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# The Economic Context of On-Premise Business Signs and How to Establish Value in the Marketplace

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## INTRODUCTION

The economic well being of many communities depends to a significant degree on the success of their commercial districts. Retail and service businesses generate jobs and income for local and surrounding populations. Commercial districts also contribute to property and sales tax bases, which translates to revenues for the local government from a source other than residential property taxes, helping to reduce or stabilize local homeowner's tax bills. Therefore, when a municipality establishes a commercial zone, a primary goal should be to optimize the chances for the economic success of all permitted uses in the zone. On-premise business signage is an elemental component of business success, and signage regulation should not be undertaken without a fundamental understanding of its impact on both private business revenues and public fiscal health.<sup>1</sup>

North American society (United States and Canada) is consumer-oriented. Billions of dollars are exchanged annually for goods, products and services. In 1997, the United States' retail economy alone generated in excess of \$2.5 trillion. Of this total, approximately \$200 billion represented expenditures on local, regional and national advertising; another \$75 billion was spent on marketing programs.<sup>2</sup>

Because consumer interests dominate the North American commercial environment, the variety and range of consumer products and services expands in direct proportion to consumer demand. In this context, the North American retail model differs significantly from that of other industrialized nations. For example, the retail economies of Japan and Western Europe, although "market" oriented, are more directed by government policies than by consumer tastes or preferences. In Japan, the state approves domination of its retail distribution and marketing system by the producer/manufacturer through a form of "captured" capitalism; in many northern European countries, state and local governments

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<sup>1</sup> Traffic safety is also impacted by business signage regulation. The professional consensus of most traffic engineers and state departments of transportation is that the lack of readable, conspicuous roadway signage (or signage **deficiency**) may be a significant cause of roadway accidents. For example, a study of tort claims filed against the Pennsylvania Department of Transportation concluded that signing deficiency, both public and private, was a factor in 22% of the serious injury cases. See *Pennsylvania Tort Claims Study*; Gittings, 1985.

<sup>2</sup> All economic figures used in this chapter are based upon reports by Robert Coen, an executive and expert economist at McCann-Erickson Advertising Agency. Mr. Coen's figures are routinely published and relied upon by the *Wall Street Journal*, *Advertising Age*, and other such respected publications.

protect the local business community by assuring district conformance to existing retail patterns and restricting access to newcomer businesses -- a form of "controlled" capitalism. Neither model is comparable to the consumer-directed, competitive capitalism of North America.<sup>3</sup>

Additionally, continuing increases in North American automobile use, together with shifts in population and expanding job opportunities, have fostered significant changes in consumer behavior.<sup>4</sup> These changes require land use planning models and approaches to building urban environments which recognize the information needs of a highly mobile consumer society and the role on-premise signage plays in meeting those needs. However, few current land use planning models or theories recognize the role commercial communication plays in the North American commercial environment.

Finally, the fact that signs are place based, or immovable and "silent", may encourage assumptions that signs do not constitute any recognizable form of speech, and therefore, do not deserve free-speech protections. Federal court cases since the 1976 landmark decision in Virginia Pharmacy<sup>5</sup> have mandated otherwise, *i.e.*, the sign is no different from any other form of communication medium, and as such, its "message" is entitled to certain First Amendment protections. Minimally, these protections guarantee time, place, manner and content neutrality.<sup>6</sup> And, legal protections increase for signs which contain a political expression or embody a "work of art" or trademark emblem or display a copyrighted slogan. Because of the federal cases, whenever a regulatory body undertakes restriction of commercial communication (including signage), it must always keep in mind that it is engaging in an act of censorship which may have actionable adverse impact on a basic civil right. It cannot be said too often that in the commercial milieu, regulations which seek to control signage, particularly the message of a commercial "speaker", must be objectively enacted and imposed, always taking particular care that content or copy is not compromised absent a substantial state interest.

The task of establishing value as a prerequisite to sign regulation is one of the more

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<sup>3</sup> Comparisons between certain economic systems is impracticable, *e.g.*, countries dominated by Marxist economic theories are entirely production based, unresponsive to either market forces, business exigencies or consumer preferences.

<sup>4</sup> The average new car in the United States travels 15,000/year, as opposed to 5,000/year in Japan. Total travel miles for American consumers are 1.5 trillion annually. New car sales average 15 million annually resulting in total sales volume of \$350 billion. Auto insurance sales, averaging \$150 million annually, exceed total cigarette, soft drink and beer and toy sales combined. Additionally, trucks (both heavy and light) account for nearly 85% of the \$450 billion annually expended on transportation and freight delivery costs in the United States; rail accounts for only 15% of these expenditures. In contrast, European nations spend the reverse -- 15% for truck transport and 85% for rail.

<sup>5</sup> Virginia Pharmacy v. Virginia Citizens Consumer Council, Inc., 425 U.S. 748 (1976).

<sup>6</sup> See, Linmark Assoc. Inc. v. Township of Willingboro, 431 U.S. 85 (1977); Ohralik v. Ohio State Bar Assn., 436 U.S. 447 (1978); Central Hudson Gas & Electric Co v. New York, 447 U.S. 557 (1980); Metromedia v. City of San Diego, 450 U.S. 490 (1981); Board of Trustees of State Univ v. Fox, 492 U.S. 469 (1989).

complicated assignments of the urban planner because regulatory results affect not only individual speech and property interests, but also reverberate throughout the increasingly varied commercial environment. Because signage is a complex communication medium, functioning in a complex society engaged in a multitude of economic activities, no single research or valuation technique can answer all signage valuation questions. This paper will concentrate on the two most basic market-based measurements used to establish the cumulative economic value of on-premise signage: (1) advertising effectiveness measures, and (2) standard appraisal practices.

Individuals engaged in business activities spend significant amounts of money for the commercial message provided by a sign. Advertising agencies and commercial real estate and business valuation services assist these individuals in determining what a sign is actually worth -- not in terms of how much it may cost to produce and place, or lease, but how much it is worth in terms of the business revenue its presence may generate. Those who understand standard economic and advertising effectiveness measures, and the varied ways commercial communication users establish the value of their on-premise communication system, will be better able to coordinate land use planning with emerging communication research and technology, optimizing benefit to the community -- both economically and "aesthetically".

Discussion of the two commonly used valuation techniques will be prefaced by discussion of the underlying complexities involved in the valuation assignment and the assumptions which are made during the research and analysis stages by those actively engaged in business and commerce.

### **Content Control of Sign Copy - Censorship; Aesthetics**

When analyzing business signage in any context, it is difficult, if not impossible, to establish its primary communication function.<sup>7</sup> For example, a *Days Inn* sign may represent pure advertising to those motorists not intending to stop, but for those seeking overnight accommodations at an affordable price, the sign provides information and direction immediately desired. First, the sign engenders recognition (reinforcing major media

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<sup>7</sup> During the early implementation stages of the 1965 Highway Act, the Federal Highway Administration (FHWA) found it impracticable to define, for regulatory purposes, a sign's function. One concern was that attempts to control message or copy content might infringe on Constitutional free-speech guarantees. Efforts to provide definitive guidelines were finally abandoned. See Principle and Procedure Memorandum 90-1 (abandoned regulations).

To use a "personal experience" example illustrated by a movie theater, one may believe that the primary function of a movie theater is to make money for the owners by showing movies. In economic terms, however, profits are realized through concessionaire sales, particularly popcorn and soft drinks. Therefore, the primary economic function of a movie theater is impossible to determine without intensive study of all economic variables involved. The primary function of theater signage is equally difficult to establish, *i.e.*, which on-site business activity does it primarily serve or support? While this example may appear singular, it is characteristic, nevertheless, of many business activities, such as a gasoline station which also offers a car wash facility or a "convenience" store.... and illustrates the problematic nature of regulating on the basis of "primary function" designations for either a business or its signage.

advertising efforts), then identifies location and finally directs the driver to the appropriate entrance; further, it offers assurance that the services and accommodations available will meet expectations (expectations often created by major media advertising).

Generally, then, signs, as communication devices, may perform multiple sets of communication functions -- they can identify, inform, direct, advertise, promote or create a business image or enhance/decrease community aesthetics, often simultaneously. Therefore, as part of the regulatory process, to affix a single purpose label to on-premise business signage or to give weight to one attribute over another has questionable objective merit. Sometimes, restrictive descriptions in a sign code simply reflect certain cultural or social preferences alone. In such cases, the effect of the code is to censor or otherwise control that which may be offensive to some members of the community. In North America's pluralistic democracies, however, it is nearly axiomatic that any exercise of police power, which attempts to dictate the tastes of the few to the many, will be met with strong objection -- in both political and legal venues.

Given there is more than one kind of aesthetic "reality" in any cross-section of the North American public, aesthetics, nevertheless, is becoming the most disputed area in signage regulation. Some researchers and regulators, in seeking to strike a balance between the public's right to "aesthetically-pleasing surroundings" and the business community's right to "commercially speak to consumers or potential consumers", may err too far on the side of aesthetics. Such error may compromise not just the business community's ability to meet the needs of the market, but also constitutional guarantees of free speech, particularly in the area of content control. In such instances, the possible fiscal liability to the municipality may substantially outweigh any benefit conferred by "viewpoint" regulation.

The on-premise business sign is a familiar and respected icon in American society - many are accorded "landmark" status. It is as important to a commercial zone's success as sidewalks, streetlights, curbs, parking and streets...and should receive the same careful attention to function as these other components. Function and form are not incompatible. Through use of color, light, and visually interesting symbols, letters, logos, and other information, signs enliven commercial areas and make them attractive places to shop. For many theme-oriented districts, such as San Francisco's "Chinatown", Seattle's "Vietnamese Village" or Dayton's "Neon District", signs lend a special character and ambience that would not otherwise be possible, contributing significantly to the success of the district.

While one cannot assign to the public a universal aesthetic standard, in the context of signage aesthetics most retailers understand that image is one of a sign's key communication components as it relates to economic impact. If an attractive image is not communicated by signage, the business will rarely get the clientele it wants or be able to let people know the true flavor of the business. In other words, it is just as important to today's businessperson to convey to the passing public the proper image as it is to the community to present an attractive retail environment. Modern retailing recognizes that if a business's "aesthetic" appearance is not pleasing, the customer can, and often will, go elsewhere.

Further, as cost-effective advertising mechanisms, signs facilitate competition among businesses, which, in turn, benefits consumers by (1) increasing information concerning available products and services, and (2) increasing choices in terms of which businesses to patronize. Facilitation of information and choice often leads to lower prices -- another consumer benefit. Finally, signs function as directional or "wayfinding" devices. They help people find their way to a specific business or they function as a marker, telling people where they are in relation to where they are going.

Simply, aesthetics and commerce do not have to be in opposition; instead they can work together to implement progressive, design review or other specialized sign codes which enhance both the local economy and community ambience. Signage regulation should not become a matter of aesthetics vs. economics; rather it should reflect a holistic approach to a complex, multi-faceted problem.

### **Types of On-Premise Business Signage**

The phrase "place-based communication and graphic devices and systems" may better describe the complexity of on-premise commercial communication than the term "signage." This is so because modernly there are more ways to communicate commercial messages than by traditional on-premise signage, generally referenced as freestanding, projecting, wall ( or fascia), roof and canopy/awning (or "face lift") signs. For example, product franchise corporations (e.g., *McDonald's*) and gasoline chain retailers (e.g., *BP Oil*) have developed very effective alternate forms of signage -- the most obvious that of "signature" buildings featuring colors or logos emphasized in major media advertising. In some instances, the signature attributes of the building go beyond display of corporate colors or logos and represent the logo or product itself, as does *Chili's* in Denver, Colorado. Other types of non-sign signage include product displays and dispensers or special site lighting and landscaping.

All forms of alternate signage or place-based communication and graphics devices/systems are used interchangeably by the market-savvy, well-capitalized retailer to offset sign regulations which, for example, limit size or restrict placement of the "traditional" sign. By reinforcing the message conveyed by other media advertising, on-site signature signage enables the business to enhance communication with the consumer public. In cases of severe regulatory downsizing of an on-premise sign, signature signage can successfully substitute for the sign altogether.

An on-premise business sign also possesses a property interest which can be defined and separately valued as the "visibility component" of a real estate site, further complicating the attempt to define what a sign is and how it should be treated in the regulatory sense. Therefore, if one is to accurately measure the contributory value or "economics" of signage to a site, one must understand the total effect of all communication available or being utilized by the business, particularly the communication afforded by window signs, product displays and dispensers, lighting and landscaping, specialized color treatments and architecture.

## Visibility and Traffic Safety Considerations Concerning On-Premise Signage

If it is properly designed and placed, the on-premise sign can effectively perform its communication/speech functions and simultaneously promote traffic safety. To maximize its full potential, the on-premise sign must meet two essential requirements: it must be capable of being seen, and once seen, it must be capable of being understood (or "read").

Messages received from signs are processed by the driver and depending upon the driver's needs or expectations, become the basis for decisions. The correctness of any given decision, and the degree of success the driver has in completing the driving task, depends upon the sign's ability to quickly and adequately communicate its intended message. For on-premise signage, information concerning the product, good or service available on site and confirmation of location are usually the most important messages. The following factors should be considered in optimizing a sign's ability to communicate these messages clearly:

1. **Comprehension:** The message should be unambiguous. A symbol can offer significantly greater legibility for a given sign area, but it may not always be immediately understood by all viewers. Lack of recognition is a strong reason for use of standardized signing protocols, *e.g.*, standardized corporate signage. However, if a retailer is not part of a national corporate identification program, copy (or content) should receive careful attention and consideration.

2. **Conspicuity:** The sign must be distinguishable from its surroundings, *i.e.*, it must be sufficiently conspicuous to attract the driver's attention. Conspicuousness (or "conspicuity") is a particular problem for private signage after daylight. Often, vehicular headlights do not reflect onto the sign, and if the sign is not illuminated at night or during inclement weather, it can simply fail to function as a communication device.

3. **Legibility:** The sign must be readable to the extent that its copy or symbols are enough discernable to permit near instant comprehension by the observer. Two of the most important variables in determining a sign's legibility are the size of the sign and the legend on it. On a two lane, 25 mph street (characteristic of business districts), the typical on-premise sign appears to require a legibility distance of 300 feet -- a distance allowing the sign to be read from the nearest intersection, approximately one block away. For signs in rural areas or on high speed roads, a greater distance is required...and larger legends are needed, *e.g.*, the San Diego, California sign code allows signs to be 75 feet high and 300 feet square along the City's high speed interstates.

4. **Expectancy:** The sign's legend (message) and location or placement should reasonably conform to the driver's expectations. In many cases, travelers will plan to stop en route for food or gasoline or lodging, but will not know in advance where they can be found. It is illogical, and perhaps even irrational, to zone a commercial land use next to a primary or interstate highway system and not allow for adequate placement and size of signs to attract and direct motorists. (Even travelers who have preplanned will expect to find adequate signs at or near the intended destination -- to assure them they are on



target.)

**5. Emphasis:** Information most important to the driver should be emphasized by size, location, letter type, color or other means. The information may be conveyed by "copy" or by "logo". A sign displaying a nationally recognized logo, such as *McDonald's* golden arches or "M", does not need much, if any, copy because the logo alone communicates more information than any amount of copy could.

**6. Credibility:** Credibility reflects whether drivers believe that a sign's message (a) is true, and/or (b) pertains to them. Proper maintenance is a critical factor in assuring consumer confidence in private signage. On-premise signs in poor condition, badly out-of-date or lacking a communication system consumers understand, exemplify less-than-credible signing that may be disregarded.

The information conveyed by an on-premise sign simultaneously may be specific to one driver's immediate needs and largely irrelevant to another's. However, most drivers can seek and process vast amounts of information...and filter out all but what is needed, in very rapid succession. Although highly distracting, irrelevant information on advertising signs can produce a statistically significant decrease in tracking or detection tasks, research on the "distraction" factor discloses that the decrease is so small, it has no practical impact on driving functions. More specifically, test results disclose that:

1. Drivers look directly at the messages displayed, and usually within milliseconds are able to collect the information sought or needed, provided the signs are easy to read and understand. This is so, even in the presence of competing messages nearby.

2. The more complex the driving situation, the more easily the sign should be seen and read. This is particularly true for freeway interchanges, where the driver is often required or needs to make split second decisions.

3. Proper sign lighting or illumination enhances driver readability and safe-reaction times. (A positive side effect of legible, well placed and illuminated signs is the decrease in time that the driver is looking away from the road.)<sup>7</sup>

## **Role of Signs in a Dynamic Retail/Commercial Environment**

### **1. Commercial Activities**

In the North American retail economy, on-premise business signs symbolize the most ubiquitous and varied of all commercial communication systems, including television, radio, print and direct mail, and off-premise or outdoor advertising (commonly, but mistakenly labeled "billboards"). And to reiterate...they also serve to reinforce all other

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<sup>7</sup> Information concerning the visibility requirements for on-premise signage is excerpted from a study by Richard N. Schwab, entitled *Safety and Human Factors: Design Considerations for On-Premise Commercial Signs* (1998). Mr. Schwab is a former Federal Highway Administration program manager for research on highway visibility and night driving safety. See References.

forms of media communication, and are capable of performing many communication functions simultaneously. It is impossible, therefore, to look at any one built environment scenario and say this is how signage works. If nothing else, the complex morphology of American retailing prevents such sweeping generalization.

The myriad types of American retail operations and sites range from the small independent freestanding store (under 10,000 square feet) to mass merchandisers, complete category stores, strip malls, regional shopping centers and retail "clusters" which are neither shopping center or strip mall. Such diversity requires sophisticated analysis of signage requirements for both the business and its customer or client, if the business is to succeed. Thus, any comprehensive business strategy must include an effective signage program in addition to site location and development considerations. The signage program may be relatively simple -- a free standing sign...or more complex, reflecting the full range of communication devices, *e.g.*, a traditional sign, plus product dispensers and displays, and signature building and landscaping.

Sign programs and regulations should take into account not only the particular message needs of both sender and receiver, but also the site and ownership specifics of the individual commercial establishment. For example, the on-premise commercial communication needs of a local "mom and pop" operation will be greater than those of a nationally recognized retailer. Because signage needs expand or contract, depending upon nearly countless variables, broad stroke regulatory treatment is contraindicated.

The signage needs of various businesses should not be viewed on a continuum, with downtown businesses at one end and major freeway businesses at the other. Instead the needs should be viewed in a rotating circularity which recognizes that at any given time the needs of one business may reach the apex and require special attention or consideration.

For example, a service-oriented business (such as a dentist's office) that has been in the same location for many years and has an established clientele may function economically with only a sign on the door; longstanding patients (or customers) find their way to the right spot without the visual cues provided by a sign easily seen and read from the street. However, if an economic downturn occurs in the area, causing residents to move away, the need to attract out-of-area passersby in order to stay in business may become acute. On the other hand, if the economic environment remains stable, many residents will move anyway. Should the area economy improve, the increased job opportunities will bring new residents.<sup>8</sup> In both of these latter instances, "replacement" and "new or additional" clientele will be difficult to attract absent the street visibility afforded by an on-premise sign. Although area newcomers might become aware of the business through alternate forms of advertising, such as the yellow pages or newspaper advertisements, substitution communication devices are much less likely to increase the

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<sup>8</sup> According to U.S. Census Bureau figures, in the years 1995-96, 16.33% of the U.S. population of 260,406,000 moved. Of this percentage, approximately 8.0% moved either to a different county in the same state or to a different state.

clientele pool than an on-premise sign visible to the newcomer passerby.<sup>9</sup>

For many small businesses, such as barbershops, specialty stores or local restaurants, signage and word of mouth may be the sole means of reaching new customers. Further, in many communities, small businesses offer a primary source of employment and an important point of entry into the workforce for women, minorities, and new immigrants; thus, sign regulations which help small businesses succeed serve both an economic and public policy purpose.

Long established or not, there are businesses which rely entirely on their sign to connect with their segment of the market and stay in business. The clearest example is the highway-oriented business, such as gasoline stations, fast-food restaurants, and economy motels, whose customers are sometimes completely dependent on signs visible to the highway to indicate where to get desired goods or services. As the automobile has come to dominate the urban, and especially the suburban, landscape, the increase in signage needs of the "highway" (or "point of distribution") business has been dramatic -- causing a material impact on retail site selection and development theories.

## 2. Site Selection and Development Factors

Generally, two basic site selection and development strategies are at work in North America: (1) fixed points of origin; and (2) mobile points of distribution. The "fixed points" location strategy is essentially trade area oriented. The consumer moves from a fixed and defined base within the area to a specific retail site; the origin of the trip may be the home, office, school, possibly a local hotel or airport. Traditionally, a trade area business enjoyed a high repeat customer percentage and based on this percentage, market size or share could be reasonably established. On the other hand, the "mobile points" locational strategy is based on mobility or "traffic". Point of origin, is almost meaningless, and signage -- the "visibility" component of the site -- becomes all-important. Consumers stop, consume, and then move on. Repeat business is primarily generated through major media corporate or brand identification programs, which enhance recognition of the on-premise sign and often prompt a stop.<sup>10</sup>

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<sup>9</sup> In 1997, Gulf Industries, Inc., a producer of custom-designed internally illuminated pole signs and wall signs located in Torrance, California, conducted store traffic surveys of 45 established, independent retail and service sites across the United States, including, for example, car washes, muffler and transmission repair shops, beauty salons and chiropractic clinics. The surveys were conducted 30 to 45 days after installation of a new on-premise sign, and were designed to determine what drew first-time customers to the store. Of the 840 customers who participated, in response to the question "How did you learn about us?", 54% (452) stated they became aware of the business when they saw the sign; of the remainder customers, 29% (248) became aware of the location through word of mouth, 11% (92) through newspaper advertisements, 4% (32) through the yellow pages, 1% through TV (9) and 1% *via* radio (7). According to Gulf, all 45 businesses involved in the survey experienced increases in gross business, some as much as 50%, after installation of a custom on-premise sign visible to the street.

<sup>10</sup> According to the Urban Land Institute, the ideal location for a regional, community, or neighborhood shopping center requires consideration of trade area characteristics, the income level of households in the area, competition, highway access and visual exposure (ULI 1985). Other essential factors in locating a retail site include population density, growth, regional exposure (*e.g.*, the site is adjacent to a street or highway traveled by consumers from outside the immediate trade area), operational convenience, safety,

The "fixed points" and "mobile points" strategies are compounded by two sub-strategies: (1) impulse stop purchase and (2) shopping trip. The "impulse stop purchase" strategy involves finding an opportunistic retail location along the consumer's pathway. Clearly, the better the site communicates commercial messages to the passerby, the more competitive the site will be. Conversely, the "shopping trip" strategy presupposes that the consumer's intended destination is the site itself, which may somewhat reduce the need to communicate more than locational/directional information *via* on-premise signage. The mass merchandiser, "big box" retailer, and the shopping center/mall with its anchor tenant(s) are primary examples of shopping trip or destination-oriented retailing. (In fact, shopping centers and malls utilize both locational strategies -- the anchor tenant may be the intended destination, but to reach it, the consumer must pass smaller specialty stores that are designed - and signed - to capture the impulse trade.)

On a larger local scale, power centers (*e.g.*, commercial districts that contain several mass merchandisers), regional shopping centers, entertainment districts, and festival marketplaces all serve as primary destinations. "Satellite" businesses within the area serve as points of distribution, seeking to attract, through on-premise signage, customers whose chief purpose was to visit the primary destination. This is also the case for specific geographic locations that function as major tourist destinations on a national scale (*e.g.*, Disney World, Times Square). Destination cities, such as Las Vegas or Santa Fe/Taos, must strive to meet the signage requirements of not only the thousands who visit annually, but also local residents and local businesses not tied to primary destination activities.<sup>11</sup> Generally these cities satisfy most signage needs and expectations by emphasizing theme design in their sign codes.

Some businesses have adopted a "hybrid" retail strategy -- both destination and impulse oriented. The gasoline industry provides one example. Because gasoline sale profit margins for many stations may be low (1%, or less), to stay in business a station will add other on-site retail services, with generally high profit margins. For example, many stations now offer on-site car wash, convenience shopping and/or auto repair and maintenance services. The ancillary or subordinate services provided interact in a synergistic manner with the primary service so as to encourage "cross over" shopping, *i.e.*, a consumer will stop for gas and then enter the on-site convenience store to buy a soft drink. The combination of a primary use generating predictable, but low profits, with a secondary use capable of generating high, though less consistent profits, maximizes the site's economic value and rate of return.

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and parking (Salaneschi 1996).

<sup>11</sup> To the extent any city is brought up as a prime example of a chaotic sign environment, the planner should encourage further investigation and research. A city most often accused of "gaudy", "tacky", *i.e.*, undesirable "chaotic" signage, is Las Vegas; however Las Vegas' sign code is carefully structured to respond effectively to a broad range of resident and visitor aesthetic sensibilities and expectations...and in its history, the city has never suffered either urban blight or flight.

### 3. Shifts in "Trade Area" Dynamics

Especially impacted by the increasing mobility of the consumer public is the "trade area" theory of site selection and development. Traditionally, trade areas were geographically defined areas encompassing a 5-10 mile radius and containing a fairly immutable mix of residential, commercial, government, recreational, and manufacturing/industrial land uses. Site selection and development decisions by retailers were based on the trade area's boundaries, population, and consumer income levels and spending patterns (Jones and Simmons 1990, 318). The volume of business revenue available within a trade area was presumed to relate to the population and the existence of competitors within the trade area boundary, as well as revenue from transient customers from outside the immediate trade area who might patronize a business only one time or infrequently.

Since World War II, the combination of the interstate highway system and increasing mobility of the consumer public has significantly changed the notion of trade area for many types of businesses. Most notably, consumer mobility has made trade areas much larger overall. Today, it is estimated that 35 to 50 percent of the consumer population shops outside the local area (Signage Foundation 1998). In this scenario, large segments of the retail and service industry now serve as a "points of distribution," where many customers at any given point on any given day are visiting the location for the first and sometimes the only time. Applying a point-of-distribution approach to the site selection process relies more on quantitative analysis of travel patterns within an area and less on traditional trade area measures, such as population and household income. In terms of signage, retailers that function as points of distribution must capture consumers who are traveling between destinations in order to stay in business; such retailers are generally more reliant on signage than the local merchant or service-provider with whom consumers have regular visual contact.

In today's commercial environment, however, even the local shopkeeper or practitioner requires legible, conspicuous on-premise signage visible to the street. If this is lacking, a large segment of the market -- the out-of-area and newcomer consumer -- will be lost to local trade. On any given day, the potential "unfamiliar" customer loss may be as high as 50% of the total motoring customer pool.<sup>12</sup> Additionally, local potential consumers may be lost because many of them, possibly as many as 85%, daily travel outside the trade area and consume elsewhere; if the local merchant's sign lacks visibility, the local consumer may forget the business is there... or worse, never notice it in the first place.<sup>13</sup>

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<sup>12</sup> *Ibid.* FN 9

<sup>13</sup> In a mobile, consumer-oriented economy, a retail site's visual exposure and access are particularly important in providing a driver time to react quickly and safely. A site and/or on-premise signage with good visibility is one that a consumer can see and comprehend from as far away as possible. A site with good accessibility is one with clearly marked entrances and exits that allow people to move safely and easily into the parking lot and into the store. Specific sites that are considered preferable from an access standpoint are far corners on main roads, and sites to which entrances are not hampered by median strips. Sites that are considered less than ideal in terms of location are those on the insides of curves, at oddshaped intersections, and some midblock parcels. (Salaneschi 1996)

Because everyone who lives or works in a trade area routinely does not consume there, it is nearly impossible, statistically, to predict business volume for a single site or for the trade area in total. The variables created by consumer mobility also have made on-premise business signage increasingly important to businesses across the board. Often, without adequate on-premise signage, a business will cease to be a factor in the marketplace...and ultimately will fail.

Simply, trade areas are no longer static; they are, instead, dynamic and fluid with constantly changing borders and population.<sup>14</sup> As a result, the task of crafting an effective signage program requires a rethinking of historic perspectives of the communication needs of both the community and the its business districts.

### **Role of On-Premise Signs in Business Ownership and Management Models**

The American business system is not only highly competitive, but also extremely varied, particularly in terms of types of ownership and operation. One cannot determine the value of on-premise business signage and the effect of regulation upon certain businesses without some background knowledge of certain discrete segments of the retail marketplace. One sector, which is often misunderstood, is franchising. The advent of franchising in the United States increased the diversity of the American retail economy and intensified the difficulty in comprehending it.

A comparison of two operations in the quick service food segment of the franchising industry will illustrate the diversity and subtlety of the system. *McDonald's* and *Subway* are both product franchisers; such franchisers retain considerable power over their franchisees, particularly with respect to operational management and quality control.

In the *McDonald's* franchise system, the parent company exercises nearly absolute proprietary control -- the franchisee cannot own the underlying real estate (*McDonald's* owns 95% of the real property of its sites) and must rigorously conform to certain standards or protocol which dictate not only the type of product and the manner in which it will be served or delivered, but also the type and manner of building and signage that will appear on site. Conversely, *Subway*, while exercising control over product, permits its franchisee control over building type and store "trade dress", with the exception that the corporate on-premise signage package must be utilized somewhere on site.<sup>15</sup>

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<sup>14</sup> Although not typical throughout the chain, a *Wal-Mart* "trade area" may encompass as much as a 30-mile radius. Further, *Wal-Mart's* point of purchase (or "in store") commercial communication system is such that up to 85% of its sales occur on impulse. Therefore, total consumption on any given day cannot be predicted for any given store, or for that store's trade area, whatever its size.

<sup>15</sup> *McDonald's* has approximately 12,000 retail sites in the United States; *Subway*, 10,800; *Burger King*, 6,900; *Dairy Queen*, 5,800; and *Wendy's*, 4,600 (of which 900 are company owned). While occupying only 3% of the quick service food segment of the market, *McDonald's* enjoys 7% of the segment's total volume. As an example of the role of "cross over" shopping in retail dynamics and the control of product franchisors over franchisees, *Wendy's* recently named *Coca-Cola Co.* its exclusive soft-drink supplier. As a result, *Wendy's* will no longer allow franchisees to choose either Coke or Pepsi products for their stores, and hundreds of franchisees that serve Pepsi have been ordered to eventually

If diversity in the product franchise system is not enough, the business form franchiser is entirely different from either a *Subway* or *McDonald's* franchise. In most cases, the business form franchiser permits use of existing buildings and retention of real-property ownership, providing national major media advertising and marketing programs in exchange for 10-20% of gross revenues (the figure varies per franchiser). In this sense, the original small business owner and his/her business is preserved (*i.e.*, a local motel or muffler shop), with the only changes ones of visual image and access to regional/national advertising. In the face of severe sign-size limitations and perhaps "mere survival" circumstances, these changes are especially beneficial. In such situations, the only drawback to franchising is that business must be increased sufficiently to afford the percentage of gross volume due to the franchiser. However, an effective on-premise signage program, in tandem with major media advertising, will usually bring in the necessary additional customers and dollars.

At least 50% of retail business in the United States today is controlled by national corporations, of which a significant proportion are product and business form franchisers. (Large national or regional, company-owned chains account for most of the balance.)<sup>16</sup> The market recognizes that a standardized advertising and identification system, coupled with national marketing programs, increases business enough to justify a significant payment of gross income to a franchiser; because of this symbiosis, the on-premise signage programs for local franchises are inextricably tied to the parent company's major media advertising and marketing campaigns. Such major media efforts make certain that company trademarks and logos are prominently featured, and that these company "identifiers" are echoed on site, primarily by on-premise signage.<sup>17</sup> In many cases, additional reinforcement of the company's image and its product/service is provided by "signature" improvements, further enhancing the site's total signage spectrum and ability to communicate with the consumer.

Because ownership and management controls differ from franchisee to franchisee, one cannot generalize about how much commercial speech a particular franchisee needs to be successful, or how the franchise system will respond to restrictive regulation. In instances of regulation which limits size or restricts content, or both, the franchise may forego creative sign design in exchange for standardized corporate signage, which enjoys near instant recognition by a majority of consumers, often without the business displaying

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switch to Coke. (Fountain-dispensed drinks account for about one-fourth of the U.S. soft-drink industry's overall volume; it is a segment of the industry where Pepsi has long trailed Coke, holding a meager 25% share to Coke's 65%.) See *The Wall Street Journal*, ed. August 24, 1998, p A3.

<sup>16</sup> However, by numbers of commercial sites, independent or non-affiliated small business or proprietary enterprises comprise at least 60% of all commercial activities conducted in the United States.

<sup>17</sup> The importance of on-premise signage to successful corporate identification advertising/marketing programs was recently demonstrated by Burger King, which spent over \$300,000 on research to learn if minor changes in its logo colors and form would confuse customers to the point that sales would suffer. The results convinced Burger King that any logo changes should be very minor indeed, if it wanted to preserve its share of the market. Information provided by R. James Claus. See References.

anything other than a small corporate logo sign, perhaps reinforced by "signature/trademark" site design.

When municipalities attempt to "level the competitive playing field" between franchised and non-franchised business by an across the board restriction on size or copy or placement, or all three, the business most likely to suffer is the non-franchised business. Why? Because such regulatory practices may foreclose the ability of independent local business to respond to franchised competition through custom on-premise signage capable of effective communication without major media backup. Further, severe on-premise sign restrictions may have a chilling effect on federal small business programs designed to encourage the entry of minorities and women into entrepreneurial activities.

The view that franchising is anti-small business and that restriction to "identification only" signs is necessary to blunt its perceived competitive edge, also fails to recognize that the restriction may prevent the business from franchiser from providing ways for the non-affiliated small business to both stay in business and retain site ownership and control of day to day operations. On the other hand, if a community desires to encourage non-affiliated or independent business and thinks that small, "boutique" signage is the answer, it may drive the local independent business to franchise operations in order to offset lost revenues attributable to loss of an on-premise sign easily visible and readable to the passing potential consumer. In other words, since local independent business usually cannot afford the alternate commercial communication offered by major media advertising, particularly television, the business may turn to the franchiser as a "partner" in order to survive. Accompanying this partnership may be standardized retail signage -- a result possibly not intended by the community.

A sign code's influence on the competition between independent businesses and franchises should be reflective of the community's intent as established through meetings and input from the community's business owners, citizens, and planners. Therefore, before a community undertakes signage regulation, all members of the community should be given the opportunity to fully understand the role signage plays in the competitive battle between local businesses and between local businesses and those of neighboring communities, and to fully participate in the regulatory process from informed points of reference or contention.

### **Sign Codes in Certain Destination-Oriented Cities; Demographics All Important to the Planner**

While some cities "or villages" with extensive sign control, frequently including copy control, are doing well economically, it is clearly impossible to generalize that sign codes do not have a negative economic impact. Planners cannot assume, absent extensive demographic research, that the Santa Fe sign code, for example, represents a universally applicable model. Santa Fe's business economy depends upon two very specialized retail categories -- "Native American crafts" and "artist colony" productions. Many Americans travel to Santa Fe specifically to purchase items created by local artisans. Because of this, Santa Fe is a destination city.



In addition to the unique characteristics of Santa Fe's business economy, one must also consider the town's population and income mixes as well as the density ratios between housing, commercial and manufacturing activities before coming to a conclusion regarding the applicability of its sign code to other municipalities. Santa Fe's retail district comprises approximately 3% of total space available in the community, compared to 12-20% in the more typical towns. Because retail space is at a premium, it commands square-footage rental rates much higher than the average community with more space (or land use) devoted to commercial activities. Higher space rental translates to higher consumer prices; however, because many of Santa Fe's visitors are upper-income, visiting specifically to spend discretionary income on high-ticket items, high rental rates can be offset by inflated consumer prices. Finally, because retail space is confined to a small area easily discovered and traversed by the visitor, individual business on-premise signage can be small and uniform, emphasizing aesthetic-based, or "theme", signage in keeping with the town's pervading southwestern atmosphere.

The sign code of Coral Gables, Florida is sometimes referenced as a model for widespread adoption. While not a destination city in the usual sense, it nevertheless is a target residential location for upper-income retirees. As in Santa Fe, land use zoned for retail activities is quite small, with attendant higher retail space rentals and higher consumer prices. Because its primary population consists mainly of wealthy senior citizens, it functions similarly to a closed or "gated" community, with local businesses nearly entirely supported by local consumers. Certainly, permanent residents are well aware of the location of local businesses, and consequently, on-premise business signage designed to attract and inform the out-of-town passerby is considered unnecessary by both the general populace and the business district.<sup>18</sup>

While one can say the business communities of Santa Fe or Coral Gables are healthy despite a very restrictive, aesthetic-based sign code, one should not also say that their sign codes should be transferred to more demographically and commercially diverse towns. On the other hand, neither should one label the sign codes of destination-oriented Las Vegas or New York Times Square signage as undeserving of duplication under any circumstances. For example, all businesses in Las Vegas, casino type or otherwise, must pass rigorous design review tests before constructing or placing business signage. New York City municipal authorities also exercise strict dominion over Times Square signage, including imposition of rigid sign size-to-site ratio standards. Both cities emphasize legibility and conspicuity standards based on what is minimally required to assure a sign is safely

<sup>18</sup> Demographic data demonstrates the difference between average American communities and Coral Gables. According to 1998 population demographics, 90% of Coral Gables' population is white *viz a viz* 78% nationwide. Income demographics disclose that 29% of Coral Gables' population enjoys income levels above \$100,000/year (16% above \$150,000/year). The average Coral Gables' household income is \$84,468/year; per capita income is \$33,107. Nationwide, only 9% of the population realizes income above \$100,000/year (3% above \$150,000/year). The national average household income is \$48,952/year; per capita income is \$18,423/year. By age, 45% of the Coral Gables' population is above the age of 45 *viz a viz* 31% nationwide. Information obtained from *CACI Marketing Systems*, 1100 N. Glebe Road, Arlington VA 22201. According to *The Wall Street Journal*, [edition to follow], the median price for a home in Coral Gables is \$1.2 million; nationwide, the median price is \$135,000.

informing and directing the unfamiliar viewer.<sup>19</sup> Signage in Las Vegas/Times Square does not merely index or advertise what is available; it contributes to the consumer's total experience. Additionally, visitors depend upon place-based communication and graphics systems to "move" them in and around both the indoor and outdoor environments. Whatever one may think of Las Vegas or Times Square signage, it showcases 20th Century integrated communication and graphic design systems which are specifically fitted to consumer needs and expectations.<sup>20</sup>

Retailing and sign regulation are infused with complex variables, and the above example communities are not characteristic in terms of Middle America demographics or socio-economic makeup. In the sample communities, and others similarly singular, a merchant is able to economically survive in a restrictive sign environment or tolerate state intervention in storefront design for several reasons. One is restrictive commercial zoning which severely limits retail space. In such instances, only those businesses with a pre-existing consumer base or start-up/development capital sufficient to "take a chance" can afford to locate there. Consumer profiles is another factor -- common sense alone tells us that the shopping habits of the affluent, with more discretionary income at their disposal, are different from those less-affluent, whose income must be conserved for essentials. Area employment patterns play a significant part -- single professionals consume differently than married professionals with children, and both consume differently than their counterparts in the blue collar or retail service labor force.

A community's business signage program may not be reflective of either demographics or aesthetic concerns, but instead express a community desire to exclude outsiders. Clearly, if a community limits commercial communication to unfamiliar travelers, such travelers will not often stop and shop.<sup>21</sup> Or perhaps the reason for restrictive signing is that the community does not like the zone itself, in which case the community may use the sign code to drive out certain businesses, or in the worse case scenario, to cause the entire zone to fail. In a recent Supreme Court case, 44 Liquor v. Rhode Island, the Court took a very dim view of efforts to restrict on-premise signage in order to get rid of businesses, business activities or business products viewed as "undesirable" by some

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<sup>19</sup> For readability/legibility guideline principles, refer to the Federal Highway Agency's Manual on Uniform Traffic Control Devices, and companion literature.

<sup>20</sup> As recently as a decade ago, the conventional wisdom in Las Vegas was that visitors didn't want to shop. The first mall erected on the city's "strip", the *Fashion Show*, followed the typical suburban shopping center model, but its owners soon discovered that people did not want a respite from the glitter and glamour. After a remodel which give the mall a 'glitzier facade and theme restaurants', sales immediately rose by 10%. Using the same strategy, the *Forum Shops* recently opened a 250,000 square foot expansion featuring Roman mythology and is planning a 450,000 square foot third phase called *Caesar's Maximus*, a re-creation of a Roman hill town. In 1996, sales at *Forum Shops* averaged \$1,300/square foot, while the typical mall rang up only \$278/square foot. *The Wall Street Journal*, issue August 27, 1997, article "Extravagant Themed Malls Enthrall Las Vegas Shoppers".

<sup>21</sup> Planners should avoid knowingly recommending or supporting regulations that seek to encode discrimination in the guise of "aesthetics." Of particular concern should be the very real possibility that demonstrable intent to exclude outsiders violates the Commerce Clause.

members of the community.<sup>22</sup>

One particular municipal sign code should never be adopted for any other municipality absent prior in depth study and comparison of demographics, particularly income, employment and housing variables. Forces other than demographics may also be at work. Therefore, many questions must be asked and answered before one can conclude that one sign code fits all, or, due to strict sign design/size/placement controls, one community is a better place to shop/live/visit than another lacking similar controls.<sup>23</sup>

### **Advertising; A Derived Demand**

Advertising occurs as a by-product of the commercial process in a highly competitive retail environment. In accordance with supply/demand marketplace dynamics, advertising reflects derived demand, *i.e.*, it is based upon expected short run consumption of goods and services by a defined population. In theory, demand and targeted consumer populations remain relatively constant. And even if a shift occurs, a decline in revenues in one market may be accompanied by a comparable increase in another market, so that total available gross sales volume throughout the retail economy generally remains the same, *i.e.*, the total market is engaged in a "zero sum game". However, as with most theories in American retailing, zero sum game dynamics do not always hold true. Consumption within discrete markets can be increased when "intervening opportunities" are provided along customary travel paths.<sup>24</sup> This is especially so in highly discretionary areas, such as quick service foods. Money is spent on a quick meal with much less thought than when someone is setting out to purchase a washer/dryer.

Complicating attempts to generalize about zero sum game and the overall market is the nature of the North American retail system, which adjusts to marketplace forces and economic trends. Some products are regularly consumed regardless of overall business

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<sup>22</sup> 44 Liquormart, Inc. V. Rhode Island, 517 U.S. 484 (1996). In this case, influential members of the community disapproved of a retail liquor store, located within a commercial zone adjacent to a major arterial. Because the zoning ordinance did not forbid the activity, the governing body attempted to force out the business by enacting a sign code which essentially prevented all signage visible to the street. The court found this to be impermissible content control, stating, among other things, that dissatisfaction with the sale of a product (in this case, liquor) could not be resolved through imposition of sign codes designed to discourage or terminate otherwise legal activities within the zone.

<sup>23</sup> If the reader wishes to review a sign code that might generate a national model, the Cleveland, Ohio sign code is recommended. Cleveland is an excellent representative example of Middle America cities, and its sign code reflects recognition of the signage required by retailers if they are to survive in a competitive market, where generally inexpensive retail space is amply available.

<sup>24</sup> Certain professional services, which depend on consumer expenditures of discretionary income for success, may increase consumption within the category by a sign which includes notice of a "specialty" that the consumer may not expect to be available at the site. For example, a veterinary clinic may provide pet grooming as an add-on service. Too, the recent trend toward franchising of traditional service or professional businesses, such as dental practices, veterinary clinics, and real estate agencies, has made the standardized, on-premise sign an essential component of the total corporate media advertising package.

and economic conditions, e.g., food, beverages, cosmetics/personal hygiene products, durable/non-durable household goods. Such consumables are considered "non-cyclical". Those market categories subject to consumption decreases or increases in response to economic factors are considered "cyclical", e.g., autos/auto parts, toys, designer apparel and accessories, out-of-home entertainment.

Cyclical/non-cyclical dynamics were easier to predict and adjust to when trade areas were more or less immutable.<sup>25</sup> Once "flattops" or manufacturing/industrial sites brought in the jobs, which generated "rooftops" or housing, with predictable household income, which in turn generated "parking lots" or retail space, which was filled based on predictable buying power. Today, this pattern no longer holds true. With the growth of the retail economy, retail and service jobs have replaced manufacturing or industry as the driving force behind housing and employment patterns. Concurrently, both discretionary income and impulse purchasing has increased. Because of these factors, market segmentation has also increased. Often, very specialized categories take in large amounts of money. Clearly, traditional trade area analysis is no longer valid for many urban communities; neither can one apply zero sum game theory with impunity.<sup>26</sup>

Regardless of zero sum game variables, however, in today's competitive economic system, market share per retail category certainly fluctuates and is centrally dependent upon the effectiveness of one's advertising/marketing programs and access to commercial communication or speech. Additionally, commercial communication properly placed and truly noticeable or readable by the consumer will often increase daily volume for every business in the category. Americans tend to consume both by habit and impulse.<sup>27</sup>

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<sup>25</sup> *Wal-Mart's* success is significantly prompted by a marketing strategy that relies on a [mass] merchandise base which is unaffected by cyclical variables; its goods are consumed in predictable patterns on a regular basis. Because a Wal-Mart trade area may exceed the traditional trade area by 20-30 miles, it is far less susceptible to traditional trade area consumption, *i.e.*, if job or employment opportunities decrease in the local 5-mile radius trade area, Wal-Mart may continue to draw from its larger trade area as well as the infrequent passerby.

<sup>26</sup> Although generally when a mass merchandiser such as Wal-Mart enters a community, other merchants lose volume nearly proportional to Wal-Mart's gain, the losses may be offset by introducing "specialty" items not carried by Wal-Mart. In addition to regaining former sales volumes, specialization or scale economics can also increase consumption throughout the community's retail system. For example, a Sac's customer may find a Wal-Mart irresistible and spend dollars there that he or she might not have otherwise spent. Conversely, a Wal-Mart customer may spend additional dollars at a shop offering "tall men" apparel -- a specialty niche usually not filled by a mass merchandiser.

<sup>27</sup> There are two general rules in retailing. Rule 1 is that one must cut sales price by at least 15 percent to overcome brand awareness, e.g., if a business wishes to increase sales of a store brand in the soft drink retail category, to offset brand marketing advantages enjoyed by Coca Cola, the store brand must be offered at a consumer cost at least 15 percent below that of Coke. Merchants who carry a large selection of goods similar to the one reduced in price generally will be able to maintain total sales volumes because of cross elasticity in the market, *i.e.*, volume losses in one segment of the category may be made up by sales in another segment. However, as with all rules, there is the exception. Rule 2 is that Rule 1 doesn't always work to overcome brand identity, *i.e.*, major brands will maintain sales volumes sufficient to offset up to 15% price reductions in competitive brands. Most retailers cannot maintain net profits of 2.5-10% absent consumer brand "loyalty" and cost effective advertising. Since the small merchant lacks the volume which would permit discounts from major producers and enable point of

Because of this, questions as to the real impact of sign regulation on any given market on any given day are very difficult to answer in advance of regulation.

### **On-Premise Signs as Essential Components of Major Media Advertising**

The on-premise sign, when standing alone, should be considered and regulated as a full function communication and design system. In any commercial setting, the sign should be easily visible and readable; where appropriate, the company "signature" should be integrated into the message. When used correctly, the sign enhances product or service recognition and maximizes recall of other media messages, thereby providing the business immediate market advantage.

The importance of the single on-premise sign was the subject of a seminal California case, Denny's Inc., et al v. City of Agoura Hills, 97 C.D.O.S. 6341 (1997), Second Appellate District. The City is a picturesque suburban community situated in the foothills of western Los Angeles County; a portion of the City is bisected by a major and high volume freeway which is part of US Highway 101, locally referred to as the Ventura Freeway. The City desired to enhance its visual aesthetics - a purpose generally within local police powers. As a part of its enhancement program, the City enacted a sign ordinance which, among other things, prohibited all pole signs, with the exception of a few under six feet in height; the ordinance did permit "monument signs", if they did not exceed the six foot limit.

The affected business proprietors identified by the City as being in violation of the ordinance exhibited the traditional type of large freeway pole signs which announced the location of the business by name and/or logo, and considerably exceeded the new height limit. Under the sign ordinance, the pole signs became non-conforming on March 20, 1985, and following an amortization period of eight years, were subject to removal on March 20, 1992. During the amortization period, the affected businesses unsuccessfully applied for zoning variances, and litigation ensued.

The businesses alleged that the City's sign ordinance violated Section 5499 of the California Business and Professional Code, which in essential part proscribed the removal of any on-premise sign on the basis of height or size if topographical circumstances would materially impair the visibility of a conforming sign or the sign user's ability to adequately and effectively continue to communicate with the public through use of a conforming sign; if impairment of visibility or ability to communicate would result as a consequence of enforcement of the ordinance, the offending sign could remain and would be deemed conforming, as a matter of law. Section 5499 controlled all sign ordinances adopted after March 12, 1983. The City's ordinance was enacted in 1985; the affected business establishments and their signs all predated enactment.<sup>28</sup>

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purchase price reductions, he or she is much more dependent than the mass merchandiser, for example, on cost effective advertising to build a clientele and compete in the marketplace.

<sup>28</sup> Section 5499 of the Code states: "... no city or county shall require the removal of any on-premises advertising display on the basis of its height or size by requiring conformance with any ordinance or

Based on Section 5499 and its preemption of local law, the businesses requested an injunction against City enforcement of its ordinance as against them; the City concurred that the State code applied to its ordinance, but in essence countered, as a defense, that other merchants in the area with conforming signs were enjoying vigorous business and healthy sales. The trial court rejected this argument.<sup>29</sup>

One of the businesses affected by the City's ordinance was a Burger King franchise located adjacent to the Ventura Freeway. The subject's pole sign was highly visible both ways to potential customers traveling the freeway. Traffic counts showed that 88% of those vehicles passing the restaurant did so *via* the freeway; the other 12% passed by on local frontage roads. Due to surrounding topographical circumstances (e.g., the business site was lower than the freeway), a sign of the type and height required by the ordinance could not be seen by either north or south bound motorists; neither could the business premises be seen until it was too late to safely exit the freeway. Thus, forced takedown of the offending pole sign would render the site essentially invisible and incapable of attracting the freeway motoring impulse buyer.

The Agoura Hills Burger King, and its sign, were specifically built to service Ventura Freeway motorists, and its profit structure was designed with that in mind. Corporate field studies found that nearly 60% of the store's business was attributable to its on-premise sign. Even after factoring down the potential loss in business attributable to loss of the sign from 60% to 37.5% (a compromise or "averaging" between Burger King's data and that of the City's expert), corporate accountants found that the franchisee would lose a profit of \$2 million over a 15 year period -- the term left on the lease at the time of controversy. Using the higher 60% business loss calculation - a calculation the corporation believed more accurate, the lost profit would equal \$3.2 million, perhaps forcing the franchisee out of business.

A comparison was also made between the Agoura Hills Burger King and another Burger King in Camarillo, a mile further down the freeway. As with the Agoura Hills site, the Camarillo premises were not visible from the freeway, and although the store had a pole sign, the sign was visible only to southbound traffic and could not be seen until the motorist had passed the appropriate exit.

Because of both lack of visibility and ready access from the freeway, the Camarillo

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regulation introduced or adopted on or after March 12, 1983, if special topographic circumstances would result in a material impairment of visibility of the display or the owner's or user's ability to adequately and effectively continue to communicate with the public through the use of the display. Under these circumstances, the owner or user may maintain the advertising display at the business premises and at a location necessary for continued public visibility at the height or size at which the display was previously erected and, in doing so, the owner or user is in conformance.

<sup>29</sup> In response to the City's argument, the trial court stated: "Just how commercially effective signs may be at other locations is not directly relevant here.... vigorous business and healthy sales [of third party businesses]...may be generally true [b]ut that is not the statutory test."

Burger King relied much more on the local population and local frontage road traffic than the Agoura Hills store, and not surprisingly, its sales were only 48% of the sales achieved by the Agoura Hills site. The difference in volume tended to support a finding that up to 60% of the sales of the Agoura Hills Burger King flowed from its visibility to traffic in both directions for distances great enough to provide ample time for the unfamiliar driver or impulse purchaser to exit safely. Additionally, *Burger King Corporation* permitted a deviation from its customary practice of siting only one franchise per 5-mile radius trade area because only the Camarillo location was considered trade-area oriented; the Agoura Hills franchise was strictly "point of purchase" or freeway oriented, expected to draw only a small percentage of the local consumer pool.

In addition to data provided by Burger King, the studies and surveys provided by all business litigants similarly found that extensive adverse impact to business revenues and profits would result if their pole signs, visible to the freeway, were removed. Among the other litigants were *McDonald's* and *Texaco*.<sup>30</sup>

The trial court concluded that enforcement of the ordinance would result in a material impairment of all plaintiffs' ability to adequately and effectively continue to communicate with the public due to topographical conditions, which included trees, hills, concrete highway structures, other buildings, utility poles and wires, vehicles traveling the freeway, and any other visual impediment other than the natural limits of human eyesight.<sup>31</sup> The court then ruled that the attempted enforcement of the City's ordinance was in contravention of the Business and Professions Code, that plaintiffs could keep, maintain and exhibit the disputed signs at their respective business premises, that such signs would

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<sup>30</sup> Plaintiff Agoura Restaurants, Inc., dba *McDonald's*, is located adjacent to a freeway off-ramp and signaled its potential customers via a 75-foot pole name and logo sign. The trial court found that the restaurant was heavily dependent on freeway traffic for its customer base, and that no sign or display conforming to the City's ordinance would be visible to freeway motorists "at a safe and reasonable decision point for the off-ramp". Further, the trial court found no reason to question or examine plaintiff's research in detail, because research provided by the City's expert alone disclosed that removal of the pole sign would result in a gross revenue loss to the restaurant of 35% of present revenues. Similarly, predicted losses for the freeway-oriented Texaco station, according to the City's expert, were 35% of present revenues.

In Texaco's case, the predicted loss in dollars amounted to \$336,000 the first year of sign takedown. The record is silent on predicted dollar losses for the *McDonald's* restaurant after takedown of its pole sign, but R. James Claus, Executive Director of the Signage Foundation for Communication Excellence, Inc., assisted the litigants in analyzing data. Dr. Claus estimated the gross revenues loss to the franchisee at minimally \$900,000/year, based on a 35% reduction of present gross revenues averaging \$2.7 million/year; the corporation calculated the first-year loss at \$1.3 million (or 50%), rising to \$2.3 million (or 85%) within 5 years as non-local motorist recall of the site diminished. Such losses would force the restaurant to close.

<sup>31</sup> The trial court determined that the State code's statutory language minimally required "a circumstantial analysis of not only the simple visibility of the sign, but also whether the sign will be noticed [emphasis in original], and the message imparted to the viewer's brain.... [t]he additional circumstances bearing on noticeability or perceptibility, would include the origin and nature of the customer base and buying motivation, general visibility in the area, the high speed, high volume nature of the freeway, location of decision points for motorists along the freeway, identification time and reaction time, and time to make safe lane changes."

be deemed in conformance, and that the City, because of its "wrongful and on-going conduct", was permanently enjoined from enforcing the ordinance as against the plaintiffs. On appeal by the City, the appellate court affirmed the trial court's decision.

The appellate court in upholding the trial court's decision did not reach the commercial impact of the ordinance, deciding the case on the narrow question of "material impairment of visibility." However, the trial court clearly paid attention to the economic research and data submitted not only by the affected businesses, but also by the City's own expert, who agreed that significant losses in customer base and business revenues would result from the loss of signage.<sup>32</sup>

In the Agoura Hills Burger King case, lack of freeway visibility of the premises itself precluded the business from overcoming the sign height restriction by alternate forms of signage. Had a "signature" building, for example, been a viable alternative (because the site itself was effectively visible to the freeway), the Agoura Hills Burger King, and other freeway merchants similarly situated and adversely impacted by the City's height restrictions, may not have litigated for ten costly years ... costly to both the businesses and the city.<sup>33</sup> Although the Agoura Hills matter was decided in California, the findings, conclusions and decisions of California appellate courts are generally accorded great respect in sister states and federal courts. Therefore, a review of trial and appellate court documents in this case, including market survey exhibits, is recommended for all interested parties, no matter where residing or doing business.

## **Marketing and Advertising as Databased Science**

North America is enjoying perhaps the most dynamic retail period in its history, and possesses the most extensive advertising/marketing research available in the world. Technological advances in data collection permit the gathering of information on consumer behavior and preferences never before possible. Using such information, media advertising can be carefully crafted to reach particular targets. The only obstacle is that large volume is required to utilize the system full scale; volume has assisted gasoline

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<sup>32</sup> Regarding the research provided by the affected businesses, the trial court said, "...[although] plaintiffs are entitled to prevail based on...material impairment [alone]...if more were required, it would be a showing of a material impairment of effective commercial communication, which is...generally shown by the [City expert's] report...without a need for an in depth study of plaintiffs' own figures...[however] it should be quickly added that plaintiffs' own figures and related information are supported by logic..." (Emphasis added.)

The trial court went on, "[t]he evidence clearly establishes that...special topographic circumstances would materially impair the noticeability, or perceptibility, of conforming signs for each plaintiff...[and] as to each of the plaintiffs, there would be a material impairment of the commercial effectiveness [emphasis added] of a conforming sign... [because] each of the businesses relies on its existing sign to attract customers...substantially...from the freeway." Significantly, none of the trial court's findings, including those regarding plaintiffs' research, were overruled or otherwise accepted by the appellate court.

<sup>33</sup> Subsequent to the appellate court's decision, and following presentation of the cost bill to the City Treasurer, the Agoura Hills Mayor and City Counsel were recalled by the town's citizens.



stations, franchised fast service food outlets, mass merchandisers and complete category stores to obtain national recognition and retail dominance in all trade areas. For example, Wal-Mart now spends only 3% or less of total gross volume on advertising and yet enjoys recognition of its product mix by a majority of American consumers.

As technological applications of data analyses and processing increase, North American databased marketing will constantly segment. Two dynamics are at work: scale economics and specialization of product or service requiring specific marketing or advertising strategies. The system has become so sophisticated that the mass merchandiser can now determine with almost certain accuracy whether a 120,000 square foot store is more economically productive than one of 60,000 square feet, and can almost immediately adapt to any change in local economic conditions (using data board inventory and company-owned warehousing/delivery systems) by increasing or decreasing products or services. These advances in merchandizing technology offer opportunities and challenges to the municipal planner, which if unrecognized or unmet may result in land use plans lacking realistic or achievable economic goals.

## **BASIC VALUATION APPROACHES**

Given that the American retail and service economy and the role signage plays within it defy generalization, it is still possible to come to a databased determination of a sign's cumulative value prior to regulatory action or decision. Rather than compounding the problems inherent in defining and regulating signage, market-based valuation approaches provide insight into the phenomena and its use by today's sophisticated business community.

Two basic approaches, utilized throughout the marketplace, can be applied in most situations. These approaches are well established and backed by innumerable data-based studies undertaken over decades by advertising and marketing specialists. First, communication sells, and media providers daily research the impact of their particular medium on sales volumes in order to know how much to sell the communication for, or conversely, how much the client will pay. Secondly, advertising cost/benefit data is utilized by the commercial real estate appraiser and tax assessor in valuing commercial properties, including the "visibility component."

The Agoura Hills litigation provides an excellent example of the use of databased research, as well as common sense, to conclude that on-premise signage represents a valuable component of a retail/commercial site. To avoid a sign code which has the demonstrable effect of hindering the ability of certain types of retail and service providers to succeed because they rely on signage for the majority of their customers, it is important that all community stakeholders become familiar with the common language or "currency" used to determine the true economic worth of a particular sign or signage program to a commercial site. What follows, then, is a discussion of advertising effectiveness measures and the use of these measures in standard commercial appraisal practice. (Specific advertising/marketing studies will not be presented in this publication; rather the text

attempts to ground the reader in basic knowledge of underlying methodology and how value determinations are reached.)

## **Common Currency of Commercial Speech Evaluation**

The economic worth of an on-premise business sign is almost totally dependent upon its ability to effectively "speak" to the intended receiver or communicate its message in the marketplace. Precisely because the business sign is a form of commercial speech, as are magazines/newspapers, direct mail advertisements, and radio and television commercials, the primary entity looked to for valuation assistance is the advertising industry.<sup>34</sup> The North American advertising/marketing economic sector relies on four effectiveness (or valuation) measures: reach, frequency, readership, and cost per thousand exposures.

**1. Reach.** This measurement addresses the type and numbers of consumers being exposed to the advertiser's message. For example, newspaper advertisers obtain address lists of subscribers and from the demographics disclosed by the lists, determine fairly accurately where their messages are going. With respect to on-premise signage, consumer information is obtained from motor vehicle department records, based on the plate numbers on vehicles passing the sign. From this data, a dot map identifying the source of daily vehicular traffic can be constructed, and "reach" can be determined. (Note: Dot maps and motor vehicle department records also assist in defining a commercial trade area.)

**2. Frequency.** This measurement addresses how many times a viewer/reader/listener is exposed to the advertiser's message. For example, a newspaper advertiser can accurately determine how many people were exposed to an ad based on the number of newspapers purchased. Frequency measures are more difficult to determine for sign advertisers and owners, particularly those dependent upon on-premise signage. Many drivers are "just passing through" and may see the sign only once; other drivers live in or near the sign's trade area, and therefore see the sign many times a month. Origin/destination studies offer very reliable data in these circumstances. However, while traffic counts provide accurate information on the number of vehicles daily passing a sign, this number must be adjusted, using tested formulas, to account for the infrequent passerby or viewers who may see the sign, but are not potential consumers of the good, product or service advertised.

**3. Readership:** This measurement addresses whether a message is effectively speaking to and subsequently remembered by the intended recipient. Several research

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<sup>34</sup> Advertising, coupled with marketing, annually generates in excess of \$250 billion in revenues. Major media advertising expenditures at the local, regional and national levels equal more than \$175 billion. In comparison, more dollars are spent per year on advertising than on the following sales: local and long distance telephone calls, (\$170 billion), toy sales (\$20 billion), tobacco sales (\$51 billion) and soft drink sales (\$55 billion). Only categories such as new car/light truck sales at \$350 billion or retail food sales at \$450 billion produce significantly larger revenues.

techniques are used to determine this factor; two of the most commonly used are recall and recognition tests. Rating services provide these tests and results for all major-media advertisers; for example, television and newspaper advertisers rely on Nielsen Ratings Services. Small business owners not engaged in franchised business operations usually do not have access to national rating service readership tabulations, because such data is generally protected as trade secret information by the parent franchiser company. For such independent or non-affiliated small business owners, the services of a local market researcher may be required to obtain readership measures.

**4. Cost per thousand exposures.** This measurement addresses the cost for "exposure" of the advertiser's message, and is the one common denominator among all commercial communication mediums, whether radio, television, print, direct mail, outdoor advertising (billboards) or on-premise signage. To arrive at this measurement, one uses frequency data, and then divides the cost of the communication method or device by the number of exposures occurring during a defined time period. For example:

Cost/1000 Exposures - Local Television

Assumptions:

Trading area: 80,000 households  
 Audience: (15% of 80,000) = 12,000 households  
 Cost: \$120 (one - 15 second spot at 9:00 p.m. weekday)

Formula:

Cost/1000 Exposures	<u>Media Cost</u> Audience
Calculation	<u>\$120</u> 12,000 Households
Cost/1000 Household Exposures =	<u>\$10.00</u>

Newspaper cost per thousand exposures is easiest to determine; for example:

Cost/1000 Exposures - Local Newspaper

Assumptions:

Circulation: 40,000 Trading Area Households  
 Line Rate: Sunday \$.40  
 Advertisement: 300 lines; Sunday (approximately 3" x 7" column)

Formula:

Cost/1000 Household Exposures	<u>Monthly Cost</u>
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Household Circulation	Audience
Calculation	$\frac{.40 \times 300 \text{ Lines} = \$120}{40,000 \text{ Households}}$
Cost/1000 Household Exposures =	<u>\$3.00</u>

The on-premise sign cost analysis is one of the more complicated evaluations, based on original costs (design/production and construction /placement), plus maintenance expenses and depreciation. For example:

Cost/1000 Exposures - Sign

Assumptions:

Initial Cost of Design, Production and Installation:	\$7,500 (for two faces)
Amortization Period:	5 years at 10%
Cost/Month:	\$125.00
Estimated traffic count after adjustments:	30,000 cars/day

Formula:

Cost/1000 Vehicle Exposures	<u>Monthly Cost</u> Monthly Exposures
Calculation	$\frac{\$125.00}{900,000 \text{ Exposures/Month}}$
Cost/1000 Household Exposures =	<u>14 cents</u>

Based upon cost per thousand exposures, one quickly notes that the cost to REPLACE a sign's exposures with other mediums may be cost prohibitive in many cases, particularly for small business owners.<sup>35</sup> This is why "amortization" (based solely on manufacture, installation and maintenance costs) as compensation for retroactive restrictive regulations may be damaging to the business community, and ultimately, local government tax base.

All advertising and marketing sources can produce estimated cost-per-

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<sup>35</sup> The cost-per-thousand comparable examples are provided to acquaint the reader with calculation methods based on cost variances within various media. The cost of radio advertising was recently addressed in a *Wall Street Journal* article discussing the New York radio market, which is the largest in the country. The Hispanic radio station WSKQ is one of this market's two most popular stations. It commands \$500 - \$1,200 per minute for ads -- an amount about 25% less than English-language stations of similar size. (Worries of possible bias prompted the Federal Communication Commission to study whether major advertisers discriminate against Hispanic and other ethnic-minority radio formats; study results are due by the end of 1998.) *The Wall Street Journal*, ed September 10, 1998, p. B1.

thousand-exposures data. For the newcomer to signage valuation, however, there is no better source of information concerning the value of street exposures than the local outdoor advertising or billboard plant. Outdoor advertisers rely on "rate cards" as accurate indicators of monthly lease or sales costs throughout the United States. From these rates, cost-per-thousand exposures can be determined.

### **The Basic Tests -- Recall and Recognition**

As mentioned earlier, two tests -- recall and recognition -- are routinely utilized, particularly by outdoor advertisers, to determine the value of a communication structure or device and the message it is delivering.

Recall tests disclose how well a commercial message is doing by testing a consumer's recollection of a particular message; the responses are categorized as unaided, partially aided or totally aided. It is generally accepted that if a message obtains strong unaided recall after 48 hours, it is considered very effective.

Recognition is measured by testing memories before and after a particular advertising/marketing campaign or program. Such testing is also extensively used in political campaigns, particularly to measure "face" recognition. There are some complicating factors in these measurements, such as gross rating points, but for present overview purposes, these factors will not be discussed here.<sup>36</sup>

### **Top of the Mind Awareness in a Consumer-Oriented Society**

A primary goal of advertising, and a main reason for buying/selling exposures, is to develop top of the mind awareness, which involves both recall and recognition. Most retailers operate under the marketing concept that "share of mind" equals share of market, e.g., if a consumer is asked, "what product first comes to mind when you think of [hot dogs]", the answer is thought to be a good indicator of market share. The consumer is believed to have top of mind awareness for the product most often purchased or used. Many companies base advertising strategies on the answer to the "what first comes to mind" question.

With respect to introducing new or improved products, it is generally believed that if the advertising campaign cannot achieve significant unaided recall in the first 48 hours after the listener or viewer has been exposed to the advertisement or message, the campaign is judged to be of limited or no success. Of course, there are exceptions where even excellent recall will not improve product/service purchase patterns or, in the case of a political campaign, increase votes.

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<sup>36</sup> For more information, a report undertaken by Donald Sutte on behalf of the National Academy of Sciences is recommended. (Donald T. Sutte, Jr., *The Appraisal of Roadside Advertising Signs*, Chicago, Illinois: American Institute of Real Estate Appraisers of the National Association of Real Estate Boards, 1972.) Other sources are the Outdoor Advertising Association of America, Washington D.C.; the Institute of Outdoor Advertising, New York; and Traffic Audit Bureau (neutral rating service), New York.

To illustrate the above concept: recent studies show that when American buyers are asked which car company first comes to mind, 30% will say General Motors; this percentage shows a decrease of 22% since 1977. The decline in top of mind awareness does not indicate that GM is selling fewer cars -- because the market itself has expanded during the last 20 years (due to population and income increases); instead, the figure indicates that GM's market share has declined. (GM will use this decreased recall/recognition percentage to decide the future course of its commercial communication expenditures.)<sup>37</sup>

## **Measuring/Developing Top of the Mind Awareness and Market Share**

The most sophisticated studies on recall/recognition factors are undertaken by the billboard segment of the sign industry. Not surprisingly, these studies establish that larger signs on high-density traffic routes generate more revenue for the advertiser than small signs on less frequented roads. An outdoor painted bulletin typically enjoys 4 times the traffic count of a poster. This disparity is reflected in "rate card" prices, e.g., bulletin space of 720 square feet typically commands \$3500/month whereas poster space of 320 square feet sells for \$750 per month, or less. High traffic count and premiere space position are primary factors in the cost of outdoor advertising because they translate into greater recall/recognition (or top of mind awareness) and market share.<sup>38</sup>

The same holds true for on-premise business signage and political campaign signs. As viewers develop a memory for the product/ good, service or political personage or message, their inclination to choose that item or individual increases. Also, by triggering recognition and recall, on-premise business signage serves not only to signal the presence of a business establishment but also to communicate what is available at that location.

## **Example Sign Industry Study**

A major, multipart study, "Research on Signage Performance," conducted between 1995 and 1997 by the University of San Diego looked at the effects of on-premise signage on the financial performance of retail sites.<sup>39</sup> The conclusion of the study was that "on-

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<sup>37</sup> General advertising purposes can shift from situation to situation. In the past General Motors, Inc. dominated the North American automobile market, and GM feared federal action for restraint of trade if their market share increased above 50%. Consequently, for a number of years GM's advertisements were not designed to increase or expand market share, but instead were aimed at retaining "old" customers and reinforcing customer decisions to purchase GM's existing lines.

<sup>38</sup> Local governments also lease space to outdoor advertisers. This space is found, for example, on buses, bus shelters, transit stations, and sidewalk kiosks. Although public advertising space is generally much smaller than that offered by traditional outdoor structures, in recognition of the intrinsic value of such exposure, rental rates of \$500/month/poster face are not uncommon. Street-based exposures represent a valuable municipal resource, and are successfully implemented by many communities such as Edmonton, British Columbia, Canada and Cleveland, Ohio.

<sup>39</sup> The *Research on Signage Performance* by the University of San Diego School of Business Administration was sponsored by the California Electric Sign Association, the International Sign

premise signage has a statistically significant and financially substantive impact on the revenues of a site". (CESA/ISA 1997, 20).

Part 1 of the study was a multiple regression analysis of a group of variables, including signage, on sales at 162 Southern California locations of a major fast-food chain. Signage variables included the total number of signs on a site, the cumulative square footage of all signs, the height of signs, and the presence of specific types of signs, including monument signs, directional signs, pole signs, building (e.g., wall or fascia) signs, and drive-thru menu boards. Other variables included the value of owner-occupied housing within 1.5 miles, median rents within 0.5 miles, building size, hours of operation, and other local geographic characteristics. Although wide variations in data are important in a regression analysis to be able to determine the individualized effects of a group of variables, the summary of results did not indicate much data variation concerning the amount, type, and placement of signage from one site to another. This is so because sound business decisions preclude a national fast-food chain from building a store on a site that, for whatever reason, would not be allowed some minimum level of signage. Therefore, the researchers had to "tease out" the effects of each signage variable using data that was fairly uniform from one site to another.<sup>40</sup>

Each variable was tested at every location to predict the effect on (1) annual sales dollar revenues; (2) the annual number of transactions at a site; and (3) the average dollar amount spent per transaction. The results indicate that the number of signs at a particular site has a significant positive impact on both the annual sales revenue and the number of annual customer transactions. For example:

- n The model predicted that, on average, *one* additional sign installed on a site would result in an increase in annual sales in dollars of 4.75 percent at that site. This translates to a \$23,750 increase for one additional sign at a typical store with annual sales revenue of \$500,000.
  
- n One additional sign installed at a site is projected to increase the annual number of transactions by 3.93 percent. This translates into more than 3,900 additional transactions for a store with an annual average of 100,000 transactions.

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Association, the Sign User Council of California, and the Business Identity Council of America. A summary of the findings appeared in *The Economic Value of On-Premise Signage*, a compendium of research results and articles on sign amortization and copyright and trademark protection. The booklet was published jointly in 1997 by CESA and ISA.

<sup>40</sup> University of San Diego researchers note that multiple regression analysis relies on variation in data to illustrate relationships. Given the standardized types of signage used by a national franchiser, there is not a lot of variation in the independent sign variables. Furthermore there is not substantial variation in the site's sales performance because common business sense dictates that poor performing sites will be eliminated.

- n The impact on the average dollar amount spent per transaction as the result of additional signs ranged from \$0.06 per transaction where one additional 36-square-foot wall sign was added up to \$0.78 per transaction where one additional 144-square-foot pole sign was added.

The second part of the study combined a multiple regression analysis and a time series analysis of seven years of weekly sales data for Pier 1 Imports home furnishing stores to measure the effects of modifications, additions, or removal of on-premise signage on sales performance over time. For the multiple regression analysis, data from 100 stores was used; for the time series analysis, data from 50 stores was used. Researchers attempted to find sites that were not subject to other major events that could affect sales performance, such as building remodeling, shopping center remodeling, severe weather, or road construction.

The results were grouped according to the effects on sales performance of: (1) a change to building signage; (2) a change in pole or plaza identity signs; or (3) the addition of new directional signage. The result bore out a strong correlation between new signage and increased sales.

- n Changes to building signage (*e.g.*, the addition or replacement of wall signs) resulted in an increase in weekly sales per store of approximately 5 percent. The building signage change variables included the replacement of aging signage, the addition of new signage to previously unsigned building faces, and the replacement of existing signage with larger signage. The increases to weekly sales at the 21 sites that experienced changes to building signage ranged from 0.3 percent to 23.7 percent. The store that experienced a less than 1 percent increase was noted to have atypically high sales for the chain, and, therefore, a large increase was not expected as a result of the signage change. The store that experienced the 23.7 percent increase was noted to have atypically low sales, resulting in a large percentage increase, although the increase in terms of dollars was comparable to other sites. Of the 21 sites that experienced a change to building signage, increases in weekly sales were generally in the 1 percent to 5 percent range.
- n The addition of pole signs and plaza identity signs (*e.g.*, a multitenant sign with Pier 1 Imports identified as a tenant) resulted in a 4 percent to 12 percent increase in weekly sales at the nine sites on which those two types of signs were added. Researchers attribute the increase to the advertising impact on passing traffic.
- n The addition of small directional signs indicating ingress and egress routes resulted in weekly sales increases ranging from 4 percent to 12 percent. Researchers attribute the increase in these cases to the "signs' ability to guide a site-bound shopper more than any specific advertising effect" (CESA 1997, 35).



The Pier 1 Imports signage study concludes that "on-premise signage is a significant constituent of the factors causing the success of a retail endeavor" (CESA 1997, 36). It noted that the "advertising effect" of additional building, pole, or multitenant sign can be credited with a 5 to 10 percent increase in a site's revenues. The ability of directional signs to guide customers to a site can be credited with approximately a 10 percent addition to site revenues. The noted increases in revenues as a result of signage can have a dramatic effect on profitability at a specific site given that normal profits in the retail industry are approximately 1 to 2 percent.

In sum, research on the impact of additions or changes to signage at fast-food and home furnishing stores indicate that increases in the total amount of signage or the number of signs on a site can have a significant positive impact on the annual revenues at a site. The studies did not measure the impact on annual revenues of relatively small additions to the total amount of signage on a site.

### **Example Sign User Surveys**

As an offshoot to its economic study with the University of San Diego, the California Electric Sign Association solicited testimonials from several national and regional franchise clients describing the before-and-after effects of a change in signage (CESA 1997). In a letter to the CESA Sign Guidelines Committee in March 1996, a Jack-in-the-Box restaurant executive indicated that the addition of a new pylon sign at one store resulted in an 8.8 percent increase in weekly sales at that store in 1992. A control group of 15 Jack-in-the-Box stores at which there were no signage changes experienced an average 4.9 percent increase in sales during the same time period.

The marketing department of *Cendant Corporation*, the nation's largest business form franchiser, reported an increase in rooms rented as a result of new signage at one of the company's *Motel 6* franchises. In December 1994, the subject motel increased the height of its pole sign from 45 feet to 75 feet. The new sign height was necessary to increase visibility to motorists and to avoid an obstruction from trees. The number of rooms sold increased 19 percent from 1994 to 1995. The letter notes that no other changes were made to the interchange or the adjacent roadway. (The marketing department additionally reports that fewer than 50 percent of economy motel lodgers make advance reservations.)<sup>41</sup>

In 1988, a survey of citizen preferences about automobile dealership signage was conducted by market researchers at the University of San Diego (Brown 1988). The City of San Diego had just enacted new restrictions on the size and placement of automobile dealership signage. The purpose of the study was to ascertain citizen's opinions about the signage. Survey questions about signage were embedded in a broader market survey of 350 customers visiting the service departments of eight San Diego automobile dealerships. The results indicated that 18 percent of customers became aware of the service

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<sup>41</sup> Richard Wolf, Senior Counsel, *Cendant Corporation*, 1997. See References.

department when they saw the sign. More than 68 percent of respondents believed that signage was important in helping them locate the dealership. Most of respondents (76 percent) indicated that the signs were fine at the present size (which reflected the new stricter size requirements), while 22 percent thought the signs should be larger. Researchers concluded that there was no evidence to suggest that a significant group of people thought that automobile dealership signage should be removed or reduced in size. This was despite the fact that the signs at the dealerships were some of the largest commercial signs in the study area.

## **Government Research and Policies**

Whether signage may be a causal factor in lowering the income potential of a real estate parcel was the subject of study by the outdoor advertising division of the California Department of Transportation. The division employed the appraisal firm Haskell Berry to determine if the presence of outdoor or third party signage (billboards) adversely affected the income potential of other commercial activities sharing the site. The purpose behind the study was to ascertain how much monetary compensation, if any, must be paid to the outdoor owners when the outdoor signs had to be removed *via* a regulatory taking. At the time, many in CDOT argued that outdoor signage reduced the property value and/or income potential of adjacent businesses and sites; they further argued that because removal would increase property values and income potentials, removal should not be compensated monetarily. Researchers found no basis for the argument that outdoor signage decreased land values or income potentials. On the contrary, it was concluded that signage had no adverse affect on either the property value or income potential of adjacent properties. An additional conclusion was that all types of signage increased site economic productivity and sales for the businesses to which each type referred.

The Federal Highway Administration, in implementing the 1965 Highway Act, mandates monetary compensation for the taking of outdoor advertising along the interstate highway system. The federal compensation schedules are based on extensive research on the economic value of outdoor signs to the businesses they advertise. One study heavily relied upon was the California study mentioned above. (Also, see the 1970 Property Relocation and Acquisition Act and the "Legal" chapter.) As consumer mobility and discretionary income increases, the compensation paid for the taking of outdoor structures has also increased significantly.

## **Private Studies**

At the request of two Washington cities -- Lacey and Spokane -- the writer prepared analyses concerning the costs and benefits conferred by a proposed aesthetic-based sign code which would severely restrict local businesses' ability to communicate with highway travel. The analyses concentrated on the probable costs to these businesses. The approach was conceptual and designed to provide basic education to the city governments on the cumulative economic value of signage to site. The analyses concluded that business revenue losses would result in losses to the community in the form of income and sales taxes which would not be offset by any appreciable benefit. Following the

presentation, the city administration of Spokane rejected the proposed code; in Lacey, the proposed code was modified to take into account the visibility needs of the business community, particularly the needs of highway-oriented businesses.

Databased research concerning economic benefits to a municipality from restrictive sign codes is lacking in today's planning or regulatory literature. Therefore, quantitative cost/benefit databased research should be a high priority in all municipalities before undertaking regulation to limit size, height, illumination, color, content or legibility of on-premise signage. For the time being, conceptual cost/benefit analyses such as those conducted by the writer should be reviewed for useful insight into the likely economic impacts of a sign code.

### **The Role of Professional Research and Government Policies In Determining the Value of Real Estate Interests, including Signage**

For the last 30 years, land use decisions have involved three general types of practitioner or professional: 1) the land use planner and the transportation engineer, who are specialists in neighborhood and district land use patterns, 2) the public appraiser, usually identified as the county tax assessor, and 3) the private appraiser, who is employed by private parties, financial institutions and government lenders or loan guarantors, *e.g.*, the federal Veterans' Administration or HUD. Prior to the savings and loan crisis of the late 1980's, members of these three groups could express an opinion about the value of real estate interests without benefit of specific training or expertise. In the wake of the crisis, the federal government learned that flawed appraisals or value determinations contributed significantly to loan foreclosures and financial institution failures. In response, the federal government enacted the 1989 Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA) -- a consumer based legislative effort which subjects the appraisal profession and American financial institutions to extensive regulation regarding appraisal valuation and evaluation processes.

Professional real estate appraiser conduct, standing (licensure and certification) and education are under the control and supervision of the states, the Appraisal Foundation, and the federal Appraisal Subcommittee -- a regulatory body created by FIRREA legislation. The Foundation Appraisal Standards Board is responsible for "Uniform Standards of Professional Appraisal Practice" (USPAP); USPAP applies to all real estate appraisers undertaking assignments in federally referred transactions, and sets out the data and research methodology to apply to the task. All states have adopted USPAP for real estate appraisers practicing within their jurisdiction. An appraiser licensed or certified under USPAP risks both civil and criminal sanctions for failure to follow USPAP requirements.

### **Establishing Worth of Primary and Accessory Real Estate Uses**

Every activity occurring on a commercial site contributes to the success or failure of that site, and is capable of valuation. The following outlines the specific steps mandatory to the descriptive research task of appraising/valuation:

## 1. Definition of the Problem

Valuation is site specific and establishes the "market" price for a specific real estate parcel or interest at a particular point in time. To begin, one must identify the type of property to be analyzed and the legal rights afforded such property. When valuing on-premise signage, one does not directly appraise the value of the sign itself. Rather, what needs to be determined is the value of the site's visibility or communication component. Before reaching a determination of value or what the market will pay for the interest, one must also analyze and understand the relevant sign code(s), which may or may not regulate every aspect of a site's visibility/communication component.

## 2. Preliminary Analysis and Data Selection and Collection

Preliminary analysis, data selection and collection impact the quality of the valuation result. General data includes trends from social, economic, legislative and environmental forces that affect property values. Such data may include, for example, population demographics, occupancy rates, and new business and housing starts. Specific data on the property to be appraised and potential comparable information must always be collected.

A critical factor in evaluating the contributory value of the retail site's visibility component is a complete understanding of the general public's need for a communication system, as well as the specific communication needs of the individual site. For example, zoning which permits impulse shopping or point-of-distribution retail activities should also permit signage visible to and readable from the street; on the other hand, an exclusive upscale store or a destination-oriented store (*e.g., Wal-Mart, Home Depot*) may not have as great a need for highly communicative on-premise signage.

## 3. Highest and Best Use (of Site and Signage)

Before completing an opinion of value, one must first determine the most profitable use of the property as it currently exists and then as if it were vacant and ready to develop. The process involves a four-pronged analysis: the use must be 1) physically possible, 2) legally permissible, 3) financially feasible, and 4) maximally productive.

Briefly, highest and best use in signage analysis involves determining if sufficient signage exists or can exist for the subject business to carry on its normal practices as compared to similarly zoned or regulated sites. Generally, "use" 4 involves questions of sign size and legibility or readability and conspicuity -- a sign's ability to stand out from its background. If a visual communication device cannot be easily seen or read by its intended audience, it will fail its intended purpose, and the commercial site cannot be maximally productive. Local sign codes impact all highest and best use tests; of particular importance are size and placement requirements.<sup>42</sup>

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<sup>42</sup> *Ibid.* FN 7.

#### 4. The Three Traditional Valuation Approaches and Applications

In the absence of unusual or mitigating circumstances, valuation involves three generally accepted ways to reach a realistic conclusion: 1) the market approach using comparable closed sales or executed leases, *i.e.*, determining what the market is willing to pay for a property interest similar to that of the subject property; 2) the income approach, *i.e.*, anticipating future economic benefits or "income stream" to be realized from the subject property interest, assuming it is capable of producing income; and 3) the cost approach, *i.e.*, estimating the cost to replace or reproduce an existing property improvement or interest, taking into account deduction for accrued depreciation, and/or land value, as appropriate to the valuation.

##### (a) Market Comparison Approach

Although on-premise signs are not actually bought and sold in the marketplace, one can use the market comparison approach to establish how much the market is willing to pay for a high-visibility site. Sales of outdoor advertising structures may be utilized because such sales reflect add-on value attributable to street exposure.<sup>43</sup> By knowing what users will pay to acquire an outdoor advertising structure, the value of all place based communication systems is better understood and easier to establish. Furthermore, the outdoor advertising structure functions similarly to the high-rise on-premise sign that can be seen from major highways and arterials. Potential customers react similarly to both sign types, and customer profiles, as well as capitalization rates developed and provided for the billboard user, can be equally relevant to the owner of a high-rise on-premise sign.

Additionally, differences in square foot rental are often attributable to differences in signage exposure to the street. For illustration, assume a signage valuator is valuing three distinct retail locations in one shopping center, where most non-signage factors are equal. The locations under study are the 1) freestanding buildings, 2) in-line buildings, and 3) buildings that do not face a primary street. The differences in square foot rentals for each type of location will usually provide a good idea of how the visual communication component of the various sites relates to rent per square foot.<sup>44</sup>

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<sup>43</sup> Valuation of an outdoor advertising structure, which constitutes a primary land use, proceeds more in accordance with traditional real estate evaluation/valuation methods than those used for on-premise signage (an accessory use). Market sales data for these structure are very reliable because they are routinely bought and sold, or marketed, based upon established measurement criteria (*e.g.*, reach, frequency, readership and cost per thousand exposures).

<sup>44</sup> For example, in the Portland, Oregon metropolitan area the typical square footage rental for buildings lacking street or frontage visibility is \$.50-\$.70/sq ft, while for "in-line" buildings it is \$.90-\$1.00/sq ft and \$1.20-\$1.50/sq ft for free standing buildings.

(b) Income Approach - Capitalization Rate

Capitalization rates, commonly referred to as "cap rates", are a relatively complex tool used by appraisers. However, a basic understanding of this tool is advisable for any individual seeking more knowledge on valuing the economic worth of signage.

Simply, a cap rate for commercial appraisal purposes works similarly to interest earned on a bank deposit -- if one wishes to earn **\$10,000** in interest per year, and the bank offers a 10% interest or cap rate, one deposits **\$100,000** in order to earn **\$10,000**. On the other hand, if the bank offers only 5% interest, one must deposit **\$200,000** to realize the desired return.

As a signage appraisal example, assume that a 1,000 square foot retail building with superior street visibility (Store A) nets \$1,500 monthly income (triple net rent after tax, maintenance and upkeep expenses) while same size Store B, lacking street visibility, nets \$500 monthly income (or \$12,000/year less than Store A). Both stores are located in the same retail complex. Using a cap rate of 10%, the value of Store A's visibility component can be reported as \$120,000 (or  $\$12,000 \div .10 = \$120,000$ ).

Under cap rate analysis, the same example may be used to illustrate calculation of the value of Store A's visibility based on rental rates. Assume that Store A rents for \$1.50/sq ft (or \$1,500/month) while Store B rents for \$.50/sq ft/month (or \$500/month). The annual difference in rental rates is \$12,000. Using a cap rate of 10%, the value of Store A's visibility component, based on rental rates, is \$120,000/year (or  $\$12,000 \div .10 = \$120,000$ ). Although in real situations, the value reached by rental rate and net profit analysis may not so conveniently arrive at the same figure, the above simplified example illustrates how the market recognizes the add-on value of the visibility component of a specific commercial site, based on net income -- and/or rental rates, when suitable comparables can be found.<sup>45</sup>

When using the income approach to valuation, one must correctly categorize the retail store or site because the income attributable to on-premise signage varies by business category. Additionally, one must know if the business intends to rely for its success upon customers within the local trade area or instead upon the in-transit consumer. Finally, reliable valuation under this approach is dependent upon data concerning what percentage of those who view the sign will stop.

Generally, the valuator must rely on others for information. One data source is the typical chain or franchise store, which usually has access to comprehensive marketing data relevant to revenues attributable to signage. Most independent or non-affiliated businesses keep records or have some knowledge concerning business revenues resulting from customers who stop by due to a sign. In a true "mom and pop" situation, it may be

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<sup>45</sup> When capitalization analysis using rental rates and income reach differing results, the results are reconciled with the figures established by other appraisal methods to arrive at a final determination of value.

necessary to commission a separate market survey or study in order to obtain necessary data. In any event, reliable information documenting the interaction and interdependence of signage, customer behavior and revenues are of critical importance to the valuator.

### (c) The Cost of Replacement (or Substitution) Approach

Once one determines how much exposure an on-premise sign provides, the value of that sign can be determined by what it would cost to replace it with another advertising medium capable of performing as effectively. Briefly, the approach is based on the cost to replace exposure by substitution of an alternate source. As earlier mentioned, exposure is valued according to "cost per thousand exposures". In most cases an advertising agency or consultant should be enlisted to assist in determining the validity of cost per thousand media comparisons. The sign industry itself can provide market data regarding costs of on-premise signs and other place-based advertising. Input from a transportation engineer may also be necessary.<sup>46</sup>

If a business has a commercially effective on-premise sign and loses it through retroactively applied regulatory action, then the owner must set aside a certain amount of "capital" to pay for its replacement -- enough, presumably, to last for as long as business signage is needed. Sometimes, however, place-based commercial communication systems cannot be replaced, either directly or by substitution. For example, on most major freeway systems, both off-street visibility and ingress/egress is restricted. In such cases, if an adjacent retail site is not adequately communicating its goods or services and location through signage easily visible to motorists at some distance, the traveler consumer may miss the nearest exit and be lost forever as a customer. For "point of distribution" retailers, and most small, independent merchants, lack of highway or street visibility may result in destruction of not only the business but also the business district, as zoned.

In addition to the Agoura Hills litigation, loss of place-based communication has been addressed in several other court cases. One, for example, was decided in a 1981 Wisconsin state court.<sup>47</sup> In this case, a raceway owner agreed to temporarily remove his raceway's high-rise on-premise sign, visible from a main freeway, to make way for a public improvement. Although the sign was nonconforming at the time the city induced takedown, it was protected under a nonconforming use state statute. During the period of takedown, the raceway was sold; the municipality then refused to grant the new owner a permit to reconstruct the sign. The Court ordered the municipality to pay the new owner the difference between the property's value as residential property and its greater commercial value as a business site with effective "exposure" to the street. The amount awarded was \$4,000 for loss of the sign itself, plus \$165,965.26 for the consequent loss of business and property value, which in 1981 dollars was a considerable amount. Expert opinion concerning the value of the freeway exposures lost because of the sign's removal was the key factor in determining damages.

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<sup>46</sup> As a general reference, see A Sign User's Guide: A Marketing Aid; R. James Claus, ST Publications (1988).

<sup>47</sup> Beaver Dam Raceway, Inc. v. Town of Beaver Dam, 315 N.W.2d 727 (Unpublished opinion, Wis.App. 1981).

A more recent example, involving both income/capitalization rate and cost of replacement analyses, is the Caddy's case, which arose in a lower court in Hamilton County, Ohio -- a state which recognizes the "visibility component" of a commercial site as a partial real estate interest. "Caddy's" was a very successful sports bar occupying a building which was to be "taken" under exercise of eminent domain to make way for a municipal stadium. The county tax assessor placed a value of \$1.3 million on the land and building and no value on the premises' business signage advertising the bar. The signage had been "grandfathered in" and was highly visible to adjacent streets and highways.

Because Caddy's distinctive wall mural and roof sign were non-conforming under present codes, they could not be duplicated on the replacement buildings used by the county as comparables; neither did the comparables have equal or similar exposures to the freeway. Therefore, if income levels were to be maintained after relocation, alternate forms of commercial communication, such as outdoor advertising (billboards), or TV and radio commercials, would have to substitute for the lost on-premise visibility to potential customers.

During trial on the issue of just compensation for lost visibility, expert testimony established that the cost of visibility replacement in the form of outdoor advertising was \$180,000/year; this number was based on how much the subject signs would have rented for, had they been "outdoor advertising" instead of on-premise signage. The jury awarded \$1.3 million for the real property and building, and using a capitalization rate of 10%, awarded an additional \$1.8 million for the value of on-premise signage which could not be duplicated on a replacement location within the vicinity of the stadium. Thus, the combined award gave the owner sufficient money with which not only to replace land and building, but also to protect the former income stream, *i.e.*, if the \$1.8 million award for "lost" signage is prudently invested, annual interest earned should fund the annual cost of replacement exposures without affecting sales volume.

(See **Appendix 1** for a case study on the application of real estate appraisal methodology in determining the portion of the value of a commercial site that can be attributed to its signage.)

## 5. Matched Pair Analysis

The matched pair analysis often is the most valuable tool available to those seeking to establish or understand what the market will pay for a retail site's visibility component. For the residential valuator, the matched pair analysis is routinely relied upon to bolster the findings of value reached by use of other methods. For example, to arrive at a reasonable value for a tract home, a residential real estate appraiser may look at recent market sales data concerning two nearby tract homes, similar in every way except location, *i.e.*, one home, which sold for \$100,000, was located on a busy collector street, and the other, which sold for \$110,000, was located on a quiet residential side street. The appraiser can reasonably assume and report that the \$10,000 difference between the two otherwise comparable homes is due to location.



Matched pair analysis also can be used effectively to quantify variable changes in the value of commercial sites which are attributable to on-premise signage as permitted by the respective municipal sign code. An excellent example of such analysis is provided by the experience of a small, four-store independent home improvement chain located in southern California. Home Depot moved into the chain's trade areas. (Home Depot, a big box, one category national chain, is known in the trade as a "category killer", or in other words, a terminator of smaller, local home-improvement retailers.) In this case, the small chain owner decided to go head to head with Home Depot, and initiated a total remodel of his old and obsolete stores..."old" with respect to structure and "obsolete" with respect to on-site marketing techniques, including signage.

The chain's stores were located in Cresenta Valley, Valencia, Simi Valley and Thousand Oaks. All of the stores, before and after remodel, were approximately 44,000 square feet in size. Prior to remodel, signage for all four stores was similar and gross sales were within 15% of one another. Because the stores were located in different trade areas, with different municipal sign codes, the owner had to tailor each store to fit the relevant code. Although he was able to somewhat standardize building storefronts with respect to corporate logo and colors, the owner could not standardize the balance of on-premise signage -- specifically wall or fascia signs and freestanding signs.

Cresenta Valley has a progressive, liberal sign code which permitted the chain owner to place a large store-front wall sign over the main entrance and border wall signs listing products, e.g., housewares, paint, electrical, plumbing, along the sides of the building. A large, double-pole free-standing sign displaying corporate colors and logo is located adjacent to the street; the sign is not shared with any other retailer and has a variable message board which permits the owner to advertise special sales. Valencia has a similar sign code, and the owner was able to place large wall signs over the main entrance and along the sides. In contrast to the Cresenta Valley location, however, the visibility of the freestanding sign is somewhat hampered by a landscape median between the street and sign and a parking barrier in front of the sign; the sign is also somewhat shorter in height.

Simi Valley has a much more restrictive sign code than either Cresenta Valley or Valencia, and consequently, the site's storefront signage is considerably smaller, limited to narrow border wall signage. Although the on-premise sign is tall and located close to the street, the store must share the sign with others, because the code does not permit individual free-standing signs for retailers located in a retail "ribbon."

The sign code of Thousand Oaks is very restrictive and the site's storefront signage is limited to a small entrance sign and two small "hanging" signs at either end of the building. The freestanding on premise sign is located on a landscaped strip next to the road, and because the code limits sign size to 6 x 6 feet, the sign's visibility is severely compromised by surrounding foliage.

Following remodel, and despite Home Depot's presence, Cresenta Valley increased

its sales by 45% and Valencia by 38%; on the other hand, Simi Valley's increase was only 20% and Thousand Oaks', 10%. Further, the difference in sales volume between the Thousand Oaks' site and the Cresenta Valley site, which prior to remodel was only 15%, considerably increased. Since the chain owner reports no increase in local media advertising (e.g., local TV and radio spots, newspaper ads and "flyers"), the disparate increases in sales volume between all the stores can only be attributed to the availability, or lack thereof, of on-premise signage easily visible and readable to street traffic.<sup>48</sup>

Essential to the matched pair analysis is that the sites being compared are truly similar, with the exception of one variable. In the residential example above, the homes were identical except for location; the difference in value between the comparables then could reasonably be traced to location. In the retail example, store size, products and services, and pre-remodel sales and signage, for comparable purposes were fundamentally identical; the post-remodel difference in sales volumes (or value of each site to the business), with all other things remaining equal, then could be reasonably traced to the controlling sign codes.<sup>49</sup>

### **The Omni Approach to Valuation<sup>50</sup>**

The omni technique incorporates the **market comparison**, **income capitalization**, and **matched paired analysis** approaches into a single technique. Under this approach, the valuator can usually identify the "extra" income the sign brings to the business. In essence, the question to be answered is: "What, if any, economic benefit is there for having on-premise signage?" Using this approach, in 1996 a certified, Florida-based signage appraiser, Richard Bass, did an economic analysis of the impact of a newly installed, on-premise freestanding sign that identifies a men's clothing store located in Sarasota Quay, a mixed-use retail, office and restaurant complex.<sup>51</sup>

Prior to the installation of the new sign, the retailer had no external visibility to either of the major arterial streets adjacent to the mall. The business had been in the same location for eight years and was making a profit. A major tenant moved out of the retail space resulting in available on-premise signage for the men's store, and a sign had been installed in December 1995. Subsequent to the sign's installation, a one-year analysis indicated a seventeen percent increase in sales volume for the business. Can this increase

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<sup>48</sup> This information was obtained from a presentation and handout made by Jess Ruf, Chairman Do-It Center, Inc., based in Van Nuys, California, at a meeting of sign industry and APA representatives in Cleveland, Ohio, in February 1996.

<sup>49</sup> If more than one variable between the compared sites exists, the sites cannot be used in a matched pair analysis.

<sup>50</sup> In the context of this chapter, the word "omni" is used as a term of art to describe an inclusive or comprehensive approach specific to signage appraisal.

<sup>51</sup> This case was summarized from an unpublished paper submitted by Richard Bass, MAI/AICP/EAP, to the APA in response to a call for presentations for the APA National Conference in 1998. Bass is a certified appraiser in Sarasota, Florida.

in revenues be attributed solely to the signage? According to Bass, yes it can. Further, as a result of the increased advertising effect of the on-premise sign, the storeowner was able to reduce his expenditure on print advertising from \$24,000 in 1995 to \$13,000 in 1996. The appraiser looked at other non-signage factors that could have had an impact on sales during the study period, including roadway improvements, presence of competition, the addition of other major draws to the center; he found that there had been no significant changes. However, during the period of time the signage effect was studied, two other small retailers in the same complex that did not add signage went out of business, and another relocated.

Assuming for the moment that the example business' sign had to be removed due to a regulatory "takings" by the municipality, and further assuming that the subject jurisdiction required monetary compensation because the sign was considered a partial real estate interest, the cost to the municipality might be considerable. If the increase in sales volume can be traced to the sign, then its compensatory value will be based on this increase. For illustration, assume that the increase in sales following sign placement averaged \$20,000 per year. To protect the business's income stream - and based on a realistic capitalization rate of 07% - the compensation for removal of the sign could be as much as \$285,000. On the other hand, if one looked only at the savings in other media advertising costs the business enjoyed because of its on-premise sign, at a capitalization rate of 07%, the compensation would be \$160,000. But because other-media advertising appears less effective in increasing sales volumes, the actual award might be somewhere in the middle, e.g., \$200,000, which if invested at 07% would generate income generally sufficient to sustain pre-regulation sales volume as well as provide funds for other-media advertising.

In yet another compensatory scenario, one might assign a "remaining useful life" to the sign, and structure compensation accordingly. Thus, if it was determined that the sign had a remaining life of 10 years, the award might be \$200,000 as compensation for 10 years of reduced sales volume, or it might be \$110,000 as compensation for increased advertising costs, or again somewhere in the middle to compensate for both lost income and increase in advertising costs.

Based on the above example, then, it is clear that municipal efforts to retroactively limit or restrict on-premise signage, particularly size or height, should be undertaken only with great caution by the municipality and vigorously opposed by businesses that can prove adverse economic impact will result from downsizing or removing on-premise signage legally placed under the existing code.

## **OTHER CONSIDERATIONS**

### **Efficiency**

In North America, commercial districts (zones) locate at travel points of confluence. Traditionally these points were located at rail heads/junctions or river/sea ports. Small town America had its main street; large cities had their "districts", e.g., financial, retail,

entertainment. With the construction of the interstate highway system, the shift in residential housing from urban to suburban, the increased use of the automobile, and the expansion of freight delivery by truck, commercial centers have spread throughout the urban, suburban and even rural setting. Because of this diffusion, efficient land use has become a primary planning goal. A significant part of this goal is to promote fiscal health through policies that assist continued commercial contact with the motoring public.

If a business is to successfully attract the motoring public, it most effectively and affordably does so through signage. Businesses incur substantial tax liability for doing business, and much of these tax dollars are paid to the municipality. Property taxes are the most universal, but many municipalities also receive a percentage of all sales taxes collected.<sup>52</sup> In some metropolitan areas, such as Portland, Oregon, businesses are required to assist in funding the mass transit system through payroll taxes. Additionally, businesses routinely pay license, inventory and other taxes or fees to the community.

The visibility component of a retail site plays a significant role in every tax assessor's determination of value for property tax purposes. In most instances, retail rents (and commercial real property sales) are higher for sites with street visibility; sales are also generally higher.<sup>53</sup> The greater a site's income in relation to other commercial properties, the higher the property tax assessment. In all state and local governments, the principal is the same: the higher the net income a property generates, the higher its assessed real estate value.<sup>54</sup>

A community responsive to consumer mobility and consumption patterns will capture at least 25 percent, and possibly up to 50 percent, of its business income from people who live or work out of the definable trade area. Because such consumers spend and then move on, they do not burden public services, such as police and fire protection or school districts -- the largest consumer of municipal tax dollars. Revenue provided by the non-local transient consumer population is the least expensive (most cost-effective) revenue to generate...and provides significant funding for community infrastructure and services.

In addition to generating beneficent revenues, creative on-premise signage often keeps local income in town, by informing and attracting consumers who live and work there. In the modern marketplace, the right place-based advertising will effectively and economically permit the local shopkeeper to successfully compete, even with the mass merchandiser or big box retailer.<sup>55</sup>

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<sup>52</sup> Taxes associated with business revenues generally are the most productive for a municipality, i.e., with the exception of street improvements; the revenues generated are not funneled back to the business community. For instance, the writer's study conducted as part of a sign variance request by Pier 1 Imports in Germantown, Tennessee, disclosed that although the commercial district comprises only 3% of municipal land uses, the district generates 17% of the town's tax revenues, most of which go toward funding infrastructure and schools -- expenditures generally unrelated to business activities.

<sup>53</sup> See Appendix 1; Best Buy appraisal.

<sup>54</sup> Appraisal Institute, The Appraisal Handbook.

<sup>55</sup> The customer survey referenced in footnote 9 (Gulf Industries, Inc., 1997) provides documentation

All community stakeholders should strive to recognize and understand the contributory value of signage to the business community, to the public it is intended to serve, to the community's tax base, and to the revenue sharing of local governments. The issue is never just one of bringing more business to an individual sign user.

### **Public Welfare and Safe Passage (or Wayfinding)**

Signs are critical to safe movement by the traveling public and are the primary wayfinding device employed in today's North American mobile consumer society. Traffic risks and accidents occur in part because people are not provided easy access to information necessary to their purpose. Drivers look for...and expect to find...signs telling them where to go and what is available once they get there as well as how to avoid potential risk. An informational or directional sign that is too small, badly placed, poorly illuminated, or lacking conspicuity in that it cannot be discerned from its background is frustrating to the mobile consumer and may cause the consumer to make unsafe traffic maneuvers.

Safe wayfinding is not only important on major highways, but also within the municipality itself. A jurisdiction which relegates certain activities to certain areas, and then won't permit adequate informational and directional signage, is creating a hazard for the public. Frustrated consumers will make unsafe traffic maneuvers to get where they want to go. Furthermore, as the present motoring population ages, and driver visual acuity concurrently decreases, the need for better signage conspicuity and legibility will correspondingly increase throughout the urban and suburban landscape.

## **CONCLUSIONS**

A sign is a placed-based "speech" device, which visually communicates a message to its viewers. A sign may inform the public about a specific good or service...it may direct the public to a particular spot...it may even suggest that the public act in a certain way, for example, vote for one candidate or buy one house, instead of another. A sign is entitled to certain Constitutional protections which must be taken into account by a regulatory body.

Signs come in two basic types: on-premise and off-premise. The off-premise sign (or outdoor advertising) is unrelated to any use or activity occurring where it is placed. The

of a sign's ability to increase customer base and sales volumes -- in some cases as much as fifty percent.

Although the survey was not conducted by an independent researcher and was limited to small, non-affiliated (or independent) business, it gives us strong evidence that a custom-designed sign can overcome the competitive disadvantages that accrue when sign codes regulate only traditional signage and not "signature" signage. Absent a well-designed, placed and legible sign, it appears that a sizeable segment of the mobile and newcomer market will be lost to small business. More research in this area is indicated, particularly if a community wishes to avoid regulations which discriminate against the small business person who generally cannot afford extensive trade dress in lieu of the on-premise sign. Additionally, a community should strive to implement signage regulations that compliment federal programs designed to encourage small business.

off-premise sign we are most familiar with is the billboard, which includes posters of approximately 300 square feet up to bulletins or spectaculars which can measure 700 square feet. The off-premise sign normally advertises nationally known goods, products or services, and can be used for either a multi-city or cross-country showing. Thus, the primary function of these signs is to reinforce public awareness first created through other mediums, such as television, radio and newsprint, and they are usually very expensive to buy or lease.

The on-premise sign comprises an accessory land use, *i.e.*, its use is accessory to a site's main use, which for purposes of this paper is commercial. On-premise business signs are located somewhere on site and are functionally related to the success or failure of the site. In contrast to off-premise signs, which generally reinforce information already familiar to the viewer, the on-premise business sign many times must convey new, previously unknown information. In appearance and dimension these signs will vary according to the communication needs the site requires to become and remain economically viable. The costs of sign design, production, and placement will also vary, but are generally more affordable, especially for the small, independent business, than alternate forms of commercial communication.

Although on-premise business signage performs a major role in the success of local economies, its regulation does not impact all businesses equally. The food service business provides an illustration:

For the large national franchise, such as *McDonald's* or *KFC*, the on-premise sign may display nothing more than the corporate logo and customers will be attracted. This is so because these corporations can afford and extensively use other mediums to advertise their wares. In such instances, all the on-premise sign has to do is assist the consumer in locating the facility -- the consumer already knows what he or she is going to get there, and approximately how much it will cost. The corporate logo system is especially effective in attracting the non-local or in-transit customer.

On the other hand, the local independent restaurant must generally rely upon its sign to attract customers because the owner usually cannot afford the costs of other media, such as television or large newspaper advertisements. In most cases, national media advertising would be foolish anyway, because the targeted consumer is probably from the local trade area. In other words, the local merchant aims at reaching people who live, work and travel in the vicinity of his or her business and not at triggering recall, recognition or top of the mind awareness on a multi-regional or national scale.

When a community examines on-premise signage with the purpose of making recommendations concerning new sign regulations, it is of paramount importance that the complexity of the undertaking be understood. Minimally, the stakeholders must become familiar with recent research and literature to be certain proposed new regulations are not compromising traffic safety, or manipulating business strategies or giving preference to one retailer over another without intending to do so. Also, where areas of a community are zoned for commercial use, it should naturally be a community goal to do as much as

possible to ensure that all businesses that choose to locate in the zone are able to succeed.

As a corollary, well-intentioned, aesthetic-driven agendas, which do not take into account the consequences of on-premise signage restrictions, may cause the destruction of business districts and bring upon a community the blight and deterioration the community most wanted to avoid. Since no community administration would want to knowingly recommend policies that resulted in a substantial negative impact on the municipality, those with legitimate aesthetic concerns for the streetscape need to be open to information, in part contained in this paper and in part brought to them by sign manufacturers, sign users, economists, transportation engineers, lawyers, appraisers, and others professionally conversant with the function of signage in the commercial environment.

When considering the economic context of signs, a city administration should be cognizant of what types, sizes, and number of signs work best for citizens and business in each community district. Sign codes for larger cities and urban areas should be drafted with district "type" in mind. For example, separate sections of the sign code might be written for downtown businesses, neighborhood businesses, business parks or industrial/commercial areas, and mixed use, historic and entertainment districts. Also, scenic, view, gateway or commercial strip corridors may require individualized regulatory treatment.

All sign codes should be context appropriate, and no comparisons between communities should be made, absent detailed analysis of all demographic variables. In other words, municipal administrators and officials should not look at sign regulation as "Santa Fe vs. Las Vegas" or "over-restriction vs. under-restriction." Instead they should approach sign regulation in the context of "appropriate regulation vs. too-restrictive." Also, municipalities should guard against codes designed to the lowest common denominator -- *i.e.*, codes designed to get rid of the ugliest sign in town, or to prevent similar signs in the future. Many times the "ugly sign" is not the fault of the existing code, but rather due to a lack of its enforcement; thus, vigilant enforcement often will negate the need for a new code.

Allowing businesses to maximize the utility of their signage is not a call for a *laissez faire* approach to sign regulation. Instead it is a call for a common sense approach that recognizes the consumer's need for information and the business's need to communicate this information, while remaining mindful of community character and ambience. Although notions of residential aesthetics should never be applied to retail zones, well crafted, responsive sign codes certainly can be used to create attractive, inviting streetscapes in central business districts, neighborhood commercial areas, entertainment districts, tourist destinations, and commercial corridors.

In the search for a fair sign code that protects the legal rights of all parties, it is often a difficult task to balance community desire for attractive streetscapes with driver need for safe sized and placed signs and business need to communicate with existing and potential

customers. However, a workable balance of all competing interests can be achieved when regulators have a full understanding of the various forms of signage and how they are economically evaluated. Of equal importance to the process is recognition by business interests of the public's desire for attractive commercial environments. Ideally, when all stakeholders are participating with full knowledge and appreciation of sometimes opposing viewpoints, governing bodies will better comprehend the options and better craft a sign code which is responsive to and respectful of business needs, consumer expectations and community aesthetic concerns.



## **Appendix I. Using Appraisal to Measure the Value of Signage.**

To illustrate how a real estate appraisal methodology can be used to determine the portion of the value of a real estate site that can be attributed to its signage, we present a case study of a Best Buy electronics store in San Antonio, Texas. In 1994, the Best Buy Corporation sued the owner of a shopping center in which a new Best Buy outlet was being opened to recover damages from the delayed placement of two pole signs. The shopping center had agreed to install the two signs on June 1, 1995. One sign was installed on August 17, 1995, and the other on September 4, 1995. The store opened on August 18, 1995. Best Buy sued to recover damages based on the value of advertising that was lost when signs were not erected on schedule.

Best Buy hired Claus Consulting Services, Inc. of Sherwood, Oregon. (R. James Claus the proprietor is credited in the signage and appraisal professions as having pioneered the technique for appraising the visibility component of a site.) In the Best Buy appraisal, Claus used the three traditional components of a real estate appraisal in his estimate of damages: a cost of replacement (or substitution) approach, a market comparison approach, and an income capitalization approach.

Prior to the three-part appraisal process, a highest and best use analysis of the site is undertaken. This type of analysis establishes the most profitable use of site in light of any legal or financial constraints. According to Claus, highest and best use as applied to signage means that the subject on-premise sign can be seen by the intended audience (*i.e.*, passing motorists, pedestrians) and that its copy can communicate as intended (*i.e.*, is readable and understandable by the intended audience) (Claus 1997).

*Cost of replacement approach.* In standard real estate appraisals, the cost of replacement approach is used to describe the cost of replacing a building with a structure that is functionally equivalent to the existing structure. Claus's signage appraisal method applies a cost replacement approach to determine the cost of replacing the signs' commercial communication or advertising value with other forms of advertising, such as newspaper, television, and radio ads. It is not used to measure the cost of replacing the physical structure of the sign, as is the common measure of sign value in amortization cases.

*Market comparison approach.* This approach involves comparing a property being valued with comparable properties that have recently sold or are currently on the market. In the Best Buy evaluation, Claus notes that because the visibility or communication function of signage cannot be bought and sold, the market comparison approach has to instead be applied to an analysis of the rents and sales per square foot of similarly situated sites with various levels of signage.

*Income capitalization approach.* This approach is used to ascertain the present value of anticipated future income to be generated by a property over its remaining useful life. For the purposes of signage, the Claus model focuses on income generated by customers who were prompted solely by the sign.

For the Best Buy evaluation, Claus relies primarily on the cost of replacement and income capitalization approaches. To determine the replacement cost of a sign's advertising value, Claus measures the number of "exposures" that would have resulted if the two signs were in place as originally scheduled. The standard advertising measure of "cost per 1,000 exposures" is then used to determine the cost of a comparable number of exposures in newspaper or television advertising.

The study finds that freeway exposure to the signs in question can be estimated at 12,000,000 (3 million per sign face per month). This figure is derived by using daily traffic counts for the section of I-410 where the Best Buy is located and were obtained from the Traffic Audit Bureau's (TAB) Daily Effective Circulation (DEC) for that interchange. Based on the DEC at that intersection, 396,000 exposures occurred daily or 99,000 daily per sign face. (Each vehicle passing by any of the four sign faces is counted as one exposure.) In total, the study finds that Best Buy missed 15,444,000 exposures for the sign that was installed 78 days late and 19,008,000 exposures for the sign that was installed 96 days late.

In the Best Buy example, the appraiser estimates the cost to recover the lost exposures with other advertising mediums at \$36,700 per month. That is based on the cost of a midweek and Sunday newspaper insert reaching 545,000 people and 182 gross television-rating points that reach 2.4 million exposures. Multiplying the cost of replacement exposures by the number of days of lost exposures by the number of sign faces, Claus estimates that the total replacement cost equals \$424,767. A 50% percent reduction is then applied to the total replacement costs to account for "other ways to mix the advertising dollar to obtain these lost exposures" (Claus, 1997, 9).

Turning to the income capitalization method, Claus then derives additional damages from lost income that would have resulted if the signs were in place as scheduled. This portion of the appraisal is done by measuring the number of customers who patronize a business on a given day solely because they were prompted to go to the store by the sign. Based on in-store customer surveys, Claus concludes at least 25 percent of the store's business can be directly attributed to the sign. (The surveys indicated that 33% of customers were initially attracted by the sign.) According to actual Best Buy sales figures, gross profit at the store for the first year of operation was \$308,000; 25 percent of which (\$75,000) Claus attributes to the signage. This amounts to \$1,286.20 per day per sign face. The daily measurement of lost income is then derived by multiplying the number of days each sign face was absent (78 days for one sign; 96 days for the other) by the daily gross profits attributable to each sign face (1,286.20) to arrive at a total figure of \$223,799 estimated lost income.

Claus' evaluation acknowledges that Best Buy was not bargaining for lost income during the time the sign's were not in place (indeed, the store was not open during that period) but, instead, was seeking recovery of the value of the exposures lost during that time. However, to reach a final determination of value following reconciliation of all methods utilized, one measure of damages can be predicated on the value of pre-opening signage exposures, which in this case would have assisted in creating "top of the mind awareness"

during the critical pre-opening period, even though some of the viewers might not be interested in stopping -- then or ever.

## References

- Anderson, Raymond T. 1983. *The Economic Values of On-Premise Signs*. Alexandria, Va.: National Electric Sign Association.
- Arthur, Paul and Romedi Passini. 1992. *Wayfinding: People, Signs, and Architecture*. New York: McGraw-Hill Book Company.
- Brown, Jacqueline J. 1988. Mission Valley Automobile Dealers' Marketing Research Project, in *The Economic Value of Signage*. California Electric Sign Association and International Sign Association, 1997.
- California Electric Sign Association (CESA) and the International Sign Association. 1997. *The Economic Value of On-Premise Signage*.
- Claus, Karen E. and R.J. Claus. April 1977. *Small Marketers Aids 161, Signs and Your Business*. Washington, D.C.: U.S. Small Business Administration (U.S.GPO 1978 0-255-010.)
- Ellis, Seth R. and Robert Johnson. 1997. "Research on Signage Performance." In *The Economic Value of Signage*. Prepared for the Sign Guidelines Committee of the California Electric Sign Association and International Sign Association.
- Gittings, Gary L. "Tort Liability in the Pennsylvania Department of Transportation," *Conference Proceedings: Effectiveness of Highway Safety Improvements*, American Society of Civil Engineers, New York, NY, pp. 102 - 116, March 1985.
- Hyder, Zakia. 1998. "Defeating a Sign Code." *Signs of the Times*, Volume 220, No. 5. April
- Jones, Ken and Jim Simmons. 1990. *The Retail Environment*. Routledge: New York.
- Peterson, Robert A. ed. 1992. *The Future of U.S. Retailing*. New York: Quorum Books.
- Schwab, Richard N. 1998. *Safety and Human Factors: Design Considerations for On-Premise Commercial Signs*. Study sponsored by The Signage Foundation for Communication Excellence, Inc. and The International Sign Association.
- Signage Foundation for Communication Excellence, Inc. "A Challenge to Sign Regulation," 1997. Letter to the Editors, *Journal of the American Planning Association*, 64, 1: 88-93.
- U.S. Department of Transportation, Federal Highway Administration. 1988. *Manual on Uniform Traffic Control Devices for Streets and Highways*. Pittsburgh, Pa.: U.S. Government Printing Office.
- Wolf, Richard. 1997. Senior Counsel, Cendant Corporation. Presentation at a forum on signage and First Amendment issues. Cleveland, Ohio, July 25.
- Ziccardi, Donald with David Moin. 1997. *Masterminding the Store*. New York: John Wiley & Sons, Inc.