are sitting ducks for someone whistling through the parking lot at an oblique angle to get to Sears. The more you create barriers to more than channeled motion of the car the happier they are going to be, which tends to conflict with the efficiency you can snowplow the site or provide maintenance or the cost of landscaping, etc. Somehow you've got to get mama and the kids from the parking lot to the shopping center.

Once you have them in the center, the main stress factor is claustrophobia. Claustrophobia. is going to be a function of a number of things. One, your sense of space or turf. That in turn is a function of humidity, temperature, and light. It is also a function of glare and of noise. Virtually everything you do in the design of the center is to reduce those irritants which prompt you to get your coat on and get out instead of spending that last ten minutes of lingering recreational shopping which makes it more than the average purchase.

So we have these three elements. Certainly the approach zone is a function of one's self esteem in moving into what would otherwise be unfamiliar territory. The average American is an extremely insecure individual. They get upset by not being confident in what they are doing. I'm sure you have had the experience of making a right turn instead of a left turn and everybody else in the car gets on your case. Inwardly you seethe. That is not a great way to get people into a frame of mind to spend money. Spending money requires

self esteem, and if the self esteem has just been battered, they are going to be very defensive and paranoid about the next message that somebody has as to why they should buy a universal widget or gadget or whatever. The approach zones - they have gotten very good from a traffic engineering standpoint as how best to get you on and off the center. How many lanes you need, what level of patience you have, by standing in line waiting for each car to spit out in front of you, and whether you go left or right or have to go around the center, etc. The problem of course is applying that on a specific site where there are various kinks in the road system and various kinks in the terrain or problems with the site which don't allow you to do that.

A good case in point is Hilldale Center, where the site is too shallow, and you have two long queing lanes coming in because that is all that the city would give them. Then you have a couple of lanes coming in downhill off Segoe Rd. You have a significant elderly pop. on Segoe Rd., but because of the steps coming down, for a lot of them, if they don't get there by van or bus, they don't get there at all. It's true whether we are talking about pedestrian access, vehicle access, van access, bus access, public transportation access, etc., the comfort and character of that is critical in how often people will make it part of their regular shopping habit or pattern.

The architect of course has as his first charge to create a sufficient awareness of the building and its components so that the customer can easily read the building. This is true whether it is a shopping center or hotel or any other multiple customer kind of real estate. It should read well from some distance away. If you are trying to find your hotel at ten o'clock at night you want a marquee that is really a knock out and you know you are headed in the right direction and you don't have to change from one one-way street to another one-way street to figure out how to get your car up to the front door, etc. That needs to be as immediately apparent as possible, so you don't arrive in a state of emotional disarray. That means also that you want to make as many right turns and as few left turns as possible. But the shopping center developer at the same time wants to know that since people will take the shortest distance from their car to the center or hotel, and they will park on the side they arrived from, he needs to engineer that arrival so that you have an even stream coming at the center from all sides. If you have a two level center, it is important that you have the same number of cars on the upper level as the lower level. They monitor that daily and hourly. Rousse likes to use the Fanny Farmer candy sales or some similar impulse item, with sales on two levels of the mall at opposite ends which should be at about the same level or his pedestrian stream isn't working right, which means his arrival stream isn't working right, so he needs to consider his approach zones to modify that behavior. That is the first zone of stress. They spend a lot of money on that.

East Town out East Washington Ave., a Jacobs-Visconti development, first of all had to solve the problem that the inbound lanes were higher than the outbound lanes, because it runs over a rock ridge there just north of the Holiday Inn. They had to

negotiate with the highway department to blast away the ridge so both lanes were at the same level, so you could make a left turn without going down an embankment to get down to the next level. They had to negotiate a road system which allows you to traverse the entire shopping center area on an inner road without coming back to East Wash. Ave. Then they built a third lane from highway 51 all the way to the center at the expense of the shopping center developer so the right turn traffic into the center was not in conflict with the outbound traffic on 151. That represents a substantial investment. In many cases on the east coast in order to make that left turn, they will actually have one lane bridge up and over the highway permitting a continual flow into the center. That bridge is paid for privately, and without it, there would be no inherent value in that shopping center site if most of their traffic is coming from the direction that would require that left turn.

So that is the first problem we have to solve: stress in the approach zone.

The second problem is designing to prevent a sense of insecurity in the parking lot.

Part of that of course is personal safety. They want lighting; you don't want the parking lot immediately adjacent to areas that are regarded as unsafe by the general public. There are a couple of community centers in the New York Bronx area in which the parking is all indoors. An old industrial site converted to a supermarket. You drive in on the first floor and you are essentially coming into an enclosed parking lot, because if you had an outdoor lot, people would not come to the center. That of course is extreme, but nevertheless you have to provide that sense of personal safety. A combination of lighting, proximity, accessibility to what people would otherwise regard as social threats.

Second of all, you have to be able to transverse from your car to the center without getting run down. That implies a fairly coordinated channelized flow so it is obvious to all parties which way the traffic is going and most parking lots that means one way with angle parking, which is obviously facilitated by the ability to drive in quickly. One of the problems with straight out parking is that you have to back out at an angle that is relatively unsafe to those that are coming from either direction. A major factor is how to you transverse the traffic flow that might cut off the parker from the center. All of you have heard us before on this subject: making a highly uneven edge to the center so that traffic can move around the center at an extremely low rate of speed, 5 mph or so, and if it gets too easy, you put in a sleeping policeman which is a big asphalt bump which will knock the bottom out of you car, as they have on the back side of Hilldale. The idea is to slow the traffic so they would rather take the peripheral road than drive next to the shopping center itself. Hilldale doesn't have the right shaped site to give you that peripheral road at some point away from the center. That was poor land planning to begin with. (E.H. note: it was done by none other than professor Ratcliffe!) West Town and East Town have a

strong peripheral road system and those activities which generate a high volume of traffic to the site, the drive-in banking, tires and batteries, fast food restaurants, are all out on that peripheral road away from the shopping center and doesn't contribute to interdicting the family from the shopping center door, etc.

Once you've got them inside, at that point there is a whole series of subtleties which have really revolutionized shopping center design. If I were to show you slides of shopping centers built in the mid sixties, you would see terrazzo floors, you would see generally a steel panelled ceiling deck, maybe with little holes in it for sound absorption, you would have long flat planes, maybe with clerestory windows above with semi-indirect lighting coming down. You would have store fronts which are the kind of thing which you would normally see out of doors, but now they are indoors, there would be hard surfaces, the noise would bounce off those surfaces significantly, and the textures would very definitely be industrial-commercial. Now if you look at it, all of those things give you claustrophobia. The glare and noise give you a headache, and the feet get sore pounding on the terrazzo; there is no sound absorption of the conversation, and you are treated to the profanities and obscenities and some lady threatening dire personal discomfort to a child who is acting up, etc., all of which makes the average person somewhat uncomfortable. Most people don't care to eavesdrop on someone's conversation. Most people don't care to be treated to somewhat violent and frustrated parenthood at work.

So as a result, we need something to soften and isolate those cumulative irritations so they don't drive them out before they spend their last dollar. The first thing they did they went to very uneven ceilings. that creates a whole lot of noise traps; you get away from the industrial metal kind of thing and go into acoustical plastic - much more indirect lighting, but primarily designed to absorb sound. Second of all, those ceilings are higher. So that the whole relationship of the height of the space and the width of the space doesn't give you the sense of parallax which contributes to your claustrophobia. You want to break up parallel lines of all kinds. A long distance parallel line contributes to claustrophobia. You move the store fronts in and out; better yet, you move them up and down with some ramps and change of heights; you go to carpeting, which is not only easier to maintain with a carpet cleaner than terrazzo, it is softer on the feet; it is domestic in character and absorbs sound. You generally put up some sort of auditory gauze to absorb sound further. the water fountains in the middle of the mall with the water bubbling and the spray spraying is not there simply to humidify, but they are there because water is soothing on the claustrophobic tendencies and it tends to muffle sound, so the conversation going on on one side of the spray isn't easily heard by those on the other side. We might also use some music by Musack or some similar device. But typically in the larger center, we get multiple functions with the fountains.

The next major element is control of temperature and humidity. The mall itself will be cooler and tends to have a somewhat higher humidity, which tends to reduce the claustrophobia which was rising

while you were in the small adjacent store with lower ceiling heights, etc. Disney has done a lot of work in that area, so that in days of high humidity and high temperature, they will admit fewer people, so you will have more turf.

Americans tend to be kind of edgy about turf. They don't want to be within smelling range of someone else. That is not true of other cultures. The Arabs love it. If you have ever looked at the pictures of the Arab bazaars, half the fun of it is that they are all crowded into relatively small areas. Arabs love to talk to you face on, a few inches apart. Americans would regard that individual as suspect and would tend to avoid that individual at all costs. American's sense of turf is larger than anyone else's. That's a cultural phenomenon. More material on that is in "The Silent Language" by Hall, who did a lot of research in the mid seventies on spaces that people require in different activities. Also "The Hidden Dimension," also by Hall, which has to do with how different cultures and different income sectors of our own culture relate to the amount of space in which they feel comfortable or where they begin to feel uncomfortable. There is also a more recent book called "The Psychology of Space."

The individual stores are attempting to appeal to a variety of tactile sensations which are pleasurable. Some people like to see a variety of merchandise stacked up so there doesn't appear to be any shortage of candy or ice cream in the room. They like to brush up against the materials, or they find the motif of the men's store with its English woods and brasses appealing.

One of the interesting things about the American shopper is how timid they are about exploring new areas that may represent a line of merchandise they are not familiar with, like going into a computer store or a hi-fi store without knowing what a woofer or a tweeter is. In the old days if you went into a store and the door slammed behind you, you were already on guard, which is not a very good way for the salespersons to get their message across or for you to relax sufficiently that you will entertain the idea of whatever kind of merchandise it is.

So you see in the modern store a stagefront kind of store where the gate goes clear up into the ceiling and you see the left shoe rack right out in front where you can kind of touch and feel and acclimate yourself and creep in, and not feel like your route of flight has been cut off - an important element: keeping the flight zones open. This is why deep stores don't work very well any more. The Forest Plaza in Fon Du Lac is an excellent example of that. The average store depth up there is about a hundred feet, but the average rental depth is 60 feet. So you have this tremendous functional obsolescence because from a retailing standpoint they don't need that much depth, nor can they use it, because the customer won't go that deeply into the store and feel like his flight zone has been cut off. Relatively shallower store depths today give better access and circulation. The retreat from one of those stores then allows you to move back to the mall and regroup in the higher humidity and coolness

and higher ceiling area. At Mayfair, they found the mall was so long, people didn't want to carry their coat all the way through, so they had lockers at the entrance where you could put your coat and bags so you arm wouldn't fall off before you got all the way through the center.

It takes a great deal of perception to realize where people go and why and why they don't go. Westown has a problem getting people into the back alley, because the back way is really concealed from the front way, so the stores consistently die on that end of the center because they don't get the pedestrian traffic through. It is generally thought that if you have vertical access radiating out from the back end of what is essentially a two-deep store configuration to the center square, you generally get more traffic, because people wouldn't lose sight of where they came in the door, and therefore they wouldn't feel cut off from their flight line.

The Ferra Gp. acquired the Birdsville Mall which had some major problems which were basically sight line. As you came in the center you couldn't see the back of the center, and from the back of the center you couldn't see how to get out. So they gave up a couple of stores, and shaved the sight line so that no matter where you were standing you could see how to get out. Then they put in some sky lights so you could see some cloud movement on the floor and people don't perceive they have been cut off from the outside world never to be found again by their relatives, and as a result they are quite comfortable, so their sales volumes in the back of the center per square foot are now equal to what they were in the front of the center. It was at least curable and correctable.

All of these elements add up to the stress factor which determines the volume and growing power of that particular center. If you were in an acquisition mode or an appraisal mode, they help you determine its potential sales per square foot. You know that it is not going to be the average. The fact that ULI says that N Central shopping centers average \$187/sq. ft., doesn't mean a thing. If this one is only doing \$110 per square foot, the question is why. Invariably it is the stress factor which hasn't been considered.

In the numerator the other element we talked about is perceived bargain. Here we have an interesting irony. People feel that if the surroundings are too rich and architectural, they are somehow paying for that in the cost of goods.

The famous shopping center in Scottsdale Arizona which had I. Magnin as its only anchor initially is a beautiful piece of architecture with red Arizona stone and a Mayan architectural treatment which is a kind of parallelogram art did terribly. Magnin didn't do well and neither did the other stores. It looked too rich. So they brought in a Broadway Department store. Broadway is pretty much the Boston store of the southwest. They did a square box with white brick and precast concrete and is a basic plebian dept. store. Not only did Broadway do well, Magnin's sales tripled, because as you approached the center, you saw the Broadway Building,

so people didn't feel that they were paying for too much theatre. People need to feel that the mix of goods is such that they are not getting highballed because of the cost of the facility. The people in Scottsdale can afford anything the people in Scottsdale want, yet they didn't relate well to that. Note that the perception of the store changed even though the appearance didn't by adding the Broadway store and a number of other more reasonably priced stores. People felt they had options. They always want to go shop the low end and then take themselves upside voluntarily. So you see the low priced men's shoes first, or the stripped down computer. People want to do that for themselves. They don't want to feel that they have no choice.

Perceived bargain is reflective of the mix of goods, the diversity, and the brand names that people relate to. It is an overall impression rather than comparative shopping. People occasionally do comparative shopping, but they don't read Consumers Reports on each item or buy a bag of groceries at one store then at another. It is much more impressionistic and therefore much more easily manipulated from the shopping center's standpoint.

The other element in the numerator, aside from diversity and perception of bargain, is how well people identify in terms of their frequency of visit. If they view it as part of their regular routine, chances are they don't relate it to their major purchases. If on the other hand it is made an event, they feel more at ease making a major purchase. For example, modern shopping centers do not put a food store in the shopping center. If you go to the food store, you want to be able to go dressed as a bum. This is true if you are male or female. You want to go in and out and not make a big to do out of it, just pick up the box of macaroni you forgot the first time. Going to the shopping center is old hat and you are not dressed to go down to the upper end dress store or to Marshall Fields, or if you do go, you run into one of your friends and feel like a real nerd. It destroys the whole event. The woman shopper tends to make it a social event, and maybe goes with a friend. If they identify the shopping with a social event, they have greater peace of mind and more receptivity to the merchandise. Therefore it is very useful to a shopping center to have a community room where the league of women voters or whatever meet. You are going to the shopping center nominally for the social event. Note that the shopping centers don't discourage the art shows, etc.

This is also true of elderly housing. One of the ways you can lock into your market is to find out where they prefer to shop. I know that in my part of the world in Milwaukee and Fox Point, much of the social action takes place at the Kohls food store. When folks retire and move to an apartment in Shorewood, they still go eight miles out to Fox Point to go shopping at the Kohls store Monday or Friday night or whenever they did that to catch up on the gossip. The Kohl's store with the same line of merchandise was three blocks from where they lived in Shorewood. Going shopping at the Kohls store became recreational and not just utilitarian, so now you've got more receptivity because you've made an event out of it.

The same is true of Beyerle's in Minneapolis. They make no bones about about it. They realize that grocery shopping has gone two ways. You either want the max bag of groceries for the minimum amount of bucks, or you go to Beyerle's which becomes a recreational exercise and they even have a little amphitheater where a home economist shows you how to fix the special of the day three different ways. You can roam through their Irish glass store. The shelves are low, so you can make eye contact with the person on the other side, which enhances the social element. They use lighting to make it a warm element. They remove the little irritations which make you go yuck at the supermarket. At the fish counter notice carefully the air intake system which sucks the air in so you can't smell fish. People want to look at, but not smell lobster. The tactile sensations you get at Beyerle's are all positive. Beyerle maintains that his turnover is higher than his competition. They are in the 24-27 x per year turnover, and he is at 31-35 times a year, so all of his basic groceries can be sold at the same prices as his competitors and he can make it up on the gourmet specials and people spend more at Beyerles. Woodman's has copied some of his methods, but certainly not as effectively. In Minnesota, you can use light as a wash, but that would be an unfair trade practice in Wisconsin. You go to Beyerle's and they will have a wall of crackers with a spotlight on one of those boxes so it is waving at you saying buy me. They do a lot of stage setting of their product line. He knows his competition pretty well because his dad owns it- Safeways. His dad tried to make shopping an efficiency exercise. (Cubs is considerably less, because they have a cheaper union contract. One reason that Kohls sold out to A&F is that they extinguished the old union contract and went from \$9 per hour to \$5 or \$6.) Perceived bargain. Beyerle's is a good example of modifying what is perceived and adding a recreational component.

All of that becomes the categories for development of a feasibility study on some sort of retail facility. You can state right up front the model you are operating on. It is not unlike the flow chart concept. It is stated in pseudo-scientific terms, and they become the subject matter for analysis by whoever is doing the feasibility study. It is not simply a matter of cataloging that route 99 goes by on this side and highway 55 on that side. That is totally irrelevant information. The important thing is what is the stress factor on that route. Is it over or under its rated capacity by the Fed gov't. The trick is getting the analyst doing the feasibility study to not only inventory facts, but to communicate the significance of those facts to the kind of enterprise that he is analyzing, in this case shopping centers. A lot of feasibility studies that you read that are done by accountants or by guys who went to planning departments have a whole list of highways that feed in and the demographics and so forth, and put them all on the page, and it is left to the experienced retailer to convert all of those to the significant elements about the factual information.

The thing you want to keep in mind is, particularly once you get past the time and cost of transportation, is the stress and what

contributes to stress in the stress zone. In the numerator look at diversity and perceived bargain, and perhaps the recreational component of shopping so it becomes an event instead of a chore. It never ceases to amaze me the number of people who go into the store on Friday night as the family recreation. Taking the kids along to observe the action and ending up with an ice cream cone is about all they can afford. It becomes a major social component for a large part of the American public. As a result, anything which creates stress will be opposed strongly by the shopping center retailer.

For instance, is the shopping center mall a public thoroughfare or a private one. Does the shopping center owner have the right to exclude those who are running for election or protesting or doing pantomimes against financing the Contras, etc. Shopping center owners have gone to the supreme court and established that their mall is in fact a machine for making money, and that social anomalies and stress adversely affect the shopping pattern and therefore since it is their mall, they can exclude and control who uses that as a communications device, so they can discriminate in favor of those who add to the pleasure of the experience, such as the antique dealers.

A second element of stress is cleanliness. Rouse went all the way to the supreme court to establish that if you are an ice cream shop, he can require that your customer eat his cone in your shop so that the little darling doesn't dump his ice cream on the mall. He can control merchandise to the extent that he can show that the alternative creates negative consequences which detract from other people's experiences in the mall. Since the shopping experience is synergistic, it is legitimate for him to control merchandise lines to protect that critical element of diversity. Perceived bargain may mean that he wants one shoe store to be in one price range and another to be in another range, and require that in his lease. Should, say Famous Shoes, change its modus operandi, he could force them out.

A good example of that is University Square. U. Sq. was developed by Mr. McCormick, who owns Python, and there are very tight lease controls on the kinds of things that can be sold at the other food stores. One of the things that is verboten is other Italian Pizza food lines. Shanghai Minis was the only thing they could do there. the Yogurt store can't serve ice cream. The leasing pattern attempts to control the diversity, lest there be a movement to one kind of item.

Sometimes you can't resist that, but you can try to control it. The Pier Deli in San Francisco was originally 75% retail and 25% restaurant, but the retail did not do well in many parts of the buildings, because it wasn't a terminal destination. Retail is a browsing activity and people didn't browse well in certain wings of the building. They eventually were turned over to restaurants which were terminal, and then the thing was to get Restaurants which were not carbon copies of one another. Pier Deli has done a relatively good job at maintaining the diversity of their cuisine.