The Economic Value of On-Premise Signage

An economic study on the factors contributing
to the value on-premise signs bring to a business

This study was conducted and supported by the California Electric Sign Association, the University of San Diego School of Business Administration, the International Sign Association, the Sign Users Council of California, and the Business Identity Council of America

Editor's Note

This study on the Economic Value of On-Premise Signage is a comprehensive assessment of the key factors on-premise signs contribute to the success and vitality of business.

The study analyzes specific areas relating to on-premise signs and includes case studies and testimonials as to the value of on-premise signage. More importantly, for the first time, the study presents a thorough scientific, statistical analysis, which concludes that on-premise signage does, indeed, have a positive impact on business and local government.

The study examines the demographic trade areas in which a business is located, sign visibility, aesthetics, and the factors that make it visible to the human eye. Also included is a summary of federal laws protecting and impacting on-premise signs, as well as an interpretation of the California Business and Professions Code for on-premise signage, which can be considered a framework for sign codes in other states.

Additionally, articles on sign-code issues, such as amortization, copyright and trademark protection are included. Case law is cited in the Appendix as a reference for legal issues affecting on-premise signs.

This project was started in 1993 at the behest of the California Electric Sign Association, which founded the Sign Guidelines Committee. The University of San Diego School of Business Administration carried out the study and Sign Guidelines Committee members contributed articles, research, and information toward the overall project.

Acknowledgment of Support and Funding

This research is supported and funded by the California Electric Sign Association (CESA) the International Sign Association (ISA), the Sign Users Council of California, the Business Identity Council of America (BICA), and the University of San Diego (USD) School of Business Administration.

The CESA Sign Guidelines Committee would like to specifically thank Jerry Jackson, retired executive director of CESA, and its staff, for their continuous and fruitful efforts to help us find firms willing to provide the confidential and proprietary information necessary for our research; the other members of the Sign Guidelines Committee for their continued confidence in our efforts; and, Curtis Cook, the dean of the School of Business Administration at USD, for his support and advice. We would like to especially thank Leo March, president of Integrated Sign Associates, for his vision and vigilance; we all may have abandoned our efforts if not for Leo's continued enthusiasm for our project.

We want to extend a special note of thanks and gratitude to the management of our study data sources and their staff, all of whom were incredibly cooperative, and very generous during their busy work-day hours to help us develop the database. They also provided us with many insights into the business aspects of their particular sphere of operations. We used this crucial information to guide our selection of many of the variables that we tested with our models. A special thanks to Tim Purpura, manager of Signage Services for Pier 1 Imports. Tim was incredibly generous with his time and signage expertise. Without the help, concern, and cooperation of firms like these in the business community, university research into this type of marketing and economic phenomena is not possible

Finally, we want to extend a special thanks to Seth R. Ellis, Ph.D., Associate Professor of Marketing, USD, for his willingness to understand how signage is used by mobile America, and his continued interest in this project.

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Preamble

Communication is a basic, necessary human activity. If suddenly denied any single form of communication, our entire economic and social system would begin to crumble. Without radio and radar communication, aircraft would not be able to fly safely. Without that communication safety net, an entire industry would not exist. Without television, newspapers, magazines, or radio, we would immediately become an uninformed society. Without visual communications on our highways, tourism and transportation would grind to a halt. Additionally, without visual communications for businesses, there would be direct economic hardship for both the business and local community government.

America is the most mobile society in the world; therefore, communication and transportation are vitally linked. In fact, without visual communications on our highways, we would virtually be an immobile society. Communication is the sharing of information. It is accomplished in a variety of ways, all of which we often take for granted.

A direct information link exists between each type of communication -- from a simple warning light indicator on the instrument panel of your automobile to a sign along the highway.

The marketing principle of "top-of-the-mind awareness" is enhanced by linking television and radio commercials, newspapers and magazine advertisements, which reach mass audiences, with on-premise business signs within a trade area.

Every form of transportation, up to and including space travel, is dependent upon communication. Although there are audible forms of communication, the more conspicuous form is visual. Whether you are walking in a shopping mall, on a college campus, or driving on Main Street USA, we all depend on readily observable signs for direction, safety, information, and advertising. Without on-premise business signs communicating to mobile America, users would be left to wandering around looking for the goods and services they need; businesses would only be located at prime locations readily accessible to consumers; tax dollars to the community would dwindle dramatically; and jobs would disappear, or not be created at all. Business signage is a medium communicating to the needs of the mobile consumer, and is often as dependent upon other forms of communication as other types of media are dependent on on-premise business signage. Recognition of a logo or brand name fuels the economic engine. Globally, other nations have recognized the transportation, communication, and economic link of signage. They are fast applying the applications proven successful during the past 75 years in America while, at the same time, enhancing their own economic development.

Many planners and community leaders in the past thought signs should be purely for identifying places of business, not for advertising. Only recently have communities begun to learn that there is a direct link between signs and revenue generated to the city via taxes; thus, many communities are beginning to look at their sign ordinances as tools used to promote healthy community economics. They have discovered visual communication tools help rebuild a deteriorating community, their tax base -- and, in addition, provide an important link in the complex chain of transportation, communications, and economics necessary in a mobile society.

- Leo March

chairman, California Electric Sign Association Sign Guidelines Committee

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Preamble

Purpose and Intent

The purpose of a sign ordinance is to establish the legal framework for the regulation of signage. Within that legal framework, there needs to be a distinct difference in the regulation between on-premise business signs and off-premise signage.

The basis of such a framework must first meet the test of the U.S. Constitution, its amendments, and any legal precedent-setting case law pertaining to signage. The purpose of the ordinance needs to be guided by the intent, be representative of nonarbitrary, nondiscriminatory control standards, and optimize communications in the regulated community.

To establish intent, there needs to be a thorough knowledge of signage and its communication value to the community. To regulate signage solely by sign size, height, number, type, or color, adversely affects the community by robbing the user of their full potential to do business, and thus undermines the community's full potential tax base.

Understanding how signs function involves questions about business strategy and the interaction of that strategy with urban-planning policies. Signs are an integral part of any business communication program and work in concert with other forms of communication.

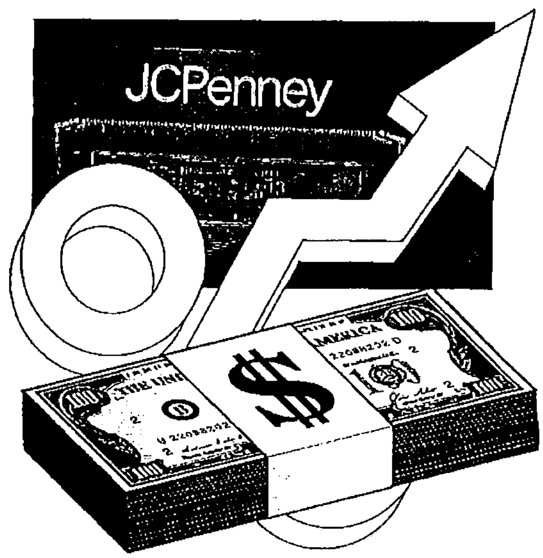
Unlike other forms of communication, signage remains static within a business trade area and is used regularly by mobile America. Thus, creating regulations to control signage remains a delicate balance between value enhancement in the urban environment and a preconceived need by planning policies.

To create sign codes that will meet the business demands of the third millennium, the authors of such sign codes will need to re-invent the meaning of creativity. Sign codes that are solely based on the limited information available to planners do not serve the needs of business, the community, or the consumer. The economic value of on-premise signage, thoroughly demonstrated by empirical studies, must be a major part of the overall planning equation so that planners can develop well-balanced sign codes that benefit commerce and the community.

The economic value of on-premise signs will continue to expand as advertising dollars are shifted from the current status quo to cyberspace technology (see Trade Areas). In addition, on-premise signage will be protected by state and federal laws to degrees not yet seen in sign codes (see Federal Laws of Protection).

Trade Area

Retail businesses in a community rely on the immediate trade area for substantially all of their revenues from operations. In this trade area, those revenues are generated by consumers attracted to the commercial offerings by various advertising mechanisms including media advertising (newspaper, radio, etc.), coupon offerings and, most importantly, the on-premise sign displays that identify the business and advertise the products or services available at the site. The savvy shop owner or corporate store manager knows that the dollars invested in his or her on-premise signage bring immediate and significant return from the target trade area surrounding the location. Similarly, many governmental jurisdictions recognize today that their own revenue sources taxes are inextricably linked to the success of the businesses operating within the multitude of trade areas that comprise the community.



A trade area is unique to the type of retail business being conducted. It is the area from which a business can expect to attract and draw consumers willing to travel reasonable distances to purchase goods and services. Trade areas are usually at the center of the customer base that will profitably support the single business enterprise. Depending upon the products and customer mix, retail businesses tend to view trade areas in one-, three-, five- or even 10-mile segments. Trade areas can be radius-based surrounding a store location or be shaped in the form of polygons created by roads and/or barriers such as bridges, railroad tracks, or multi-directional intersections. Some of the major factors that affect the strength of the trade area and influence businesses regarding location there include demographics, site characteristics, and regulatory issues.

Demographic information is needed to assure that a minimum number of consumers are in a trade area in order to provide an adequate sales volume for a particular type of retail business. Typical demographic analysis considers:

- Regional population and growth
- Net in-migration
- Age levels
- Job growth (as a barometer for a community's economic vitality)
- Educational attainment (as a proxy for buying habits and disposable income)
- Household
- Average number of persons per household
- Cars per households
- Average income
- Ethnic mix
- Traffic counts

There are many sources of good demographic research data, including National Decision Systems, Claritas Corporation, DRI McGraw Hill, and Woods and Poole. Most of these firms are deriving their data from the most recent census and updates. They then "cluster" the consumers in lifestyle types similarly identified throughout the U.S. Each consumer cluster is composed of households that tend to exhibit similar lifestyles and that act uniformly and predictably in the marketplace. The clusters are given names (i.e., upper middle, child raising families, blue collar labor, etc.) and the definitions help market researchers and retailers visualize the customer and develop sales strategies accordingly. National Decision Systems' Informark Express allows radius and polygon demographic research within trade areas. Golden Corral, a restaurant chain of company-owned and franchisee steak houses, looks at population density and median household income within one-, three-, and five- mile radii to evaluate the intensity and volume of the retail market. They survey the competition in the area, study the traffic flow at peak and nonpeak travel periods and determine if there is a lunch and dinner clientele in the area. Golden Corral's Development Committee, headed by CEO and President Tom Fowler, demands a clear picture of the customers, location and traffic pattern. Their goal is to " ... know where these folks come from and where they are going. Once you figure that out, you look for a location that is convenient not only for lunch customers, but convenient to dinner customers as a destination."

Site characteristics are critical because every retail site is competing for tenants with every other site within the same trade area. Site-related data worth collecting and profiling include:

- Roads
- Facilitators and barriers to street accessibility
- Traffic lanes
- Distance from existing intersections
- Traffic counts
- Planned changes to roadways
- Setback requirement for buildings and signs

The site is crucial to the ultimate success and viability of the business. If a business is the first of its kind in the trade area, it controls the terrain. If it is not first, then it must seek to secure a good competitive position in order to prevail.

Regulatory issues provide the single greatest opportunity for success or failure in site selection within trade areas. The Golden Corral group insists that local ordinances be reviewed to determine exterior sign restrictions, building permits and landscape requirements. They require that no store real estate transaction be closed until site and building permits are actually obtained. Carl Carlsson, author of *How to Locate Sites, Negotiate Leases and Avoid the Deal Killers*, advises:

- Zoning regulations be understood explicitly and studied well in advance of any deals;
- Contacting local Chambers of Commerce and economic development centers officers for information about business conditions and markets,

- Collecting legal data by visiting real-estate departments and investigating the parcels in which there may be an interest. This enables determination of the parcel's actual size, ownership, tax assessments, zoning, deed book, and page numbers for the most recent deed transfers and a variety of other information.
- Insisting upon good signage – "You can't be successful if your customers can't find you. A freestanding pole sign, or roof sign or signage on your building is a must. Never consider a site where signage is limited or prohibited."

James Devine, director of economic development for the city of Glendale, Arizona, concludes, "National chains rank trade areas by their potential and enter into markets by investing in the most lucrative to the least lucrative. Inserting a community ahead of the pack requires good research and follow-through. Most developers pursue retail sites or buildings which can be operating ASAP and where demographics are, or appear to be, the best for the tenant in hand."

"...for most businesses the Net will tie the graphic communication (business trademark or logo) in with an overall marketing effort."

The advent of the Internet (Net) as a growing marketing, advertising, and communication vehicle will further expand the importance and value of on-premise identification to businesses. Graphic communications on the Net will guide consumers to businesses providing products and services desired. The power of the Net will draw prospective customers from ever-expanding trade areas. For catalog-type businesses, the Net will enhance or replace the catalog and the cable-TV channel access for ordering goods. On the other hand, for most businesses, the Net will tie the graphic communication (business trademark or logo) in with an overall marketing effort. An interested customer on the Net will be able to select options that may include the location and directions to the nearest business site with the desired product or service available. Then, the prospect, possibly coming from outside the traditional trade area geography, will benefit even more from the on-premise sign, identifying the business, coordinating with the Net's communication and guiding the consumer to the right site.

Many municipalities are beginning to recognize the critical importance of creating and keeping trade areas healthy for prospective and existing businesses. Retail attraction may seem to be an exercise on the margin to purist economic developers who pursue the "basic" industries, but in many communities, retail sales are a basic industry. In California and Arizona, for example, large percentages of communities' new, general fund revenues increasingly come from sales-tax receipts. With increasing taxpayer focus on limiting or stabilizing property taxes, these new sources of income must be pursued to meet increased demands for services. Revenue generation and job-creation imperatives cause publicly-funded economic developers, who report to cash-flow conscious city managers, to "follow the money." Thus, many city economic developers are competing with their peers in neighboring communities to attract major sales-tax generators, such as new-car dealers, regional malls, furniture stores, and major discount stores, which generate hundreds of thousands of dollars in tax revenues.

According to Devine, "Time is money . . . especially in retail. Christmas is the make-it-or break-it season for many consumer-goods businesses. Malls, downtown, or redevelopment sites, will survive or die depending on whether they make an October opening deadline. A city with a proven fast-track process for design review, building inspection, or tenant improvements may be favored over one with poor customer service." Cities are now realizing that their most helpful stance for businesses is in providing quick customer service because a prospective business typically will be considering numerous locations. The site that can come on-line in time and under budget tends to be the winner.

The trade area attraction to a business, once selected and located, is of crucial importance and survival to the enterprise. Equally important is the growing understanding that the health of the trade area is critical to creating and maintaining a municipal government's major tax-revenue stream. In summary, once the demographics are worked through, and the search for a site is narrowed to a few locations, some of the typical site-selection criteria include: real estate-commission rates; governmental concessions; tenant mix; image; style; charm; character; visibility; competitors' name and physical location and condition; distances within proposed shopping area and to other competitors; ingress/egress; parking; trade-area health currently and projected; and, finally, the retail signage permitted that will ensure consumers within the surrounding trade area are able to identify the business.

References:

1. Carlsson, Carl, "How to Locate Sites, Negotiate Leases and Avoid the Deal Killers,"Franchising World, vol 24, num 4, July/August 1992, pp 4-12.

2. Devine, James A., "Retail Targeting and Attraction Strategies," Economic Development Review, vol 12, num 2, Spring 1994, pp 47-50.

3. Rose, Joan S., "A Golden Touch in Site Selection," Franchising World, vol 24, num 4, July/August 1992, pp 13-14.

4. Sherman, David M., "Perception vs. Reality: Risks in Regional Mall Ownership," National Real Estate Investor, vol 35, num 10, September 1993, pp 75-77.

Arts and Science

PRACTICAL ISSUES

INTRODUCTION

Signs, by their nature, constitute a visual experience. It is our purpose to establish the parameters to allow creativity and practicality to this experience.

We set forth proof that a one-size-fits-all answer is quite inappropriate. It is our desire to effect a one-of-a-kind solution.

LOCATION

Discerning detail: A sign is not viewed alone; rather, it is an integral part of the structures and landscape of the community. Additionally, every community should be considered, not as a group, but as unique individuals, each of whom has a right to equal access to information. These individual imperfections must be accommodated in determining regulations. To believe that a general purpose sign ordinance is sufficient to meet the diversity of communication needs within our towns or cities is no longer realistic.

Selective tuning: The likelihood of detection of a sign placed along a roadway is dependent on five major factors:

1) luminance
2) external contrast
3) size, color, and shape
4) viewing/observation time
5) angle of eccentricity to the driver's line of sight

The driver must distinguish the sign from other competing targets. The ease with which a sign is capable of attracting attention is called "conspicuity." A sign that stands out from its visual surroundings is, by definition, a conspicuous sign.

Additionally, the driver can discriminate and selectively tune into the information he needs, isolating the information he requires from the other competing elements.

For example, the driver out of gas looks for the sign that corresponds to the one on his gas credit card and tunes out the restaurants and hardware store on his route.

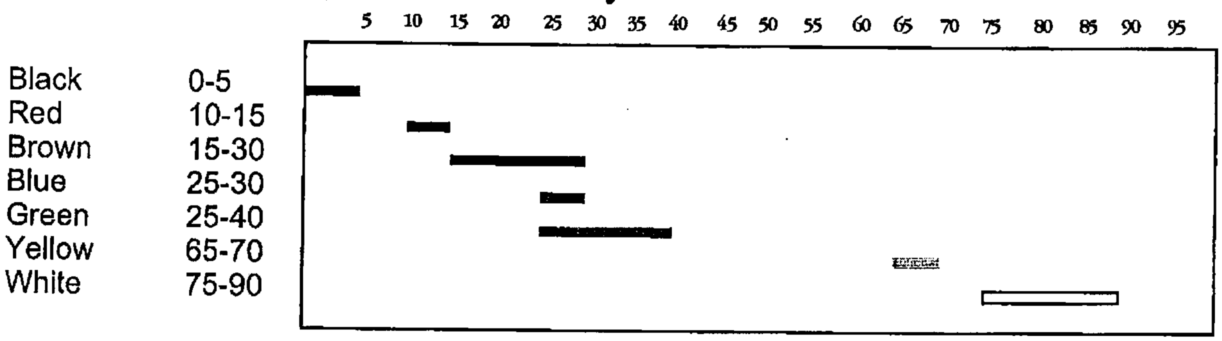
This action, by definition, is selective tuning.

VISIBILITY

Eyesight Limitations: It is estimated that 47 percent of all people wear corrective lenses. As many as 3 million people have glaucoma, and, of those under age 65, 25 million have cataracts. These statistics leave but half the population with 20/20 vision, and many of this remainder are colorblind.

Luminance: Luminance is the quality of radiating or reflective light or brightness: the brightness of the individual colors. Each color reflects a specific percentage of light striking its surface:

Percentage of Light Reflected by Colors



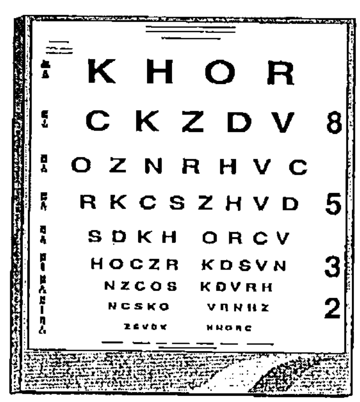
It is well to emphasize that these values are for reflected light. Luminescence is the light emitted from a light source, for example, a neon tube. The values for light emitted from a light source are in the order red, 5; blue, 4; green, 3; yellow, 2. It is obvious that consideration must be given to both reflected (nonilluminated) and emitted (illuminated) light and color.

Contrast: The normal conception of contrast is as a comparison between two or more things. In our scope, we are concerned with two comparisons:

1) Exterior-contrast ratio: The exterior ratio is defined as the luminance at an object's edge divided by the luminance of the background against which it is viewed. In order to detect the sign, the exterior-contrast ratio must be substantial. If the ratio is close to one, the sign will not be seen.

2) Interior-contrast ratio: The contrast between the sign copy and the sign background panel is the interior contrast ratio. It is obvious that black-on-black would not have a relative contrast adequate to read, whereas a white legend on black background will have maximum visual impression.

Size: The larger the legend, the better. The copy of the Snellen eye chart certainly illustrates the relationship between physical size and the dramatic visual impact. This is of particular importance when it is imperative that the sign be read easily in the minimum amount of time.



To provide its message safely, the sign must be detectable, conspicuous, legible, and comprehensible. The reported optimum size is 40 feet of distance per inch of letter height, allowing comprehension and legibility both day and night.

Additionally, the stroke of the letters comprising the sign legend should be one-fifth the letter height for maximum legibility of alphanumeric messages.

Color: Color is a recognized part of a corporate logo. Studies show that 80 percent of trade-style recognition is attributable to color. The viewer recognizes the familiar colors of the gas station as well as the shape. Subjective preferences yield familiarity.

Imagine two purple arches instead of the familiar McDonald's golden arches for fast food or a pink Union 76 gas ball. The familiar gold and the orange we're accustomed to provide name recognition.

Time of viewing: The speed of traffic must be considered as a viewing condition. The Decision Sign Distance (DSD) is a sequence of events that must take place for a motorist to take action.

DSD is calculated as follows:

DSD = v (t(lc)r + t(lc)d + t(lc)m) (feet)

Key:
v = driver's velocity
t(lc)r = reaction time (seconds)
t(lc)d = decision time (seconds)
t(lc)m = maneuver time (seconds)

Values of 8-10 seconds have been found for a lane change. Reaction times have been found to be 1.5-3 seconds; decision times range between 4.2-7 seconds; and maneuvering takes 4-4.5 seconds.

The greater the duration of the viewing period, the easier it is to develop an impression. Time is dependent upon how fast a viewer is traveling and the location of the sign. At 55 mph the viewer travels 80 feet per second. It takes 16.5 seconds to travel a quarter mile. There is little time to draw attention from the road and redirect it to the sign.

EYESIGHT/PERCEPTION

Visual effects while in motion: To repeat, the speed of travel must be considered as a viewing condition. A driver has a natural tendency to make the most use of his clearest vision, and that clearest vision is mostly in the direction of travel. As the speed forward increases, the field of usable vision is narrowed. At 55 mph, the normal angle of eccentricity decreases to 45 degrees from 180 degrees as a stationary viewing angle. Signage must be designed to be conspicuous, legible, and comprehensible to the viewer at normal traffic speeds. Additionally, the existing sight lines of the roadside environment must be factored into the design.

Recognition of these perception factors inherent in motion has been affected in a proactive formula developed and adopted by the city of San Diego as outlined in the following table:

Maximum Permitted Areas of Ground Signs

Width of Public Right of Way	Traffic Speed Allowed	Area of Each Sign Face [in square feet]
	15-20	32
	25-30	50
60 feet or less	35-40	100
	50+	150
	15-20	50
Greater than 60 feet	25-30	100
	35-45	150
	50+	200
Freeway-oriented ground signs		300

Safety: The most substantial information relative to safety has been developed by the Federal Highway Administration. Even though the specific application is to highway signs, the principles set forth are equally appropriate to commercial signs. For example, a federal study reports that 41 percent of accidents occur because of a lack of adequate signage. Further studies have established that the most important consideration in determining the size and placement of a sign is the distance between the sign and the viewer.

Night vision: Visual acuity is less in low light conditions, and signs must be designed to provide better visibility to compensate for this lower recognition at night. Four times as many accidents per mile at night occur than in the daytime. Again, at 55 mph, it takes but 16.5 seconds to travel a quarter mile. Signage must deal with both the speed and the reduced visibility.

INFLUENCE OF AGE

Age is a major factor in our society. In the year 2000, 14 percent of drivers will be age 65 and over.

Eyesight declines with age: The amount of light required for comprehensive reading increases; corrective lenses are much more predominate after age 50; the ability to adapt to glare is substantially reduced; the extent of peripheral vision is significantly reduced; and; the reaction/response timeline is greater.

ART

The design of a sign requires careful consideration of all of the factors which we have outlined. Once again, it is important to refer back to the need for the sign to be "conspicuous." So, in fulfilling the need to perform the intended function, the sign must be more conspicuous that its backdrop.

The "art" is in developing a sign consistent with the scientific facts and, at the same time, with a style that will effectively convey the message to the viewer. Size needs to be appraised as a factor. Size needs to relate to the background of the landscape, cityscape, and, of course, the structure that it supports. A sign that would be appropriate for a 20-foot jewelry store would be invisible on a major high-rise building. Consideration must be given to the speed of the traffic, how far the structure is set back from the roadway, and to the scale of the streetscape.

The final constraint imposed on the design is the sign code of the community. This law can, unfortunately, have an unnecessarily chilling effect on creative design. Dr. Walter Hardwick suggests: "To believe that a general purpose sign ordinance or by law is sufficient to meet the diversity of communication needs within our towns and cities is no longer realistic."

The many parameters to consider make a strong case for the admonition that "one-size-fits-all" is inappropriate. The solution lies in working out the common goal of enhancing the visual environment within the community. The solution is, indeed, "one-of-a-kind."

References:

1. Bagni, R.A., *OAAA Guidelines & Standards*, 1993

2. Hardwick, Walter G., *Visual Communications and Urban Design,* 1994

3. Howett, G.L., *Size of Letters Required for Visibility as a Function of Viewing Distance and Observer Visual Acuity,* National Bureau of Standards, 1983

4. Huff, Richelle J., "Corporate Identity Via Signage," California Electric Sign Association seminar, 1994

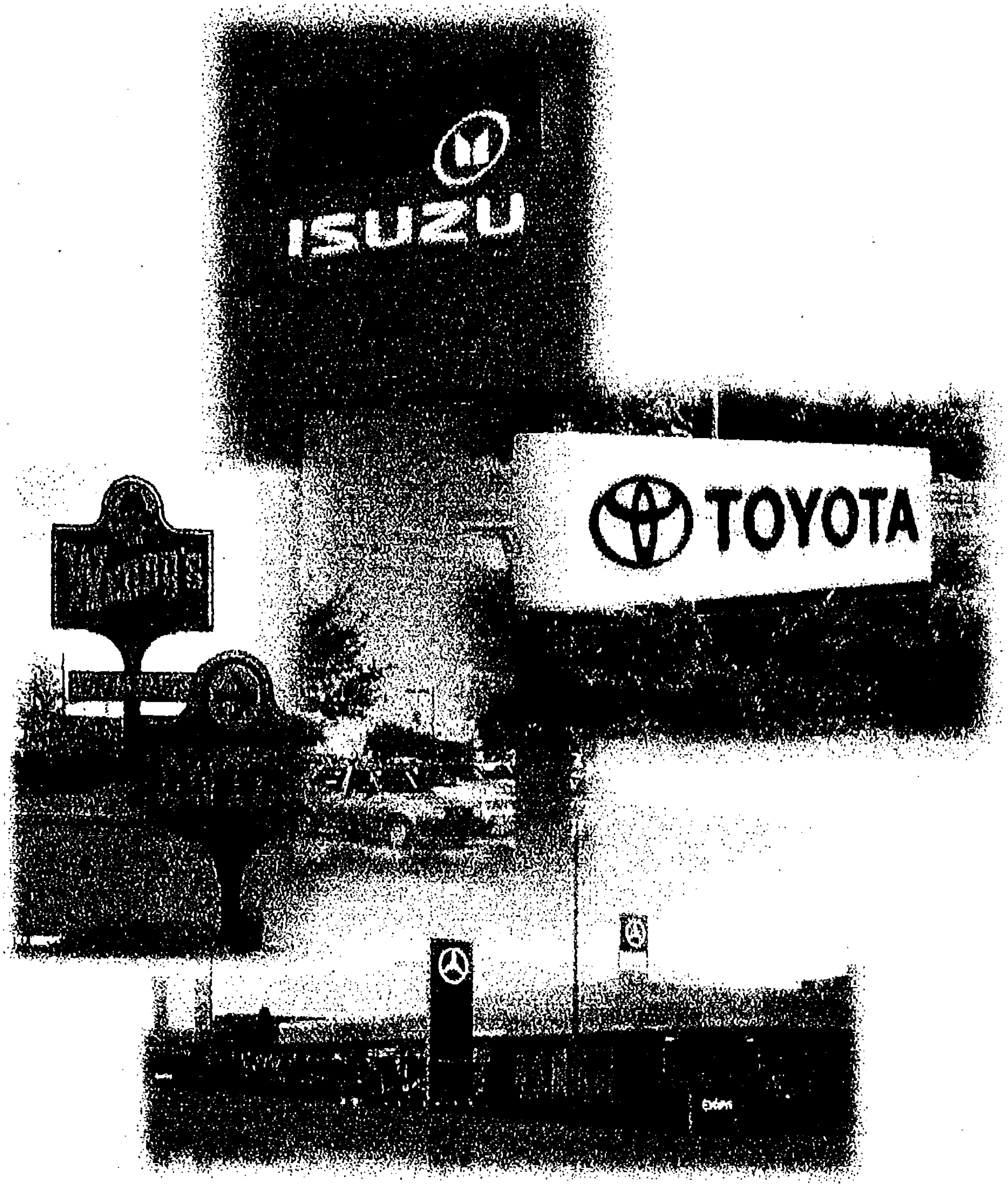
5. Jones, David K., *Sign Regulation and the Mechanics of Visual Communication*, 1994

6. Kline, Kline, Fozard, *Journals of Gerontology, Visions in Vehicles*, 1992

7. Mace, D.J., *Sign Legibility & Conspicuity, 1988*

8. Schwab, Richard N., *Visibility of Highway Signing*, 1994

Site Specifics



January 16, 1996

TO WHOM IT MAY CONCERN
c/o Bill Moore
Bill Moore and Associates
P.O. Box 6153
Albany, CA 94706

In late December 1994 we raised an existing sign to 75 feet above grade from its prior 45 feet above grade. We raised the sign to increase the visibility from the motorists -- our customers -- and avoid the obstruction from the trees.

During calendar year 1994, we sold 27,956 rooms. During calendar 1995, we sold 34,653 rooms.

No changes were made on the highway or at the interchange. No changes were made at the property. The additional 6697 room increase is attributable only to the increased visibility of the sign.

Sincerely,

Tab Sims

Tab Sims
Motel 6 Marketing Department

MOTEL 6 Operating L.P. PO Box 809092 Dallas TX 75380-9092 214 386 6161

A Division of
Foodmaker, Inc.
100 N. Barranca Avenue
Suite 200
West Covina, CA 91791-160C
818/858-0660
FAX: 818/858-0379

Date: 3/01/96

Sign Users Council of California
29170 Heathercliff Road, Suite #6
Malibu, CA 90265

Attention: CESA Sign Guidelines Committee

Dear Committee Members

We were asked to search our records for any unusual cases where signs have been made a difference to an existing Restaurant. I asked around and one was brought to my attention. It was a Restaurant that is among the vary first Restaurants developed in our chain. It opened on November 1st, 1958. Restaurant # 9.

We learned we could add a Pylon Sign in 1992 and the New Sign was installed at the end of our fiscal year. Initially we observed a modest increase in sales, then the power was connected, and the sales steadily increased.

There was no doubt that the Sign would add value to our business, however to verify the magnitude a study was necessary. Through an analyses method that compares the individual Restaurant in question to a Control Group of the nearest 15 Restaurants, combined with sales data for 8 weeks prior to the added Sign and 8 weeks after, including a factor for seasonality that has a seven year history built in; this Restaurant Sales increased 8.8% as compared to the Control Group that increased 4.9%.

Revisiting the initial findings again in 1995, some three years latter, we find an even greater separation of Restaurant # 9 and the Control Group. An 8.1% increase vs. a 2.0% for the Control Group. This observation is significant, as it points to the lasting benefit a Sign adds to the business. This benefit also is passed on to sales tax dollars and a healthy business enviorment is the result.

Hopefully this information is of some value to you, I am sorry we have no other examples to offer at this time. Should other examples come to my attention we will gladly pass them on for your evaluation.

Respectfully Yours

John A. Emanuelli

John A Emanuelli
Reg. Construction Mgr.

January 4, 1996

To Whom It May Concern
c/o Mr. Bill Moore
Bill Moore and Associates, Inc.
1057 Solano Avenue
POB 6153
Albany, CA 94706-0153

I am responding to your request for documentation relative to the value and importance of retail signage.

As you know, we were without signage at one of our premier locations for approximately one year. During that period, we had little to no recognition which resulted in lower than anticipated sales.

Signage was fabricated and installed approximately one year after we opened and we immediately noticed an increase in sales. The first full week after the signage was installed resulted in a revenue increase of 72.84% (this week this year vs this week last year).

Since that time, sales have steadily increased, and we are nearing year-end with an overall year to date increase of 2.47%. While this number may seem relatively small, we overcame a -31% deficit based on year to date revenue before the signage was installed.

Signage was the only recognizable addition or change to this space. Therefore I am confident that signage is vital to a successful retail operation.

Sincerely,

D. L. Olivero

Deborah L. Olivero
Manager Design and Construction

NAMCO CYBERTAINMENT INC.
877 Supreme Drive, Bensenville, Illinois 60106 Phone: 708.238.2200 Fax: 708.238.0560

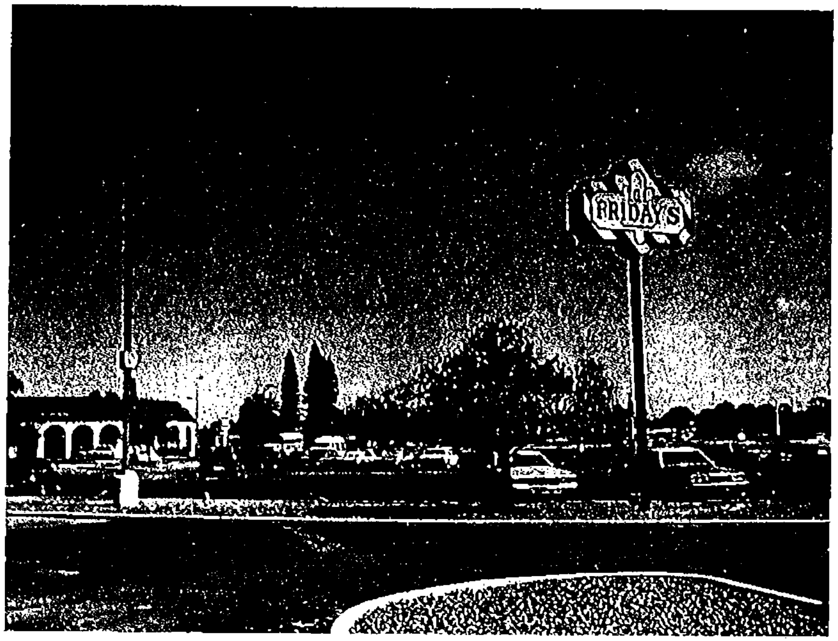
What a Sign's Worth: Death of a Retailer

An appraiser documents how the loss of a pole sign directly caused a successful mall retailer to fail

BY RICHARD W. BASS

DOES A SIGN HAVE VALUE? More than many of us can even imagine. A seldom-asked question is, "What is the exact value of a sign?" Yes, the cost of designing, fabricating and installing a sign is easily calculated, but more elusive is the contributory value the *advertising* on a sign brings or adds to a given business.

This article will present a *brief* overview of a case study involving the loss of a freestanding pole sign located in the parking lot of a community-scale (enclosed mall) shopping center. The case was complex and involved much more than can be adequately addressed in this summary. My involvement stemmed from a lawsuit between the subject tenant and the mall.



After Gulf Gate Mall changed ownership, T.G.I. Friday's became a tenant. The restaurant's corporate policy demands a freestanding pole sign. Terry Shulman's lost its sign in the process.

Background

Terry Shulman's was a drug store that occupied approximately 20,000 sq. ft. within the 180,000-sq.-ft. Gulf Gate Mall in Sarasota, FL. The mall is situated in an affluent resort/retirement community at the intersection of two major arterial roads.

The tenant had a 10-year lease with renewal options. Shulman's was located on the back side of the mall and wasn't visible from either of the two arterials. Shulman's was identified by a freestanding pole sign for which it paid approximately $3,500.

Merchandise offered by the retailer ranged from discount drugs (non-pharmaceuticals) to sundries and cosmetics at one end of the spectrum, with expensive specialty items at the other end; nothing in between was sold. The predominant customer base was female.

The merchant's retail sales had increased from 10-18% annually since it had relocated to the mall, reaching in excess of $5 million, or $250 per sq. ft. Rents paid by the retailer exceeded $125,000, or $6.25 per sq. ft. annually, plus CAMs. (CAMs are "common maintenance area" charges that retailers share for the upkeep of the entire mall. CAMs add approximately $4/sq. ft. to a retailer's rent.)

Impact

The mall changed ownership and management. The new management attracted new tenants, including T.G.I. Friday's, whose corporate policy required a freestanding sign. Due to local zoning regulations, the mall was limited to three pole signs.

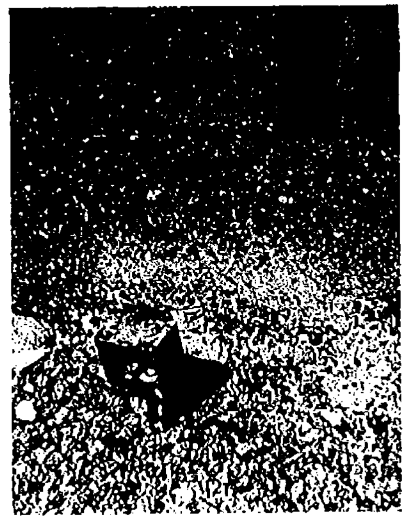
Without Shulman's knowledge or consent, mall management removed the Shulman's freestanding sign and replaced it with a freestanding pole sign for T.G.I. Friday's. Over the course of the next four years, Shulman's retail sales dropped approximately $250,000 annually as its historical growth in annual retail sales ceased.

Analysis

Analysts were asked: Could specific reasons be identified for Shulman's demise? No one presumed or assumed a correlation between the loss of the sign and loss of retail sales. So analysts began to look at potential physical and fiscal factors that could have directly impacted retail sales.

Identify new competition. Had any new competition been added within

For four years, Shulman's had no identification whatsoever. Once legal action began, Shulman's was given this panel. Note its legibility with respect to that of other tenants' names.



During the legal proceedings, the only evidence that Shulman's ever had a freestanding sign was this mounting bolt and the outlet, both of which are in the shadow of the T.G.I. Friday's sign.

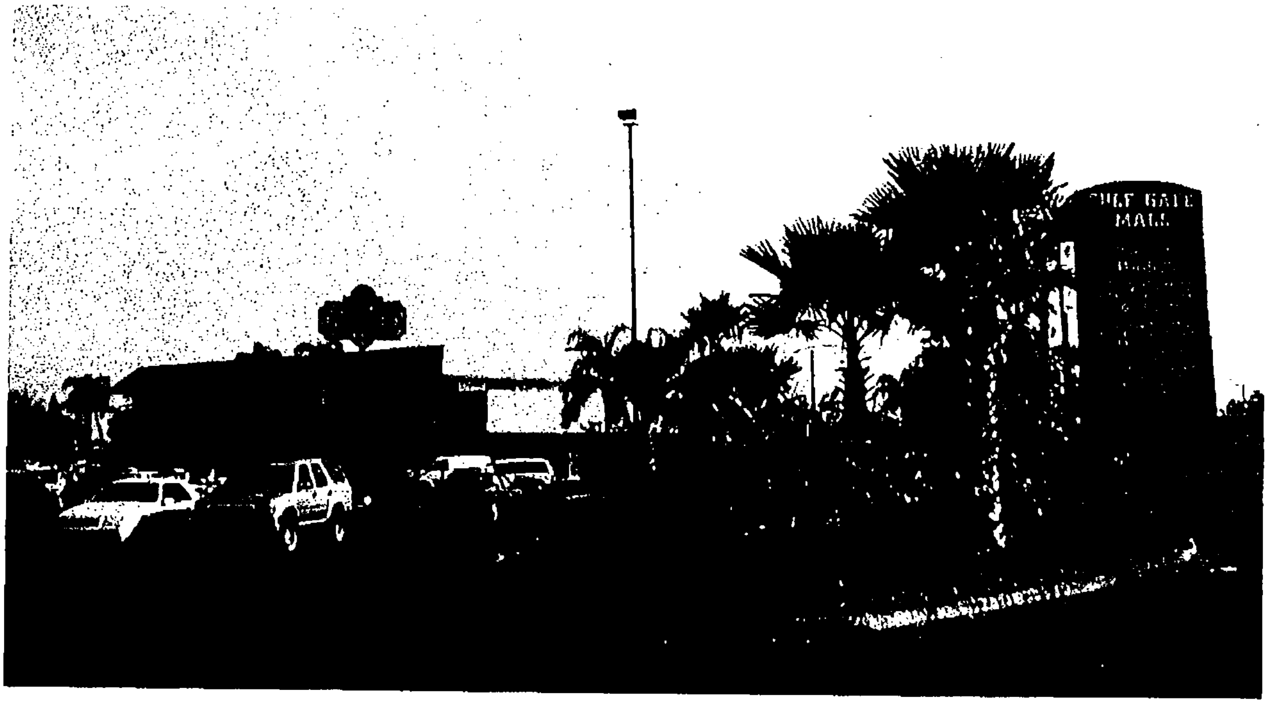
the defined (70-sq.-mile) market area? Had any existing competition physically expanded in the market area? Had new or existing competition expanded its print or other media advertising to draw new or capture existing consumers?

Economic indicators. What did the income and expense figures of other tenants show? What were the retail-sales figures for other drug stores? What were the local, regional and national economic factors (ie, recession)?

Physical indicators. Had there been any changes in the general road network that had impacted accessibility to the mall? Had there been any impediments (ie, bridge closings) that had impacted accessibility? (This was important because a major share of the mall's customer base came from a nearby barrier island.)

Internal mall indicators. Had any new tenants been added to the mall that might have been perceived as "offensive" to the older, affluent customers or the seasonal/vacation customer base? Had any mall construction activities negatively influenced shoppers' preferences?

The answer was "no," in essence, to the possible negative factors. No new competition had emerged within the generously defined "primary and secondary trade areas." Other mall tenants had been enjoying annual increases in retail expenditures; there was no downward pressure or stagnation. Physically, yes, there had been a road-widening program, but it was judged not to



During the day, Shulman's identification was slightly better, but still much less legible than the signs for other tenants.

Although some road construction occurred during Shulman's four years of declining sales, independent appraisers determined that it had not had a negative effect on Shulman's, nor on any other tenants.

have had an impact on the mall (based on surveys). Finally, all new tenants added over the five-year study period were perceived as "positive" influences.

So, overall, analysts concluded that no external influences or forces suggested causes for the declining retail sales. Shulman's had not instituted any new marketing strategies or practices. No other identified "internal" influences or forces indicated a reason for the retail sales decline.

The analysts then conducted in-store surveys referred to as "shopper intercept" or "point source" surveys. For this task, a separate market research firm, which specializes in this form of market analysis, was hired. This survey revealed:

- 62% of the respondents indicated their primary or main reason for their visit to the mall was to shop at Shulman's.
- Of the remaining 38%, 74% indicated that the subject was one of their planned shopping destinations. In other words, another 28% (74% of 38%) of those surveyed also shopped at Shulman's, meaning 90% of all mall visitors shopped at Shulman's.

In conducting the survey, mall management restricted the research team to an area immediately adjacent to Shulman's entrance, which faced the food court.

Additional data was gathered in reference to:

- Means of ingress/egress to the mall
- Historical visitation, frequency
- Per cent of first-time shoppers
- Age breakdowns
- Signage: knowledge of, location of, etc.

Conclusion

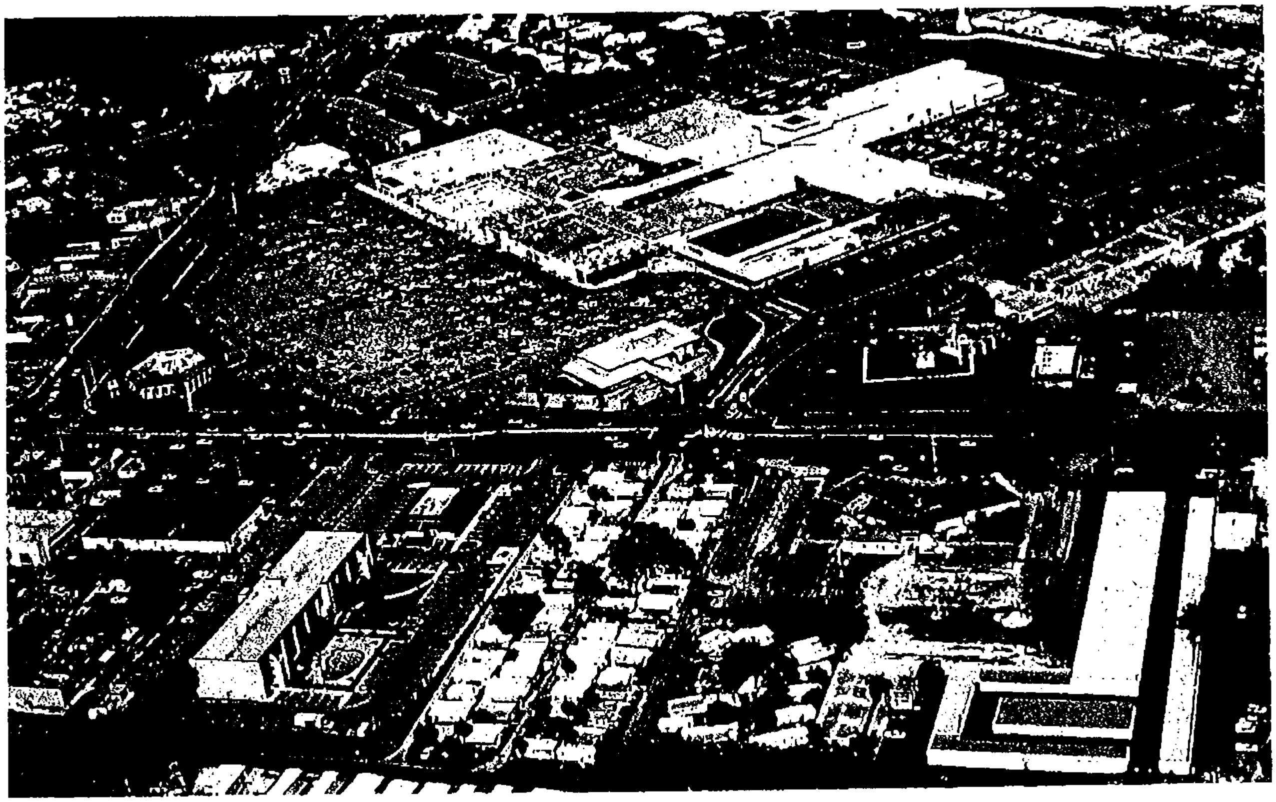
Following substantially more analysis, it was concluded that the decline in retail sales, both in direct reductions and in the loss of annual increased sales, was due to the loss of the free-standing pole sign (located in the parking lot) that had been clearly visible to travelers on both arterial roadways.

Quite simply, the retailer is no longer in business. The 20,000-sq.-ft. space is vacant. The lawsuit was settled, and the lease was not renewed. Although the tenant might have been able to relocate, no comparable space was available within the time frame between settlement of the suit, non-renewal of the lease and relocation efforts.

Other Impacts

The research team returned to the mall six months after Shulman's closed. Researchers found:

- Food court sales were down at least 30%.
- Six other stores that offered



Gulf Gate Mall (top, center) is located at the intersection of two large arterial roads. Terry Shulman's store could not be seen from either road, because it was located in the back of the mall.

Much of the mall's clientele comes from an island (top of photo). Its residents' only ingress to the mall was over a bridge; however, nothing happened over the four-year period to hinder traffic across the water.

women-oriented goods and services had closed.

The analysts' purpose is not to blame any individual person or corporation, nor the local government for its sign regulation. Even reasonable people will disagree from time to time.

And, although the sign was not the only reason for Shulman's closing, it was effectively the catalyst. The sign had value — value that facilitated the identification and location of the retailer. At minimum, it can be said that the sign had a value of $250,000 per year, for that was the directly measurable, immediate impact of its loss.

Is that the end of the story? No. Are there other impacts? Yes. The closing caused an adverse trickle-down effect on the community's economy:

- It reduced the city's tax base, because the mall is assessed based in part on its net operating income for ad valorem purposes. Absent Shulman's, the mall's income was reduced by $1 million.
- Two dozen employees lost jobs.
- The loss to local businesses included: newspaper advertising dollars, Yellow Pages advertising, the printing of letterheads, in-store needs for p-o-p signage, regional suppliers of products/merchandise, etc.
- State and local authorities suffered in terms of retail-sales revenue sharing. Sarasota lost $18,000 in sales-tax revenue.

Overall, this business closure caused a loss equivalent to 75 service-worker jobs. Clearly, a sign has monetary worth and offers benefits to the sign owner/advertiser. And, a sign provides other indirect monetary benefits to the local, and perhaps regional, economy, including the state/local government. ■

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Research Study of Signage Performance
The University of San Diego

by

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SUMMARY OF THE RESEARCH PROGRAM AND KEY FINDINGS

On-premise signage must be interpreted as a marketing device, in addition to its role as a communication or identity device. Urban planners and community regulatory agencies should be careful to take into account the possibility that increasingly restrictive on-premise signage policies will have a deleterious effect on retail performance. This, in turn, leads to a deleterious effect on the sales taxes generated by these revenues.

In this research program, we built upon earlier research on signage and anecdotal information to systematically investigate the financial impact of on-premise signage on a store's revenues. Using data from hundreds of sites, representing two major kinds of retailers, we found that on-premise signage has a statistically significant, and financially substantive impact on the revenues of a site.

In our regression analysis of a fast-food chain, we found that measures of site performance were significantly affected by the number of signs per site, and the type of signs at a particular site (i.e., site identifier signs, directional signs, menu boards, etc.). We also found that the number of signs at a particular site have a significant positive impact on both the annual sales revenue and the number of annual customer transactions.

Analysis of a data set from another nationally known retailer using two different procedures, multiple regression and Auto Regressive Integrative Moving Averages (ARIMA) time-series analysis, leads us to similar conclusions. On-premise signage is a significant constituent of the factors causing the success of a retail endeavor. Depending on the type of sign addition or modification, we found that a new building sign, a new pole, or a freestanding, multi-tenant sign tends to add 5 percent to 15 percent to a site's sales revenues. In addition, even small directional signs, intended only to help the storebound shopper find the site, tend to add around 10 percent to a site's revenues. This should not be interpreted as a prescription, that is, merely adding signage for the sake of adding signage will not result in increased sales. However, the research results do suggest that the addition of signage for good reason, such as to advertise the store to passing traffic that did not previously see the site's identity, or to help guide shoppers to a hard-to-get-to site as a prescription does result in substantially increased sales revenues.

Goal of the Study

The major goal of this study is to develop an understanding of the role of on-premise signage with respect to its economic impact on financial performance by site. From a marketing perspective, the value of on-premise signage is not adequately defined by replacement cost only. In addition to its other roles, on-premise signage is a marketing tool, similar to other forms of advertising. Thus, one of the appropriate ways to assess its value is in terms of the sales revenue that it generates. These generated sales are a function of the present and future effects of the signage, thus the value of an on-premise sign can be understood as the net present value of a future stream of revenues generated by its existence.

As with many forms of advertising, it can be difficult to assess the effect of any particular sign, just as it is often difficult to assess the exact effect of any particular advertisement. At any point in time, most firms operating in the retail environment are engaged in the implementation of a complex marketing strategy composed of multiple marketing variables (product characteristics; pricing structures; advertising campaigns; sales force activities; sales promotions, such as couponing and sampling; and distribution strategies) in an uncontrollable environment of competitor actions, customer desires, regulatory agency requirements, stakeholder demands, and so forth.

There is a gap in both the marketing and economics literature regarding the specific impact of on-premise signage vis-a-vis this complex mix of marketing variables. Our goal in this program is to supplement the anecdotal information regarding the effects of on-premise signage that is otherwise available. For communities with sales taxes, there are specific positive causal connections linking the impact of signage on retail sales revenues and, thus, the impact of sales revenues on sales-tax revenues.

The Mission Valley Auto Dealers Market Research Project

In 1988, Dr. Jacqueline Brown, then at the University of San Diego, investigated consumer perceptions of on-premise signage at eight large San Diego automobile dealerships.

[1] Although a new city of San Diego ordinance had restricted the size and placement of business establishment signs, this study found that the vast majority of patrons at the dealerships did not believe the signs should be reduced in size.

Summary of the Findings

More than 350 customers at eight large San Diego car dealerships completed questionnaires while visiting the dealer for service. Questions concerning on-premise signage were embedded in a larger survey asking patrons about various aspects of their service experience.

Almost 18 percent of the respondents indicated they became aware of the service department by seeing the dealership sign. Thus, the signage becomes one of the most powerful advertising vehicles the dealership has for generating new business. As we would expect, the largest group of respondents (35 percent) said they learned about the service department while purchasing a car. Another 29 percent learned about the dealership through word-of-mouth recommendations; this makes adequate signage important, so the business can be located, in addition to its advertising value. The yellow pages accounted for less than 10 percent of awareness creation.

More than 68 percent of the respondents suggested that on-premise signage was important in aiding their location of the dealership. Only 17 percent believed that signs were unimportant. Although most persons (76 percent) believed the signs would be fine kept at the same size, 22 percent thought the signs should be even larger. Only 2 percent of the respondents wanted smaller signs at the dealerships.

One of the dealerships had been recently forced to remove its large sign. Twenty-one percent of the respondents indicated "that now the dealership was hard to find because it 'had no sign' or 'should get its sign fixed.'"[2]

Most of the survey respondents (77 percent) believed there should be equity with respect to the allowed size of on-premise signage among several different kinds of business establishments, including gas stations, restaurants, and hotels. A significant group (22 percent) indicated that the dealerships should be allowed larger signs, and only 2 percent suggested that the signs should be smaller than other businesses in the area.

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1) Brown, Jacqueline J., Mission Valley Automobile Dealers' Marketing Research Project (1988).
2) Ibid, page 21.

Conclusions

There was no evidence from this study that a majority, or that even a significant group of people, want to see on-premise signage removed or reduced in size. This is in spite of the fact that the signs at the automobile dealerships constitute some of the largest examples of on-premise signs in the study area. The results suggest that on-premise signs serve at least two very important services: they are an important advertising source that generates new and ongoing revenues for the firms, and they are an important source of directional information to geographically guide the customer to the sites.

The Case of a Fast-Food Chain

The purpose, in this phase of the research program, is to explore one specific methodological approach for the study of the economic value of on-premise signage on the sales performance of individual retail sites. We intend to extend what is often anecdotal literature with more methodologically sound research and, to that end, provide an interpretation of the technical results that will allow the lay person to ascertain the economic value of on-premise signage. This report describes our first source of data and reports the results of this phase of the study to explain the variation in the firm's sales performance, especially as this performance is impacted by on-premise signage.

In this report, we discuss our study and our analyses of the sales performance for a sample of fast-food restaurant sites owned by a large American corporation. The chief purpose of the study was to determine the effects of on-premise signage on the dollar revenues and the number of transactions for more than 150 individual restaurant sites. We utilized a cross-sectional study (using multiple regression) with a series of variables that we hypothesized to have an impact on sales performance.

Due to the proprietary nature of the study, the results and specific descriptions of some of the predictor variables have been disguised. The results have been transformed from absolute dollar effects to percentage effects. This preserves the magnitude of the effects and protects the confidentiality of the data. The descriptions of some of the predictor variables have been generalized, but not to the extent that the models are devoid of meaning. Again, for proprietary reasons, the firm providing the data requested that its identity not be disclosed at this time. The data source firm is a well-known organization primarily involved in the production and delivery of fast-food products.

We developed a multiple regression model to identify the factors that can have a significant impact on the sales performance for a sample of restaurants. While our goal is to understand the basis for annual sales revenues (in dollars), separate examinations were also conducted of the firm's performance in terms of the annual number of transactions and the average dollar amount spent per transaction.

The Sample

The sample was obtained from a large national firm competing in the fast-food industry. As is typical for firms of this nature, they operate thousands of retail stores throughout the United States and abroad. In order to obtain a sample of sites subjected to similar marketing promotions, we chose to collect cross-sectional data from 162 restaurants in a major metropolitan area of southern California. The sample was collected in mid-1995 and the performance figures are from the firm's 1994 fiscal year. Data was developed from company records, city and county traffic engineering offices, and from census data, some of which was updated to the current time frame with additional survey work and/or projections.

Findings

We used regression analysis to identify those variables that have statistically significant effects on sales and then estimated the magnitudes of those effects. The equation that is estimated with regression analysis is called the best equation, in that this equation leaves the smallest amount of variation in sales at the 162 restaurant locations unexplained, using a specific set of explaining factors. The interested reader is referred to the Methodology and Technical Results sections for in-depth descriptions of the methodology and the statistical findings.

Three basic models were used to empirically test and explain the effects of a variety of marketing variables, including on-premise signage variables, on firm performance:

1) The first model was used to predict annual sales revenue for one fiscal year.
2) The second model was used to predict the number of transactions for the same fiscal year.
3) The third model was used to predict the average dollar amount spent per transaction.

Although our primary focus in this study is to ascertain the effects of on-premise signage, it is necessary for methodological reasons to also include other kinds of variables in our models as well.

Our regression analysis revealed that measures of site performance were significantly affected by the number of signs per site, and the type of signs at a particular site (i.e., site identifier signs, directional signs, menu boards, etc.).

We found that the number of signs at a particular site have a significant positive impact on both the annual sales revenue and the number of annual customer transactions. Other sign and nonsign variables were also found to impact site performance, but at slightly lower levels of statistical significance than the ones generally employed for market research. These other variables are addressed in more detail in the Technical Results section of the report.

In addition, the physical size of the establishment, the number of hours of operation, and a number of demographic factors also had a significant impact on total sales revenues.

Model 1: Annual Sales Dollars

In Table 1 we see the results for a multiple regression model predicting Annual Sales Dollar revenues at 162 fast food sites.

Model 1 uses actual annual fiscal year sales dollars for each site as the dependent (y) variable, and explains 33.7 percent of the variation in sales. This is very good for this type of model. The coefficients are significant at the 90 percent level of assurance.

Table 1 - Model 1: Annual Sales Dollars as a Function of On-Premise Signage and Other Marketing Variables

Variable	*Variable Description*	*% Impact on Revenue*	*$ Impact on Revenue (at a Site w/ $500,000 in Annual Sales)*
y	**Annual Sales Dollars**		
x_1	**Total Number of All Site Signs (impact of 1 additional sign)**	**4.75%**	**$23,750**
x_2	**Building Size (impact of 100 additional sq. ft.)**	**1.07%**	**$5,350**
x_3	**Hours of Operation (drive-thru & dining room per week) (impact of adding 1 hour per week)**	**0.18%**	**$900**
x_4	**Building Age in Years (impact of 1 additional year of age)**	**0.45%**	**$2,250**

Model 1 predicts:

x_1 On average, for each additional sign installed at a site, annual sales dollars are expected to increase by 4.75 percent. This translates to a $23,750 increase for each additional sign at a typical store with annual sales revenues of $500,000.

x_2 For each additional 1,000 square feet in building size, annual sales revenue is expected to increase by 1.07 percent. This translates to a $5,350 increase for each additional 100 square feet at our typical store with $500,000 of annual sales revenues.

x_3 For each additional hour per week in the number of hours that the dining room or the drive thru is open for business, annual sales revenues are expected to be 0.18 percent higher. This translates to a $900 increase for each additional hour per week that either the drive-thru or the dining room is open at a typical store with annual sales revenues of $500,000.

x_4 For each year of building age, annual sales dollars are expected to increase by 0.45 percent. This translates to a $2,250 increase for each year of store age at our typical store.

Implications of Model 1 for the Economic Value of On-Premise Signage

As one example of the implications of this model, let's look at the 1994 market sales data[3] for fast-food restaurants in Los Angeles. The estimated annual sales revenues for the area are almost $2.8 billion.

Model 1 suggests that the addition of one more sign at each fast-food establishment in the area would add more than $132 million dollars in annual revenue. At a sales-tax rate of 7.5 percent, the addition of one sign at each site would raise almost $10 million in additional tax revenues.
Conversely, Model 1 suggests that the loss of one sign at each fast-food establishment in the area would decrease the annual sales revenues by more than $132 million. Thus, the tax base would also decrease by almost $10 million.

Although one could argue that this is the implication of a regression model where other variables are held constant (the ceteris paribus assumption), the point is still clear that on-premise signage has a significantly large impact on retail-sales revenues and, therefore, the tax base.

Model 2: Analysis of Annual Transactions

Next, we examined the annual number of transactions at each site as the dependent (y) variable.

Table 2 - Model 2: Annual Number of Transactions as a Function of On-Premise Signage and Other Marketing Variables

Variable	*Variable Description*	*% Impact on Transactions*	*Impact on Annual Transactions (at a site w/100,000 annual transactions)*
y	Annual Number of Transactions		
x_1	Total Number of All Site Signs (Impact of 1 additional sign)	3.94%	3,940
x_2	Building Size (impact of 100 additional sq. ft.)	1.55%	1,550
x_3	Hours of Operation (drive-thru & dining room per week) (Impact of 1 additional hour)	0.16%	160
x_4	Building Age (in years) (impact of 1 additional year)	0.49%	490
x_5	Value of Owner-Occupied Housing Within 1.5 Miles (Impact of $1,000 additional value)	0.08%	80

3) From Restaurant Trends' QSR MarketSHARE, Report for Los Angeles, California, midyear 1995. Includes the categories: hamburger, roast beef, chicken, and pizza.

Model 2 predicts:

x_1 For each additional sign installed at a site, the annual number of transactions are expected to increase by 3.93 percent. This translates to a 3,940 transaction increase for each additional sign at a typical store with 100,000 annual transactions.

x_2 For each additional 100 square feet in building size, the annual number of transactions is expected to increase by 1.55 percent. This translates to 1,550 more transactions for each 100 square feet at our typical 100,000 transaction store.

x_3 For each additional hour per week in the number of hours that the dining room or the drive-thru is open for business, the annual number of transactions are expected to be 0.16 percent higher. This translates to 160 more transactions for each additional hour the site is open.

x_4 For each year of building age, the annual number of transactions are expected to increase by 0.49 percent. This translates to 490 more transactions for each additional year of age at our typical 100,000 transaction store.

x_5 For every increment of $1,000 in the average value of owner-occupied housing within a 1.5-mile radius, the annual number of transactions are expected to increase by 0.08 percent. This translates to 80 more transactions for each additional $1,000 of housing value.

With respect to on-premise signage, this model suggests that the number of signs located at the site has a significantly positive impact on the annual number of transactions. Also, as the size of the building is increased, the annual number of transactions increases. Specific types of signs did not have a statistically significant impact in this particular model.

Implications of Model 2 for the Economic Value of On-Premise Signage

Model 2 confirms the kinds of effects seen in Model 1. We again see that the addition of one sign will have a favorable impact on the number of transactions at a site. If we use an average value of $5 per transaction for a typical fast-food site, we see that the addition of one sign increases the revenues by almost $20,000. This is not much different from the figure of $23,750 found per sign in Model 1.

Model 3: Analysis of Average Transaction Amount

The last general type of model we constructed used the average dollar amount spent per transaction as the dependent variable. We developed this model to detect whether signage has an impact on the average amount spent per transaction as well as the total number of transactions.

Model 3 uses the ratio of annual sales divided by annual transactions for each site as the dependent (y) variable.

Table 3 - Model 3: Average Transaction Amount as a Function of On-Premise Signage and Other Marketing Variables

Variable	*Variable Description*	*% Impact on Transaction Amount*	*$ Impact on Transaction Amount (Site w/$5 Average Transaction)*
y	Average Dollar Amount Per Transaction		
x_1	225 Sq. Ft. Monument Sign (impact of 1 additional sign)	9.3%	$0.46
x_2	144 Sq. Ft. Pole Sign (impact of 1 additional sign)	15.6%	$0.78
x_3	6 Sq. Ft. Directory Sign (impact of 1 additional sign)	2.5%	$0.12
x_4	36 Sq. Ft. Building Sign (impact of 1 additional sign)	1.3%	$0.06
x_5	Median Rent within 0.5 Miles (impact of additional $100 rent)	-1.5%	-$0.07
x_6	Daytime Employment Within 0.5 Miles (impact of 100 additional persons)	-0.062%	negligible (but statistically significant)
x_7	Single Males Within 1.5 Miles (impact of 100 additional males)	-0.028%	negligible (but statistically significant)

Model 3 predicts:

x_1 is the impact of a 225-square-foot monument sign on the average transaction amount, as a percent of average transaction size, thus the presence of this sign increases the average transaction size by 9.3 percent. This translates to a $0.46 increase in the transaction size for a site with an average transaction amount of $5.00.

x_2 is the impact of a 144-square-foot special pole sign on average transaction size, as a percent of average transaction size, thus the presence of this sign increases the average transaction size by 15.6 percent. This translates to a $0.78 increase in the transaction size for our example site with a $5.00 average transaction amount.

x_3 is the impact of an additional directory sign on average transaction size, as a percent of average transaction size, thus an additional directory sign increases the average transaction size by 2.5 percent. This translates to a $0.12 increase in the average transaction size for our typical site.

x_4 is the impact of a 36-square-foot building sign on average transaction size, as a percent of average transaction size, thus an additional building sign of this size increases the average transaction size by 1.3 percent. This translates to a $0.06 increase in the transaction size for a site with an average transaction amount of $5.00.

x_5 is the impact of an additional $100 median rent (0.5 mile radius) on average transaction size, as a percent of average transaction size, thus an additional $100 in median rent within a 0.5 mile radius decreases the average transaction size by 1.15 percent. This translates to a $0.07 decrease in the transaction size for a site with an average transaction amount of $5.00.

x_6 is the impact of another 100 daytime employment (0.5 mile radius) on average transaction size, as a percent of average transaction size, thus an additional 100 daytime workers within a 0.5 mile radius decreases the average transaction size by 0.06 percent. This was found to be a statistically significant impact, although its financial impact is negligible unless daytime employment in the area were to increase dramatically.

x_7 is the impact of another 100 single males (1.5 mile radius) on average transaction size, as a percent of average transaction size, thus an additional 100 single males within a 1.5 mile radius decreases the average transaction size by 0.03 percent. As with x_6, this was found to be a statistically significant impact, although its financial impact is negligible. We report it here because it raises an interesting question: perhaps, by implication, areas with larger households would have larger transaction sizes.

It is clear from this model that on-premise signage has a significantly positive effect on the average dollar amount spent per transaction. We found that the 225-square-foot monument signs, the 144-square-foot pole signs, the 6-square-foot directory signs, and the 36-square-foot building signs all increased the average transaction size.

Certain demographic factors, such as daytime employment within a 0.5 mile radius of the site, median rent of units located within a 0.5 mile radius, and the number of single males within a 1.5 mile radius have a negative, although generally small impact, on the size of the average transaction.

Limitations of the Fast-Food Study and Directions for Future Research

One of the limitations of this pilot study is a result of some particular characteristics of the sample. Although the overall number of sites in the study was greater than 160, there were some subsets that had to be investigated on a site-by-site basis. These kinds of problems can be minimized by increasing the number of sites used from future data sources.

Another limitation to the study arises from the use of common business sense. Multiple regression is a technique that relies on variation in the data. Given the relatively standardized types of signs used by one firm, there is, in some sense, not a great deal of variation in some of the independent sign variables. Also, there is not a great deal of variation in the performance of each site, since very poorly performing sites will tend to go away. One way to deal with this methodologically is to increase the sample size in order to increase the power of the technique. It is possible that the impact of signage could be more conclusively identified with a larger sample size that would allow a more powerful statistical analysis.

Furthermore, the sign variables across the various sites with respect to this particular sample are derived from one firm in the fast-food industry. All of the sites certainly have what the firm believes to be a minimally adequate amount of identifiable signage, otherwise, the firm would not choose to locate at the particular site. Therefore, one problem for this research is that the sample is devoid of the opposite end of the spectrum, which would be a site without any signs on the premises.

As with most basic research, we initially developed a data set based on our theoretical expectations. Some variables that we would have liked to include were too expensive, or too time-consuming to obtain. We believe we would also benefit from larger sample sizes for two reasons. First, the statistical power of the analysis can be increased with larger samples. Second, some unusual profiles at specific sites created anomalous situations that sometimes confounded our interpretations. The impact of these anomalies may be clarified with larger samples. The result would be a greater degree of confidence in our findings. Also, increasing the sample size is typically a relatively easy hurdle to overcome.

One of the largest hurdles we faced with each firm is the time and effort that is necessary to invest to create a relationship of trust between the researchers and the data source. This relationship of trust is imperative, so that we can gain access to proprietary data, and so that the source will be assured that confidential information will not be distributed to unauthorized parties.

The Case of a Large Retail Chain: Pier 1 Imports

Introduction

In the first phase of this project, we conducted an exploratory investigation using data from the fast-food industry. In this phase of the project, we extend the research regarding the economic value of on-premise signage on the sales performance of individual retail sites to a chain of retail stores. The two principal investigators independently pursued two different methodologies using the same set of data as a starting point. We intend to extend what is often anecdotal literature with more methodologically sound research and, to that end, transform the methodology in such a manner that will allow the lay person to ascertain the economic value of on-premise signage. This report describes our second source of data and reports the results of our studies to assess the impact of on-premise signage on the financial performance of a site.

In this report we discuss our study and our analyses of the sales performance for a sample of retail sites owned by Pier 1 Imports. Pier 1 Imports is a well-known organization that can best be described as "a specialty retailer of decorative home furnishings, gifts, and related items." [4]

The chief purpose of the study was to determine the effects of on-premise signage on the dollar revenues for about 100 individual retail sites. We utilized two separate, but related techniques, and each of the two principal investigators independently pursued analyses using multiple regression and a time series analysis technique called ARIMA.

Due to the proprietary nature of the study, the results and specific descriptions of some of the predictor variables have been disguised. The results have been transformed from absolute dollar effects to percentage effects. This preserves the magnitude of the effects and protects the confidentiality of the data. The descriptions of some of the predictor variables have been generalized, but not to the extent that the models are devoid of meaning. We developed both a series of multiple-regression models and a series of ARIMA models to identify the factors that can have a significant impact on the sales performance for a sample of retail sites.

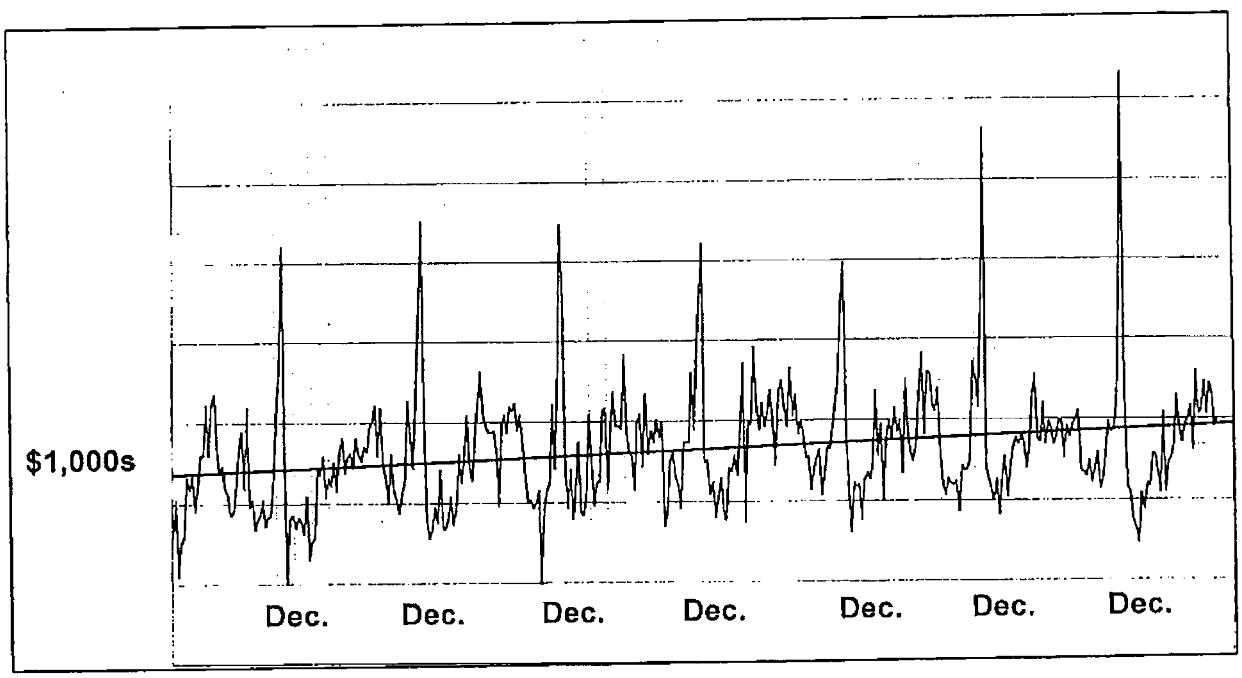
4) Company source.

The Data

The data set we investigated consisted of about seven years of weekly sales dollar data for each of about 100 individual retail sites for the regression analyses and almost 50 sites for the ARIMA analyses spread all across the United States. As previously discussed, the data for this phase of the study was provided by a nationally known retail chain with more than 500 stores across the United States. The analyses presented here are different from the cross-sectional analysis performed in the exploratory phase of the research in that the data is longitudinal; that is, we were provided with weekly sales data over the course of a seven-year period ending in mid-1996. Store histories were screened to find sites with several characteristics. First, of course, sites needed to have modifications, additions, or deletions (events) of on-premise signage. Second, these modifications needed to have at least a year of data on both sides of the event in order to construct reliable models. Third, we tried to find sites that were not concurrently subject to other major influences, such as building remodeling, shopping-center remodeling, severe weather, road construction, and so on. Finally, we examined individual scatter plots of the sites to check for any other visually apparent anomalies, such as chunks of missing data due to the accounting and reporting processes. This screening process resulted in the development of almost 40 site models.

Figure 1 is an exemplary plot of the weekly sales revenues for one of the sites. This plot is suggestive of the dramatic seasonality exhibited by each and every site in the study. As is the case with many consumer retail businesses, this site indicates seasonal spikes near Christmas, followed by a slight slump after the holiday.

Figure 1 – An Example of a Time Series: Weekly Sales Revenues Over a Seven-Year Period



Findings

We used regression analysis to identify those variables that have statistically significant effects on sales and then estimated the magnitudes of those effects. The equation that is estimated with regression analysis is called the best equation, in that this equation leaves the smallest amount of variation in sales at the retail-store locations unexplained, using a specific set of explaining factors.

We also used time-series analysis called ARIMA to model the sales at individual sites and assess the impact of changes in the on-premise signage. Each set of analyses will be described individually in the next sections of the report.

Pier 1 imports

Regression Analysis of On-Premise Signage Modifications

A Description of the Regression Procedure

The purpose of this analysis is to explain as much of the variation in sales as possible using available data and especially to find out to what extent signage has had an impact on sales. A single variable, referred to as a dummy variable by regression analysts, was used to account for differences in all nonsignage change site specific factors between each site and an arbitrary site, other than those specifically accounted for. This is a well-accepted practice that works well unless these other factors change significantly over the period of data analysis. Given the large number of sites included in this study, this methodology is appropriate.

Nominal weekly sales data were available from 95 sites with sign changes (some data series were incomplete, but included, because enough observations existed before and after the signage change to measure the impact of the signage change), for a seven-year period. Nominal sales data were not adjusted for inflation due to the large number of regional markets represented in the analysis. Thus, the trend in weekly sales represents an increase in prices as well as increases in unit sales of products.

For the regression analysis, the data were also converted from weekly to monthly data. One difficulty with the data set is that individual store sales are reported at the end of each week, since some weeks have portions of two contiguous months contained in them.

As one can easily observe in the figure exemplifying one store's sales over time, seasonality is a significant source of variation in this sales data. A variable was included to account for sales deviation from the lowest sales month of February. A time variable was included to account for any trends. The model was also adjusted to account for a national advertising campaign implemented by the company during the period of the study.

Sign changes were coded into 11 different kinds, based on the type of change. We included a variable for each type of sign change in one regression. The analysis reveals whether each type of sign change, in the aggregate, had a significant effect on sales.

Results of the Regression Analyses

The best regression model explained 82 percent of the month-to-month and site-to-site variation in sales. This represents a high degree of explanatory power in light of the fact that these sites are located all over the country and sales conditions change over time at many of the sites. As expected, the trend of the average monthly sales increased significantly. A national promotion campaign was also significantly successful, lifting weekly sales by about 11 percent per site after the campaign began as compared to before.

Certain types of signage changes also had an aggregated significant effect on sales. Major building-sign modifications and additions increased weekly sales by more than 9 percent, as a percentage of median sales. Another type of building signage modification was a major building sign combined with two other rather minor changes. This resulted in more than a 16 percent increase in weekly revenues. The evidence suggests changes to freestanding, multi-tenant signs (adding the firm's name to the identity signs) resulted in an aggregated 1 percent increase in revenues for one plaza sign and a 3 percent increase when two freestanding, multi-tenant signs were added.

ARIMA Analysis of On-Premise Signage Modifications

A Description of the ARIMA Procedure

ARIMA analysis is one of a set of time-series-analysis techniques that can be used to model sites on an individual basis. It uses the individual site's sales history to develop a mathematical model describing the data. Once an appropriate model is identified, a priori identified interventions can be assessed. In this research, the a priori identified interventions took the form of on-premise signage changes of various kinds, as well as a nationwide promotion campaign. An advantage of this kind of analysis is that the magnitude of specific changes at specific sites can be determined.

There are two popular managerial uses for ARIMA. First, once a parsimonious model of an existing set data is constructed, it can be used to make predictions about future sales. Second, the ARIMA technique can be used to assess the impact of some event, such as a change in distribution strategy, that might have occurred during the course of the time series.

Many sales data are characterized by three kinds of forces or drivers: trend, seasonality, and moving average shocks. Sales may be trending up or down, they may be subject to Christmas spikes or winter lulls, and one period's sales level may be closely connected to a previous period's sales levels. ARIMA mathematically models these forces. Then this model is used to predict future sales or assess the impact of intervention events.

As with many forecasting techniques, ARIMA models are more robust when built from several years of sales history. Thus, they are not generally useful for predicting new product sales unless that product is a close extension to, or replacement for, an existing product that does have an available sales history. Typically, better models are constructed when there is enough sales history to cover four or more seasonal cycles.

Although several different ARIMA models can exist that explain the data from our source, we pursue a parsimonious solution; that is, we seek a model that will optimize simplicity, accuracy and predictive ability. Without suffering the detailed specifications of the model that fit this data, we identify and estimate an ARIMA (0 1 1) (0 1 1) model. This means that there is trend (the Integrative or I component) at both the weekly level and at the seasonal (yearly) level. In addition, this is a moving average series (the MA component) at both the weekly and seasonal level.

Sometimes, we want to assess the impact of some kind of shock to the time series. For example, the distribution channel may undergo a radical change, an advertising campaign may begin, or a competitor may introduce a new product into the marketplace. In this example the store was significantly renovated at a point in the second year of the time series. This intervention event was explicitly modeled and the results suggested that this event contributed almost $2,500 to the weekly sales of the store.

For presentation of the results, we categorized the signage changes into similar groups: building signs, pole and freestanding, multi-tenant signs, and special directional signs. The results for each of these categories will be presented in turn. Again, in order to preserve the confidentiality of the data, each sign's impact will be reported as a percentage of the median sales for the previous year. For example, a sign with a $10,000 weekly impact at a site with sales of $100,000 per week would have a percentage effect of 10 percent. Median sales per site generally ranged from $3,000 to $30,000 per week.

Building Sign Effects

Generally speaking, the effect of a significant building signage change was substantively positive and typically increased weekly sales by around 5 percent. One site with atypically high sales revenues exhibited an increase of less than 1 percent, while another site with relatively low sales exhibited an increase of more than 15 percent. There is considerable variety in the nature of these signs; some events are the replacement of aging signage, while other events are the addition of new signage to previously unsigned building elevations exposed to passing traffic.

Table 4 – The Effect of Building Sign Additions and Modifications

Event	Increase (%)	Description
1	6.7%	Replaced aged building signage with new backlit signage system
2	15.5%	Replaced aged building signage with new backlit signage system
3	1.1%	Replaced aged building signage with new backlit signage system
4	3.5%	Replaced aged building signage with new backlit signage system
5	0.3%	Replaced aged building signage with new backlit signage system *(Note: Site already experiences atypically high sales for the chain)*
6	13.4%	Addition of new backlit signage system to rear entrance
7	5.4%	New signage on previously unsigned side of building
8	5.7%	Replaced existing building signage with larger signage
9	11.9%	Replaced existing building signage with larger signage
10	1.2%	Relocated existing signage to a different side of the store
11	5.4%	Replaced existing building signage with larger signage and new neon
12	4.5%	Replaced existing building signage with newer signage
13	5.1%	Relocated existing building and window signage to different sides
14	2.5%	New signage on previously unsigned side of building
15	3.0%	New signage on previously unsigned side of building
16	7.1%	New signage on previously unsigned side of building
17	23.7%	New signage on previously unsigned side of building *(Note: Site experiences atypically low sales resulting in large percentage increase, although the dollar effect was commensurate with other site effects)*
18	2.5%	New signage on previously unsigned side of building
19	4.3%	Replaced aged building signage with new signage system
20	5.2%	New signage on previously unsigned side of building
21	3.2%	New signage on previously unsigned side of building

Pole and Freestanding, Multi-tenant Sign Effects

As we see in Table 5, the addition of pole signs and plaza identity signs with the firm's name had a consistently substantive impact on revenues. These signs more than likely have a significant advertising impact on passing traffic.

Table 5 – The Effect of Pole Sign and Plaza Identity Sign Additions and Modifications

Event	Increase (%)	Description
22	8.5%	New pole sign
23	12.3%	New pole sign
24	4.9%	New pole sign
25	9.6%	Addition of chain identity on plaza identity sign
26	12.0%	Addition of chain identity on plaza identity sign
27	10.8%	Addition of chain identity on new plaza identity sign
28	4.1%	Addition of chain identity on plaza identity sign
29	4.7%	Addition of chain identity on new plaza identity sign
30	5.2%	Addition of chain identity on plaza identity sign

Directional Sign Effects

Rather surprisingly, the addition of small, reflective directional signs often resulted in substantial increases in revenues. These are typically used to help guide shoppers to sites with difficult or not-so-obvious ingress routes from major thoroughfares. They are also easily seen in the headlights of a shopper's vehicle. Thus, the impact of these signs is probably due to the ability to guide a site-bound shopper more than any specific advertising effect.

Table 6 – The Effect of Directional Sign Additions

Event	Increase (%)	Description
31	9.1%	Addition of 2 new directional signs
32	9.9%	Addition of 2 new directional signs
33	4.0%	Addition of 2 new directional signs
34	12.4%	Addition of 2 new directional signs

Conclusions

Analysis of a data set from a nationally known retailer using two different procedures, multiple regression and ARIMA time-series analysis, leads us to similar conclusions. On-premise signage is a significant constituent of the factors causing the success of a retail endeavor. Depending on the type of sign addition or modification, we found that a new building sign, a new pole, or a freestanding, multi-tenant sign tends to add 5 percent to 15 percent to a site's sales revenues. In addition, even small directional signs, intended only to help the store-bound shopper find the site, tend to add around 10 percent to a site's revenues. This should not be interpreted as a prescription; that is, merely adding signage for the sake of adding signage will not result in increased sales. However, the research results do suggest that the addition of signage for good reason, such as to advertise the store to passing traffic that did not previously see the site's identity, or to help guide shoppers to a hard-to-get-to site, as a prescription, does result in substantially increased sales revenues.

Methodology for the Case of a Fast-Food Chain

Potential Study Methodologies

We considered the possible use of three different methodological techniques to assess the impact of on-premise signage on site performance. The first is to track a particular site's performance, change the signage, then continue to track the performance. This is known as a field experiment. The difference in site performance before and after the change is attributed to the changes made in the signage. The second is a cross-sectional approach using multiple regression analysis to assess the impact of a group of variables across a large number of individual retail sites. The third is a longitudinal approach called time-series analysis.

Field Experiments

Studies in the field experiment category have been previously performed, often on an ad-hoc basis as the result of some external event, for example, a change in local sign ordinances. However, unless this type of field experiment is carefully designed and controlled, it is subject to several dangers that affect the validity of the results.

First, only the impact of the unique sign changes particular to that event are considered; other kinds of sign changes may have other kinds of effects. Second, the change observed at the site may also be due to other components of the firm's marketing mix, such as advertising or sales promotion activities. Third, the change could also be externally influenced by the marketing activities of competitors in the trade area or by changes in the economic environment (e.g., the beginning or end of the tourist season). Fourth, unless an experimental design study of this kind is carefully conducted over a sufficiently large and random sample of sites, the results are not generalizable beyond the specific site. Thus, given the potential problems, this type of methodology was not our first choice for the study. Furthermore, the typically anecdotal evidence available today is often of this type of pseudo-experimental design, and the validity or reliability of such evidence may suffer from one or more of these serious problems.

Cross-Sectional, Multi-site Studies

The other major methodological approach we considered was to perform a cross-sectional analysis of a large number of specific sites. Using statistical techniques, such as multiple regression, we can take into account a wide variety of the components that may vary from site to site. Some of these components include aspects of the signage itself (e.g., setback, height, impact, contrast, square footage); local ordinances; population density in the trade area; vehicular traffic; hours of operation; and the type of area (e.g., urban, commercial, light industrial, suburban). With this information, in combination with disguised site-by-site performance data, we can construct a model to explain the impact of the signage on site performance, as well as compare that impact with the other variables mentioned. Thus, such a model may be able to partition the various effects into individual components, as well as identify important interaction effects between some of these components.

Although there are several benefits to the use of this method, the largest potential problem is that the impact of the signage may not be distinguishable from random variation in the data. The principal means to minimize this problem is to carefully measure those variables that are included in the model, and to construct as large a sample as possible (in this context, a large sample means information about several hundred sites). Empirical estimation of the performance model is the only way to understand the magnitude of this issue.

The first strength of this methodology comes from the very means of reducing the problem mentioned above. By having a large, carefully designed sample, we increase both the generalizability and face validity of the results across a broad range of situations. Second, using a multivariate, cross-sectional analysis will allow us to understand and compare the impact of the signage in relation to a host of signage components, local ordinances, and demographic information. Third, the model can be expanded by an individual firm to incorporate other marketing mix variables (e.g., site-by site advertising, sales promotions, or price changes) in order to construct a more all-encompassing model of site performance.

The Use of Cross-Sectional, Multi-site Studies

Using the statistical techniques of multiple regression, we were able to take into account a wide variety of the components that may vary from site to site. Some of these components could include aspects of the signage itself (e.g., setback, height, impact, contrast, and surface area); local ordinances; population density in the trade area; vehicular traffic; hours of operation; and the type of area (e.g., urban, commercial, light industrial, suburban). With this information, in combination with site-by-site performance data, we can construct a model attempting to explain the impact of the signage on site performance, as well as compare that impact with the other variables mentioned.

Although there are several benefits accruing from the use of this method, the largest problem we face is that the impact of the variation in signage may not be distinguishable from random variation in the data. Although experience, common sense, and our expertise in marketing and economics leads us to firmly believe that on-premise signage has an absolute and critical impact on sales revenues, it may, nonetheless, still be difficult to empirically measure these effects.

Our choice of methodology (multiple regression) requires significant variation in both the predictor and criterion variables. Thus, the best data for the research would consist of wide variation in the signage variables. However, most firms, unless they can meet some minimum level of signage requirements at a particular site, will not construct a retail site; they'll look elsewhere. Although this sort of poor signage would create a richer data set, it would be a silly business decision. As a result, we are faced with trying to tease out the effects of relatively small levels of variation in the predictor variables. The principal means to minimize this problem is to carefully measure those variables that are included in the model, and to construct as large a sample as possible (in this context, a large sample means information about several hundred sites).

Empirical estimation of the performance model is the only way to understand the magnitude of this potential lack-of-variation problem. In other words, we have to give it a try and see what happens. Thus, a pilot study is invaluable for determining the ongoing efficacy of the research project.

Although this research is an assessment of the impact of on-premise signage, there are statistical requirements concerning model specification that force us to expand the kinds of variables we test. Our models need to try to specify as many of the predictor variables as is parsimonious for the explanation of the phenomenon. In other words, we needed to try to put into the model all of the major forces that would impact site performance.

We chose to use regression analysis to identify those variables that seemed to have statistically significant effects on sales and then estimate the magnitudes of those effects. The equation that is estimated with regression analysis is the "best" in that it leaves the smallest amount of variation in sales at the restaurant locations unexplained, using a specific set of explaining factors.

The Predictor Variables Used In The Case Of a National Fast-Food Chain

In order to effectively use multiple regression, it is important to try to identify all of the important factors that affect the level of sales. Thus, we initiated our study by consulting experts in the business to help us identify the most important factors. In order to construct an adequately specified model, we needed to obtain data in four general categories:

1) site data
2) sign-specific data
3) site-specific marketing efforts, and
4) site-specific performance data

With data from our first source of data (DS1), we tested approximately 150 potential predictor variables to empirically assess and predict the effect on:

1) annual sales dollar revenues
2) the annual number of transactions, and
3) the average dollar amount spent per transaction

These predictor variables represented sign-specific variables, such as the number of signs at a site, their heights, types, and surface area; and site-specific variables such as lot size; building size; the number of seats; the number of parking spots; average traffic counts; hours of operation; trade area housing prices; and trade area daytime employment. The kinds of independent variables we collected for these analyses are described below, followed by a specific listing of the predictor variables we tested.

Sign-Specific Variables

Building signs
Monument signs
Pole signs
Special directional or menu boards
Height of signs
Number of signs per site
Square footage of each sign
Cumulative square footage of all signs

Site-Specific Variables

Area of building lot
Area of building
Whether or not there was a dining room or drive-thru
Number of seats in the dining room
Hours of operation for both the dining room and drive-thru
Average daily vehicle traffic

Demographics of the Primary Trade Area

Housing prices
Daytime employment rates
Incidence of single males
Incidence of families
Trade area radius in concentric perimeters - half mile increments up to 3 miles

Site-Specific Performance Data

Monthly and annual transactions per site
Monthly and annual sales revenues per site

Technical Results for the Case of a Fast-Food Chain

As previously discussed, we chose to use regression analysis to identify those variables that seemed to have statistically significant effects on sales and then estimate the magnitude of those effects. The equation that is estimated with regression analysis is the "best" in that it leaves the smallest amount of variation in sales at the 162 restaurant locations unexplained, using a specific set of explaining factors. When we report that a variable is significant at the 95 percent level, it means that we can reject the hypothesis that the coefficient is zero. If we accept the alternative hypothesis, that the variable has the estimated directional effect on sales, we will be wrong less than 5 percent of the time.

Three basic models were used to empirically test and predict the effect on annual sales revenues, the number of transactions, and the dollar amount spent per transaction. The first model was used to predict annual sales revenue during the fiscal year of the mid-1990s. The second model was used to predict the number of transactions during the same fiscal year. The third model was used to predict the average dollar amount spent per transaction. This was calculated by dividing the annual sales revenue at each site by the number of transactions at each site.

We began with an exploratory analysis attempting to predict the dependent variables for the three models with the kinds of variables mentioned above. Although our primary focus in this study is to ascertain the effects of on-premise signage, it is necessary for methodological reasons to also include other kinds of variables in our models. This is done in order to lessen the effects of model misspecification. The validity of any particular model depends on the extent to which it takes into account all of the necessary variables that can explain the variation in the dependent variable. These other variables also give us an opportunity to contrast and compare the size of their effects with the size of the effects from on-premise signage.

The reader will quickly notice that, although it would be reasonable to believe that advertising has an impact on sales performance, there are no advertising variables explicitly contained in these models. Advertising variables were not included because the sample was chosen in such a way that all of the sites were subject to the same advertising and promotion campaigns; thus there would be no variation in advertising variables from site to site.

This was purposefully done in order to simplify the data collection and, therefore, to reduce the data-collection costs for this exploratory study.

The variables reported in the three models are a direct result of the model development process and were retained because they were statistically significant at the 95 percent level of confidence. We found a few substantively interesting independent variables that did not quite meet this confidence level, but we chose to include them in the models. However, we explicitly indicate any variation from this norm, and report the appropriate level of confidence generated for all variables.

Three different models were tested analyzing the effects on (1) annual sales dollars per site, (2) annual number of transactions per site, and (3) average dollar amount spent per transaction. Several statistically significant variables were used in each model to determine their effects.

Because of the proprietary nature of the data, we transformed the actual coefficients into percentage terms. So, for purposes of this report, the beta coefficient will refer to a percentage increase of sales at a hypothetical site with sales being average annual sales.

Sales at restaurants are influenced by a large number of factors. The purpose of this study is to determine whether the type, the number of signs, and/or the size of signs are statistically impacting measures of revenue. It is apparent that signs affect sales, but due to the large number of other factors that can influence sales at restaurants, it is likely that only a few of the most important sign characteristics will be significant at the 95 percent level.

Regression analysis revealed that the total sales revenues at the 162 restaurants studied were significantly affected by the number of signs per site, the type of signs at a particular site (i.e., site identifier signs, directional signs, menu boards, etc.), the physical size of the establishment, the number of hours of operation, and a number of demographic factors. In general, we find that the number of signs at a particular site and the site identifier signs have a significant positive impact on both the annual sales revenue and the number of annual customer transactions. With few exceptions, we include only those factors that are significant at the 95 percent level or higher in the models we report below. Other sign and nonsign variables were found to impact sales at lower levels of significance. In general, their estimated coefficients, though not significant at the 95 percent level, support our general conclusions.

The regression equation is of the general form:

$$y = a + b_1(x_1) + b_2(x_2) + b_3(x_3) + \ldots b_n(x_n)$$

where the dependent variable (y) is being explained by the independent variables (x's). The coefficients (b's) can be interpreted as measures of the impact that a change in each corresponding independent variable has on the dependent variable, keeping the value of the other independent variables constant. The value of the constant term is only required to estimate the level of the dependent variable (y), but is not relevant to estimating the impact of each independent variable on the dependent variable (y). In order to disguise proprietary information, we have not included the value of the constant.

In this study, the dependent variable (y) is some measure of site performance, such as annual sales, annual transactions, or the average amount of each transaction.

The final models representing the best fits of the data for the three dependent variables investigated in this study are discussed in sequence here. Generally, only those variables that are significant at the .05 level are included in the models. The .05 level of significance is commonly found in market research. It means that significant results should occur by random chance only 5 times in 100 studies. This is a strict confidence level for business research, especially given the exploratory nature of this study, and it represents a standard level of confidence used in market research.

Model 1: Annual Sales Dollars

In Table 7 below we see the results for a model predicting Annual Sales Dollars at 162 sites. Model 1 uses actual annual fiscal year sales dollars for each site as the dependent (y) variable, and explains 33.7 percent of the variation in sales. This is very good for this type of model. The coefficient on x is significant at the 94 percent level, while all of the other coefficients are significant at the 95 percent level or higher. In the table below, that means that each of the p values is .06 or less.

Table 7 - Model 1: Annual Sales Dollars as a Function of On-Premise Signage and Other Marketing Variables

Variable	Variable Description	B_n (%)	p	$ Impact on Transaction Amount (Site w/ $5 Average Transaction)
Y	Annual Sales Dollars			
x_1	Total Number of All Site Signs (impact of 1 additional sign)	4.75%	0.019	$23,750
x_2	Building Size (impact of 100 additional sq. ft.)	1.07%	0.026	$5,350
x_3	Hours of Operation (drive-thru & dining room per week) (impact of adding 1 hour per week)	0.18%	0.000	$900
x_4	Building Age in Years (impact of 1 additional year of age)	0.45%	.045	$2,250
X_5	Index of Drive-Thru Hours / Dining Room Hours (the ratio of the drive-thru to the dining room hours)	11.9%	0.060	
X_6	Index of Floor Space to the Number of All Types of Signs (Impact of an extra 100 sq. ft. of floor space per sign, on the annual sales)	.04%	0.002	
X_7	Value of Owner Occupied Housing (1.5 mile radius around site)	0.05%	0.030	
X_8	A Company Specific Proprietary Variable	12.1%	0.013	
X_9	A Company Specific Proprietary Variable	17.25%	0.003	

Model 2: Analysis of Annual Transactions

Next, we examine the annual number of transactions at each site. The "best" model for explaining the number of transactions contains all of the same variables as the dollar sales model.

Model 2 uses actual annual fiscal year transactions for each site as the dependent (y) variable, and explains 38.3 percent of the variation in sales. This is very good for this type of model. All of the coefficients on x are significant at the 95 percent; that means that each of the p values is .05 or less.

Table 8 - Model 2: Annual Number of Transactions as a Function of On-Premise Signage and Other Marketing Variables

Variable	Variable Description	B_n (%)	p	$ Impact on Revenue (at a Site w/ $500,000 in Annual Sales)
Y	Annual Number of Transactions			
X_1	Total Number of All Site Signs (Impact of 1 additional sign)	3.94%	0.045	3,940
X_2	Building Size (Impact of 100 additional sq. ft.)	1.55%	0.001	1,550
X_3	Hours of Operation (drive-thru & dining room per week) (impact of 1 additional hour)	0.16%	0.001	160
X_4	Building Age (in years) (impact of 1 additional year)	0.49%	0.026	490
X_5	Value of Owner Occupied Housing Within 1.5 Miles (Impact of $1,000 additional value)	0.08%	0.000	80
X_6	Index of Drive-Thru Hours/ Dining Room Hours (the ratio of the drive-thru to the dining room hours)	14.07%	0.022	
X_7	Index of Floor Space to the Number of All Types of Signs (impact of an extra 100 sq. ft. of floor space per sign, on the annual sales)	0.033%	0.010	
X_8	A Company Specific Proprietary Variable	11.57%	0.015	
X_9	A Company Specific Proprietary Variable	16.15%	0.005	

Model 3: Analysis of Average Transaction Amount

The last general type of model constructed utilized the average dollar amount spent per transaction as the dependent variable. We developed this model to detect whether signage has an impact on the average amount spent per transaction as well as the total number of transactions.

Model 3 uses the ratio of annual sales divided by annual transactions for each site as the dependent (y) variable, and explains 38.3 percent of the variation in sales. As we have previously noted, this is good for this type of model. All of the coefficients on x are significant at the 95 percent; that means that each of the p values is .05 or less.

Table 9 - Model 3: Average Transaction Amount as a Function of On-Premise Signage and Other Marketing Variables

Variable	Variable Description	B_n (%)	p	Impact on Annual Transactions (at a site w/ 100,000 annual transactions)
y	Average Dollar Amount Per Transaction			
X_1	225 Sq. Ft. Monument Sign (impact of 1 additional sign)	9.3%	0.023	$0.46
X_2	144 Sq. Ft. Pole Sign (impact of 1 additional sign)	15.6%	0.006	$0.78
X_3	6 Sq. Ft. Directory Sign (impact of 1 additional sign)	2.5%	0.012	$0.12
X_4	36 Sq. Ft. Building Sign (impact of 1 additional sign)	1.3%	0.005	$0.06
X_5	Median Rent within 0.5 Miles (impact of additional $100 rent)	-1.5%	0.000	-$0.07
X_6	Daytime Employment Within 0.5 Miles (impact of 100 additional persons)	-0.062%	0.000	negligible (but statistically significant)
X_7	Single Males Within 1.5 Miles (impact of 100 additional males)	-0.028%	0.000	negligible (but statistically significant)
X_8	A Company Specific Proprietary Variable	2.98%	0.011	

References

Ellis, Seth, Ph.D.; Johnson, Robert, Ph.D; Murphy, Robin, M.B.A.; "The Economic Value of On-Premise Signage." California Electric Sign Association, University of San Diego, International Sign Association, Sign Users Council of California, Business Identity Council of America, 1997.

Federal Laws of Protection

Summary of Federal Law Applicable to On-Premise Signs

In addition to state laws, there are four major federal laws applicable to on-premise signage: the United States Constitution, the Highway Beautification Act, the Copyright Act, and the Lanham Act (trademark protection).

I

The U.S. Constitution

Because signs are a form of communication, they are protected under the First Amendment. Because they are a form of property, they are also protected from any uncompensated "taking" under the Fifth Amendment. Sign regulations may also be attacked on grounds that the regulation denies equal protection of the law under the 14th Amendment.

First Amendment
(Freedom of Speech)

The First Amendment to the Constitution provides in part:

"Congress shall make no law...abridging the freedom of speech, or of the press; or the right of the people to peaceably assemble, and to petition the Government for a redress of grievances."

There are a multitude of applications and types of signs and messages that in one way or another would fall under the First Amendment freedom of speech protection. Further, there's an entire body of federal law that covers speech. Of necessity then, this summary is limited to First Amendment protections relating to commercial speech, which includes signage.

The First Amendment guarantees freedom of speech as a fundamental right. Simplistically, as applied to commercial expression, this means that before government can regulate speech, it must have a compelling reason, as opposed to a mere rational basis, for the regulation to withstand constitutional challenge.

Commercial speech is expression that proposes a commercial transaction. To be protected, the speech must be truthful and promote lawful activity. To be valid, a regulation must directly advance a legitimate, substantial governmental purpose or interest; it must operate in a reasonable manner; and application of the ordinance must satisfy its purpose, i.e., there must be some reasonable nexus between the means and the ends.

It's also important to note that regulation of a message differs from regulation of the manner or means of expression. Regulations must be content-neutral. Overrestrictive regulation of the means of expression has been found to result in impermissible control of the message and, is therefore, unconstitutional.

Cases interpreting First Amendment speech protections are too numerous to detail in this publication; however, a brief review of recent relevant cases is included in Appendix VI.

Fifth Amendment
(Just Compensation)

Fifth Amendment protections include uncompensated takings. Put another way, just compensation must be paid before the government can effect a taking of property. This is most commonly understood in the context of eminent domain, where government takes over private property for public use. However, a taking may also occur when a regulation or law effectively deprives a property owner of substantially all reasonable use of the property. To constitute a taking, the regulation must destroy a major portion of the property's value.

These "regulatory takings" might occur in the signage context when an ordinance causes the removal or reduction of an on-premise sign, which results in a business' loss of ability to effectively identify the business. This, in turn, results in the business' economic downfall or loss of income. There have not been any reported cases dealing specifically with this issue; however, takings law is still an emerging area. A brief review of recent key cases dealing with takings is included in Appendix III.

The U.S. Supreme Court has identified three factors that have particular significance in determining whether there has been a taking: (1) the economic impact of the regulation, (2) the extent to which the regulation interferes with investment-backed expectations, and (3) the character of the governmental action.

In California and other jurisdictions, in lieu of compensation, amortization is accepted as a reasonable means of compensation for the removal of on-premise signs. However, amortization is not without controversy. Under California law, the removal of on-premise signs in this manner requires a minimal 15-year amortization period. For further discussion on amortization, see the ISA publication *Amortization Explained*, which is reprinted in Appendix I.

Fourteenth Amendment
(Equal Protection)

A regulation or ordinance that creates arbitrary, unreasonable, or discriminatory classifications is generally considered to be an unconstitutional violation of equal protection rights under the 14th Amendment.

For example, the billboard industry often contends that sign regulations that prohibit off-site billboard advertising, but allows on-site signs, create an arbitrary and discriminatory classification.

The judicial test for equal protection purposes is that the classification must not be arbitrarily made for the mere purpose of classification, but must be based upon some natural, intrinsic, or constitutional distinction that suggests a reason for and justifies the particular regulation. Again, the regulation must directly advance a legitimate state purpose. See Appendix II for recent cases addressing equal protection.

regulation. Again, the regulation must directly advance a legitimate state purpose. See Appendix II for recent cases addressing equal protection.

II
THE HIGHWAY BEAUTIFICATION ACT

This act was adopted in the mid-1960s as a response to national concern over control of outdoor advertising along the nation's highways. Its alleged purpose is: "to protect the public investment in such highways, to promote the safety and recreational value of public travel, and to preserve natural beauty."

Essentially, the act regulates the location and type of signs that will be allowed along the highway -- within 660 feet of the freeway right of way -- by limiting such signs that are outside of urban areas and visible from the highway to directional and official signs and messages. Exempted are for-sale/lease signs if located on the property, on-premise business signs, electronic message signs, historic or landmark signs, and "free coffee" signs (for nonprofit groups).

By complying with the act, California, for example, receives federal highway funds. Further, as a result of an agreement made between the state and federal government, California receives additional money for designating sections of certain highways as "bonus segments."

Although a city or county may approve construction of a sign in a designated area along the highway, if the California Department of Transportation (Caltrans) determines the sign will be in a bonus segment, it may not issue a permit, except for electronic centers and as otherwise provided by state law. Caltrans has devised a flow chart outlining when a state permit is required.

III
THE LANHAM ACT
(Trademark Protection)

The Lanham Act deals with trademark protection and provides, in pertinent part, that no state, city, county, or agency may require alteration or modification of a registered trademark, service mark, trade name, or corporate name, etc., as "exhibited in the certificate of registration issued by the U.S. Patent and Trademark Office." Many states also provide similar protections under state trademark laws. Unregistered marks may also be protected, depending on the circumstances.

What this means, from a signage perspective, is that a federally registered logo mark or name cannot be required to be altered as a condition of approval for a sign permit. By way of example, a city or county cannot force the user of a registered mark to change the color, typeface, or design, of the mark to comply with local ordinances or design criteria.

The purpose of the law is to permit mark holders to display their marks in a uniform manner throughout the U.S., to protect mark holders and consumers from deceptive imitations or registered marks, and to protect these marks from interference by state and local legislation.

The American Planning Association publishes a book planners may utilize suggesting that corporate America should be required to modify trademarks to conform with community aesthetics; however, trademarks are *property rights*. Businesses that divest themselves of their rights dilute the value of their mark and their identity in the marketplace. See the article in Appendix VI, *Trademark Infringement: How Sign Regulations Infringe Business Trademarks*, reprinted from the Business Identity Council of America, for a recent assessment of this issue. A brief review of recent relevant cases is included in Appendix V.

In this regard, sign designers need to be cautious about possible trademark and copyright infringement when creating a sign in someone else's "style."

IV
COPYRIGHT PROTECTION

For a thorough discussion of copyright protection, see the ISA publication *Theft by Design*, which is reprinted in Appendix IV.

PRE-EMPTION

In many instances, federal laws will pre-empt, or take precedence over, state or local laws. When the federal laws or rights involved are of a national character, e.g., involving an important national right, such as constitutional rights or federal laws governing interstate commerce (such as the trademark and copyright laws), those laws will prevail over state and local laws. As such, state or local governments may not pass or apply laws inconsistent with federal law. Similarly, state laws will pre-empt city and county ordinances. In the signage context, federal pre-emption should be argued when a local government attempts to alter a federally protected trademarked logo.

California Business and Professions Code

(The information presented in this interpretation is deemed to be reliable at the time of publication; however, it should not be construed as a substitute for legal advice.)

INTRODUCTION

In 1983, California became the first state to promulgate a series of statewide on-premise sign laws intended to protect business from unreasonable governmental interference and to require the payment of just compensation for the compelled removal of signs. The following analysis of California's on-premise sign laws is intended as a suggested guideline for consideration in other jurisdictions, as well as an interpretation for those doing business in the state.

SECTION 5490: Scope and Definitions

INTENT:

Sets forth the various definitions of words used in the on-premise sign laws. Also limits the applicability of these laws to on-premise signs only. Note that "sign" is never defined in the ordinance, but instead, a sign is an "on-premise advertising display." See subsection (b). This section also establishes that an on-premise sign shall be considered on-premise regardless of any further subdivision of a parcel.

INTERPRETATION:

This section is fairly straightforward. Of significance to the sign user are the following subsections:

Subsections:

(a) which restricts the sign laws in this chapter to on-premise signs only;

(b) which sets forth the 15-year minimal intended life span for a sign to qualify for protection under these laws;

(d) which excludes billboards from this chapter;

SECTION AS WRITTEN:

APPLICATION OF CHAPTER; DEFINITIONS

(a) This chapter applies only to lawfully erected on-premises advertising displays.

(b) As used in this chapter, "on-premises advertising displays" means any structure, housing, sign, device, figure, statuary, painting, displays, message placard, or other contrivance, or any part thereof, which has been designed, constructed, created, intended, or engineered to have a useful life of 15 years or more, and intended or used to advertise, or to provide data or information in the nature of advertising, for any of the following purposes:

1. To designate, identify, or indicate the name or business of the owner or occupant of the premises upon which the advertising display is located.

2. To advertise the business conducted, services available or rendered, or the goods produced, sold, or available for sale, upon the property where the advertising display has been lawfully erected.

(c) As used in this chapter, "introduced or adopted prior to March 12, 1983," means an ordinance or other regulation of a city or county which was officially presented before, formally read and announced by, or adopted by the legislative body prior to March 12, 1983.

(d) This chapter does not apply to advertising displays used exclusively for outdoor advertising pursuant to the Outdoor Advertising Act. (Chapter 2 -commencing with Section 5200).

(e) which excludes from the definition of illegal advertising displays, non-conforming signs legally erected, but currently in their amortization period;

(f) which provides a definition of "abandoned advertising display."

(g) which provides that once a sign is determined to be on-premise, it shall remain deemed on-premise, regardless of any changes in the character of the property or subdevelopment, such as lot splits, new roads, sale or transfer of the business. This subsection was added effective 1997 to avoid reclassification of signs from on-premise to off-premise as a result of the specified conditions.

(e) As used in this chapter, illegal advertising displays do not include legally erected but nonconforming displays for which the applicable amortization period has not expired.

(f) As used in this chapter, "abandoned advertising display" means any display remaining in place or not maintained for a period of 90 days which no longer advertises or identifies an ongoing business, product, or service available on the business premise where the display is located.

(g) (1) For the purpose of this chapter, an on-premises advertising display that is located within the boundaries of a development project, as defined by Section 65928 of the Government Code, that identifies either the name of the development project, its business logo, or the goods, wares, and services existing or available within the development project, shall continue to be deemed an on-premise advertising display regardless of any of the following occurrences:
(A) The creation or construction, in or about the project, of a common parking area, driveway, thruway, alley, passway, public or private street, roadway, overpass, divider, connector, lot split, or easement intended for ingress or egress, regardless of where or when created or constructed, and whether or not created or constructed by the project developer or its successor, or by reason of government regulation or condition;
(B) The sale, transfer, or conveyance of an individual lot, parcel, or parcels less than the whole, within the development project;
(C) The sale, transfer, conveyance, or change of name or identification of a business within the development project;
(2) This subdivision shall not be applicable in any case in which its application would result in a loss of federal highway funds by the State of California;
(3) This subdivision applies to all counties and general law or charter cities.

SECTION 5491: Fair & Just Compensation Required for Removal

INTENT:

To protect owners of legally erected signs from potential financial hardship caused by changes in a sign ordinance that would make their existing signs illegal and subject to removal.

INTERPRETATION:

Section 5491 of the code establishes a basic requirement that a sign cannot be removed, or its use restricted, without paying the owner fair and just compensation.

The section applies only to on-premise signs on the site where the business is located, but it does not apply to billboards, which are considered off-site. The section also prohibits a city or county from restricting the regular maintenance or repair of the sign without paying fair and just compensation. See code section 5492 for further explanation.

SECTION AS WRITTEN:

REMOVAL, ABATEMENT, OR LIMITATION OF ON-PREMISES ADVERTISING DISPLAY; COMPENSATION REQUIREMENT

Notwithstanding any provision of Chapter 2 (commencing with Section 5200), except as provided in this chapter, no on-premises advertising display which is used for any of the purposes set forth and conforming to Section 5490 shall be compelled to be removed or abated, and its customary maintenance, use, or repair shall not be limited, whether or not removal or limitation is required, because of any ordinance or regulation of any city or county, without the payment of fair and just compensation.

SECTIONS 5491.1 & 5491.2: Inventory Requirements; Fees

INTENT:

To require the city or county agencies to inventory, identify, and cause to be removed all signs within their jurisdiction that were illegally erected or have been abandoned. To also assist a city or county in determining that there is little or no need to further restrict legally in place signage once all illegal or abandoned signage has been removed. Also intended to assist in the removal of so-called visual blight.

SECTION AS WRITTEN:

5491.1. (a) Any city or county adopting or amending any ordinance or regulation that regulates or prohibits the use of any on-premises advertising display that is more restrictive than existing law, shall include provisions in that ordinance or regulation for the identification and inventorying of all displays within its territorial limits that are determined to be illegal or abandoned pursuant to the law that is in effect prior to the adoption of, or amendment to, the ordinance or regulation.

(b) The required identification and inventory shall commence not later than 120 days from the date on which the ordinance or regulation is adopted or amended and shall be completed in a timely manner. The population of the city or county, as determined by the most recent federal census, the number of on-premise advertising displays located within the city or county, and other relevant factors may serve as a guide for the purposes of determining what constitutes "a timely manner" for the purposes of this subdivision.

INTERPRETATION:

Any city or county that amends, adopts or modifies an ordinance that regulates or prohibits the use of on-premise signs MUST within 120 days of adoption of the revisions, conduct a survey to identify and inventory illegal and abandoned signs. The city or county then becomes responsible for implementing procedures to remove such signs.

The city or county is not required to conduct the inventory if the ordinance applies only to new signs in new developments, i.e., signs that have not yet been built or installed as of the effective date of the ordinance. Also, the city or county may impose a reasonable fee on all sign users (not per sign) to cover the actual cost of conducting the inventory. Chapter 2.6 commencing at Section 5499.1 provides an additional method by which a city or county can be reimbursed for its abatement of illegal or abandoned signage once identified and inventoried. Therefore, any argument for failure to comply with the inventorying and abatement requirements based on want of money is rendered meaningless.

COMMENT:

This section also provides that a city or county is required to conduct a second public hearing to determine the necessity of the revised ordinance once the inventory has been completed. Until the city complies with the inventory provisions, it may not enforce the new provisions of the sign ordinance. The purpose is to require the city to fully and fairly evaluate whether enforcement is in fact necessary.

(c) (1) Upon the completion of the required identification and inventory, the city or county shall consider, at a public hearing with opportunity for public comment, whether there is a need for the ordinance or regulation described in subdivision (a) to take effect.
(2) (A) Any applicable amortization schedule for the ordinance or regulation adopted or amended pursuant to this section shall not expire until at least six months after the date on which the city or county confirms, pursuant to paragraph (1), that there is a continuing need for that ordinance or regulation to take effect, unless the amortization period specified in the ordinance is for a longer term, in which case the remaining term shall apply.
(B) Until the city or county provides, pursuant to paragraph (1), that there is a continuing need for the ordinance or regulation to take effect, the new ordinance shall not apply to a change of copy, change of color, maintenance, or repair made to a sign which conformed to the prior ordinance unless those changes, maintenance, or repairs involve a change in location or structure of the sign.
(d) An identification and inventory is not required if a city or county has undertaken and completed an identification and inventory of illegal or abandoned displays not more than three years prior to the date on which the ordinance or regulation described in subdivision (a) is adopted or amended.
(e) This section does not apply if a city or county adopts or amends an ordinance or regulation that regulates only new on-premises advertising displays. For the purposes of this section, a "new on-premises advertising display" means a display whose structure or housing has not been permanently affixed to its intended premise on the date on which the ordinance or regulation is adopted.

5491.2. *(a) A city or county may impose reasonable fees upon all owners or lessees of on-premises business advertising displays for the purpose of covering its actual cost of inventorying and identifying illegal or abandoned advertising displays which are within its jurisdiction. A city or county may exempt from the payment of these fees the owner of a display identifying an achievement award, the name of a farm, or the name of a business for which the farm produces, if the display is located on an operating farm within an agricultural preserve established pursuant to the Williamson Act (Chapter 7 (commencing with Section 51200) of Part 1 of Division 1 of Title 5 of the Government Code), and if the city or county finds that the exemption will further the purposes of the agricultural preserve.*
(b) The actual cost to the city or county may be fixed upon a determination of the total estimated reasonable cost. The amount of that cost and the fee to be charged is exclusively within the discretion of the city or county.

SECTION 5492 & 5493: Fair and Just Compensation Defined

INTENT:

Defines, and, together with Section 5493, establishes formulas for fixing Fair and Just Compensation payable upon abatement, along with time frame for establishing Fair Market Value.

INTERPRETATION:

"Fair and just compensation" is interpreted to be the fair market value of the sign on the date written notice to conform or comply is given to the owner. Fair market value is determined by one of two methods, whichever produces the greater amount of compensation:

(1) the actual costs to remove the sign, plus the cost to duplicate the sign, plus the costs of any damage done to the property where the sign is located;

OR

(2) the actual cost to purchase a new, conforming sign, plus the cost to remove the old sign, and the cost to repair any damage to the property caused by removal.

In either case, the compensation must be paid before the sign is required to be removed. Section 5493(b).

COMMENT:

Often an ordinance will give the municipality authority to determine fair market value. This is okay, so long as the provisions of these code sections are complied with.

SECTION AS WRITTEN:

SECTION 5492. PRESUMPTION: PAYMENT OF FAIR AND JUST COMPENSATION: FAIR MARKET VALUE

For purposes of compliance with Section 5491, fair and just compensation is presumed to be paid upon the payment of the fair market value of the on-premises advertising display as of the date written notice is given to the owner of the display requiring conformance or removal thereof.
Fair market value consists of the actual cost of removal for the display, the actual cost to repair any damage caused to the real property or improvements thereon as a result of the removal of the display, and the actual cost to duplicate the advertising display required to be removed as of the date written notice requiring removal for non-conformance is given to the owner by the governmental body requiring conformance or removal.

SECTION 5493: ALTERNATIVE PAYMENT; ACTUAL REPLACEMENT COST

(a) As an alternative to payment of fair and just compensation under Section 5492, a city or county may pay fair and just compensation to the owner of the on-premises advertising display by paying the actual replacement cost to the owner for an on-premises advertising display which shall conform with the laws in effect that are applicable to the owner's business premises, and shall include, as part of the actual replacement cost, the actual cost for removal of the nonconforming on-premises advertising display and the actual cost of the repair to the real property caused by the removal of the display.

(b) The sum payable as fair and just compensation to the owner of any on-premises advertising display shall be the greater of the two methods provided in subdivision (a) of this section or Section 5492 as the basis for fair and just compensation. In any event, before any on-premises advertising display is required to be removed, the fair and just compensation required by subdivision (a) of this section or Section 5492 shall be paid.

SECTION 5494: When Just Compensation not Required - Amortization

INTENT:

This section discusses the effects of amendments, amortization, and annexation of property on nonconforming signs.

INTERPRETATION:

In cities or counties having amortization ordinances that were introduced or adopted prior to March, 12, 1983, so long as a city or county provides a legally acceptable amortization schedule for the removal of nonconforming signs, it is not obligated to pay compensation if it requires the removal of such signs upon the end of the amortization period.

Section (a) further provides that upon termination of the amortization period, such signs will be presumed to be illegal and subject to removal by the city.

Section (b) and (c) apply to situations where a city annexes land and attempts to enforce its sign ordinance on the annexed property. This section provides that the amortization period for removal will commence on the date of annexation.

Section (c), however, requires the city to pay compensation for removal upon annexation of land when the city's existing ordinance does not provide for amortization.

Under Section (d), upon abatement of a sign, a city is required to pay just compensation if amendments or modifications to its sign ordinance, including amendments requiring removal of signs, were made after March 12, 1983, and if they made the ordinance more restrictive.

Under Section (e), a city is required to pay just compensation for the removal of signs if it reenacts an expired sign ordinance within 12 months of its termination if the revived ordinance is more restrictive than its predecessor and the preexisting ordinance was originally adopted prior to March 12, 1983.

SECTION AS WRITTEN:

ORDINANCES AND REGULATIONS PROVIDING FOR AMORTIZATION MAKING NON CONFORMANCE LAWFULLY IN PLACE ERECTED DISPLAYS EXEMPTION; PRESUMPTION OF ILLEGALITY; ANNEXED PROPERTY, AMENDMENTS OF MODIFICATIONS; REENACTMENT

The ordinances and regulations of any city or county, introduced or adopted prior to March 12, 1983, which have provided for amortization, and which make nonconforming any lawfully in place erected on-premises advertising displays, shall not be subject to Section 5491.

(a) All on-premise advertising displays which become nonconforming as a result of any such ordinance or regulation are presumed illegal once the amortization period provided by the ordinance or regulation rendering them nonconforming has lapsed and conformance has not been accomplished.

(b) If property containing on-premises advertising displays is annexed to a city or county which introduced or adopted, prior to March 12, 1983, an ordinance regulating on-premises advertising displays, the city or county may apply its ordinance or regulation to the annexed property, and the display shall be deemed illegal upon expiration of any applicable amortization provided by such ordinance or regulation. The amortization period is deemed to commence in such event upon the date of annexation.

(c) When amortization has not been provided in any applicable preexisting ordinance, annexed nonconforming displays ordered to conform to ordinances or regulations of any city or county shall be subject to the requirements of Section 5491.

(d) Amendments or modifications to ordinances or regulations of any city or county adopted prior to March 12, 1983, including amendments which require removal or additional displays or displays which had previously been made conforming, shall be subject to the requirements of Section 5491 if such amendment or modification makes the ordinance being amended or modified more restrictive or prohibitive.

(e) Ordinances or regulations of any city or county introduced or adopted prior to March 12, 1983 which have terminated or will terminate, may be reenacted and are not subject to Section 5491 if reenacted within 12 months of their termination and if upon reenactment they are not made more restrictive or prohibitive than the preexisting ordinance or regulation.

SECTION 5495: Just Compensation Not Required (Certain Zones)

INTENT:

This section sets forth additional requirements applicable to the uncompensated removal of signs in residential or agricultural zones. Also establishes rules regarding the 15-year life span for such signs.

INTERPRETATION:

A city may require the removal of a sign in a residential or agricultural zone without paying just compensation when all of the following occur:

(a) Residential or Agricultural. At the time the sign was erected, it must have been in an area shown as agricultural or residential in the general plan; and
(b) Zone. The sign must have been lawfully erected in a residential or agricultural zone; and
(c) No Special Zone. There is no requirement for removal based on the existence of a special zone designed or intended to remove or control advertising displays; and
(d) 15-year Amortization. The sign is permitted to remain for a 15-year period from the date of adoption of the ordinance. This section also determines, legislatively, that every sign falling under this section also has a useful life span of at least 15 years. It further sets forth a prorata amortization schedule (based on the cost to duplicate the sign) to be used in determining fair and just compensation.

SECTION AS WRITTEN:

ORDINANCES OR REGULATIONS REQUIRING UNCOMPENSATED REMOVAL OF DISPLAYS, CONDITIONS

A city or county whose ordinances or regulations are introduced or adopted after March 12, 1983, and any amendments or modifications to those ordinances and regulations, are not in violation of Section 5491 if the entity elects to require the removal without compensation of any on-premise advertising display which meets all of the following requirements:

(a) The display is located within an area shown as residential or agricultural on a local general plan as of the date the display was lawfully erected.
(b) The display is located within an area zoned for residential or agricultural use of the date the display was lawfully erected.
(c) The display is not required to be removed because of an overlay zone, combining zone, special sign zone, or any other special zoning district whose primary purpose is the removal or control of advertising displays.
(d) The display is allowed to remain in existence after March 12, 1983, for a period of 15 years from the date of adoption of the ordinance or regulation. For purposes of this section, every sign has a useful life of 15 years. Fair and just compensation for signs required to be removed during the 15-year period and before the amortization period has lapsed shall be entitled to fair and just compensation which is equal to 1/15 of the duplication cost of construction of the display being removed multiplied by the number of years of useful life remaining for the sign as determined by this section.

SECTION 5495.5: Amortization - Special Sign Zones

INTENT:

To limit to two the number of specific plans or regulations affecting signage in less than an entire city or county.

INTERPRETATION:

By limiting these less-than-entire-area plans to no more than two in a given community, the ability of a city to piecemeal its regulation of signage and establish different criteria for different areas, reducing business reaction, is thwarted.

SECTION AS WRITTEN:

ORDINANCES OR REGULATIONS APPLICABLE TO DESIGNATED AREAS REQUIRING REMOVAL OF DISPLAYS IN ADDITIONAL PORTIONS

A city or county with an ordinance or regulation introduced or adopted prior to March 12, 1983, which is applicable to designated areas within the city or county less than the entire city or county is not in violation of Section 5491 for an ordinance or regulation introduced or adopted on or after March 12, 1983, even though it requires removal of on-premises advertising displays in additional portions of the city or county, if the city or county adopts not more than two such ordinances or regulations on or after March 12, 1983, and if the total effect of the ordinance or regulation is to apply to less than the entire city or county, and such new ordinance or regulation provides reasonable amortization for conformance. "Reasonable amortization," for purposes of this section, shall not be less than 15 years from the date each such ordinance or regulation was adopted. If these conditions are not met, the city or county is subject to Section 5491 with respect to all those ordinances and regulations.

SECTION 5496: Flashing or Rotating Signs

INTENT:

To protect historically significant signs with rotating or flashing features, such as barber poles or movie marquees.

INTERPRETATION:

Even though a city might choose to pay fair and just compensation for the removal of signs, unless the sign has historical significance, the city can still remove or deactivate the flashing or rotating features of some signs without paying any compensation. "Historical significance" is something that must be determined by each community on a case-by-case basis.

SECTION AS WRITTEN:

ORDINANCES OR REGULATIONS REQUIRING UNCOMPENSATED DEACTIVATION OF FLASHING OR ROTATING FEATURES ON DISPLAYS

A city or county, whose ordinances or regulations are otherwise in full compliance with Section 5491 is not in violation of that section if it elects to deactivate, without compensation, any flashing or rotating features of the on-premises advertising display, unless the flashing or rotating feature of the display has historical significance.

SECTION 5497: Just Compensation not Required (Other Exemptions)

INTENT:

This section establishes the criteria that must exist for a city to force removal of signs without having to pay compensation.

INTERPRETATION:

In cities or counties whose sign ordinances were adopted after March 12, 1983, for any of the following conditions, the city or county may require removal or conformance of a sign without paying compensation.

(a) Noncompliance. If at the time of its erection, the sign did not comply with all regulations then in effect.

(b) Abandonment. The sign has been abandoned for more than 90 days. Abandoned means not used. Removal costs for such signs may be charged to the legal owner. (Refer to Section 5490 (f)).

(c) Destruction. The sign structure has been more than 50 percent destroyed and the destruction is other than the sign face or copy and the sign cannot be repaired within 30 days of its destruction.

(d) Remodeling. If the sign structure is remodeled (except for a copy change) or if the building or land use where the sign is located is enlarged or expanded and the sign will be affected by such work, or if the cost of the sign remodel work exceeds 50 percent of the cost of reconstruction of the sign.

(e) Relocation. The sign owner relocates the sign from its original location. "Relocation" is not defined in the code; one could argue for example that relocation does not include moving the sign for safety

SECTION AS WRITTEN:

ORDINANCES OR REGULATIONS REQUIRING UNCOMPENSATED REMOVAL OF DISPLAYS MEETING CERTAIN CRITERIA.

A city or county, whose ordinance or regulations were introduced or adopted after March 12, 1983 or any amendments to those ordinances and regulations is not in violation of Section 5491 if it elects to require the removal, without compensation, of any on-premise advertising display which meets any of the following criteria:

(a) Any advertising display erected without first complying with all ordinances and regulations in effect at the time of its construction and erection or use.

(b) Any advertising display which was lawfully erected anywhere in this state, but whose use has ceased, or the structure upon which the display has been abandoned by its owner, for a period of not less than 90 days. Costs incurred in removing an abandoned display may be charged to the legal owner.

(c) Any advertising display which has been more than 50 percent destroyed, and the destruction is other than facial copy replacement, and the display cannot be repaired within 30 days of the date of its destruction.

(d) Any advertising display whose owner, outside of a change of copy, requests permission to remodel and remodels that advertising display, or expands or enlarges the building or land use upon which the advertising display is located, and the display is affected by the construction, enlargement or remodeling, or the cost of construction, enlargement or remodeling of the advertising display exceeds 50 percent of the cost of reconstruction of the building.

(e) Any advertising display whose owner seeks relocation thereof and relocates the advertising display.

(f) Any advertising display for which there has been an agreement between the advertising display owner and the city or county, for its removal as of any given date.

(g) Any advertising display which is temporary.

reasons or to strengthen its supports.

(f) Agreement. The sign owner and city may make an agreement to remove the sign by a specific date without compensation. Such agreements should be in writing to be enforceable. Use permit could arise from such agreement.

(g) Temporary signs. The sign is not intended as a permanent structure. Many local ordinances provide a separate definition for temporary signs.

(h) Public Welfare. Any sign which is unsafe or poses a danger to health and safety.

(i) Traffic Hazard. Signs which are traffic hazards may be removed, provided the hazard was not created by the relocation of streets or highways or by any action taken by the city.

(j) Three Years of Incorporation. A city is not required to pay compensation if it adopts a sign ordinance within three years of becoming incorporated as a city, subject to "k" below and except as set forth in Section 5494. See 5494 for further explanation.

(k) 15-Year Rule. If a city incorporated after January 1, 1989, adopts or amends its sign ordinance within three years of incorporation, it is not required to pay compensation for removal of signs, so long as removal is not required for 15 years from the effective date of the ordinance or amendment.

(h) Any advertising display which is or may become a danger to the public or is unsafe.

(i) Any advertising display which constitutes a traffic hazard not created by relocation of streets or highways or by acts of any city or county.

(j) Ordinances adopted by a city within three years of its incorporation, which incorporation occurs after March 12, 1982, shall not be subject to Section 5491 except as provided by Section 5494. (Added by stats. 1983, c. 1232, 1.)

(k) Notwithstanding subdivision (j), for any city or county incorporated after January 1, 1989, an ordinance initially adopted within three years of incorporation, or any amendment thereto within that three-year period, may require removal without compensation, except that no removal without compensation may be required within 15 years from the effective date of that ordinance or amendment.

SECTION 5498: Exemptions from Compensation & Amortization

INTENT:

To provide exemptions from the compensation and amortization requirements of the law under certain special circumstances.

INTERPRETATION:

This section excludes the following listed places from having to pay fair and just compensation and from the 15-year amortization requirements:

(1) Redevelopment project areas, if legally created;

(2) National Register of Historic Places locations;

(3) State and City Historic Landmarks, Points of Interest or other Historic Zones or places, if properly designated;

(4) Planned Commercial Districts affecting signs as specifically defined in Section 5498 (b) above.

SECTION AS WRITTEN:

EXEMPTIONS:

(a) Sections 5491 and 5495 do not apply to redevelopment project areas created pursuant to the Community redevelopment Law (Part 1 (commencing with Section 33000) of Division 24 of the Health and Safety Code), planned commercial districts, or to areas listed or eligible for listing on the National Register of Historical Places, or areas registered by the Department of Parks and Recreation as a state historical landmark or point of historical interest pursuant to Section 5021 of the Public Resources Code, or areas created as historic zones or individually designated properties by a city or county, pursuant to Article 12 (commencing with Section 50280) or Chapter 1 or Division 1 of Title 5 of the Government Code.

(b) As used in this section, "Planned commercial districts" means areas subject to binding agreements, including, but not limited to, conditions, covenants, and restrictions, which do all of the following:

(1) Affect on-premise advertising displays.

(2) Are at least as restrictive as any ordinance of a city or county, which affects on-premise advertising displays at the time the agreement was entered into.

(3) Contain a binding financing commitment sufficient to carry out the agreements.

SECTION 5498.1: Continuing New Permits upon Removal of Signs

INTENT:

To prevent cities and counties from holding hostage issuance of business licenses or approval of sign permits for new signage on property by forcing removal of other signs on the same property, if certain conditions are met.

INTERPRETATION:

If a sign in a commercial center or complex is legally in place but nonconforming, a city may not deny, refuse to issue, or condition the issuance of, a new business license or new sign permit upon the removal, conformance, repair, modification, or abatement of any other sign on that same property, if the following conditions exist:
(1) The other sign is in the same commercial complex even though it's in a different business location.
(2) The other sign is not owned or controlled by the new permit applicant.
(3) The new permit applicant is not the agent of the person who owns or controls the other sign.

SECTION AS WRITTEN:

LICENSE OR PERMIT TO CONSTRUCT NEW DISPLAY; DENIAL OR CONDITIONING ISSUANCE ON REMOVAL, REPAIR, ETC., OF OTHER DISPLAY; CONDITIONS PROHIBITING

A city or county may not deny, refuse to issue, or condition the issuance of a business license or a permit to construct a new legal on-premises advertising display upon the removal, conformance, repair, modification, or abatement of any other on-premise advertising display on the same real property where the business is to be or has been maintained if both of the following apply:

(a) The other display is located within the same commercial complex which is zoned for commercial occupancy or use, but at a different business location from that which the permit or license is sought.

(b) The other display is not owned or controlled by the permit applicant, and the permit applicant is not the agent of the person who owns or controls the other display. (Added by Stats. 1987, c.1281, 4)

SECTION 5498.2: Continuing Permit upon Change of Business Ownership

INTENT:

To protect a sign from removal based on a face change.

INTERPRETATION:

Cities have been known to attempt to force the removal of nonconforming signs during their amortization period when there has been a change of ownership of the business. This section protects the continued use of signs for the remainder of the amortization period, so long as there are no structural modifications to the display. During the amortization period, a city may not deny, refuse to issue, or condition the issuance of a permit for modification or alteration of the sign, upon change of business ownership.

SECTION AS WRITTEN:

PERMIT FOR ALTERATION TO NONCONFORMING LEGALLY IN PLACE DISPLAY: DENIAL OR CONDITIONING ISSUANCE UPON BUSINESS OWNERSHIP CHANGE: PROHIBITED DURING AMORTIZATION

(a) During the amortization period for a nonconforming legally in place on-premises advertising display's continued use, a city or county may not deny, refuse to issue, or condition the issuance of a permit for modification or alteration to the display upon change of ownership of any existing business if the modification or alteration does not include a structural change in the display.

(b) Subdivision (a) of this section does not apply to any ordinance introduced or adopted prior to March 12, 1983, or adopted pursuant to subdivision (j) of Section 5497, if the ordinance contains no specific amortization schedule, but instead requires conformity upon change of ownership. (Added by Stats. 1987, c.1281. 5.)

SECTION 5499 Visibility Protected

INTENT:

To create a special exception protecting signs from removal when the lay of the land is such that compliance with a sign ordinance would significantly diminish visibility of the sign.

SECTION AS WRITTEN:

HEIGHT OR SIZE AS BASIS FOR REMOVAL OF DISPLAYS

Regardless of any other provision of this chapter or other law, 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 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.

INTERPRETATION:

This section carves out a special exception allowing the continued indefinite use of nonconforming signs that are too tall or large (including signs deemed illegal or nonconforming based on type of sign, i.e., pole, pylon, etc.) if the topography is such that compliance would result in a material impairment of visibility. This section has recently been interpreted by a California Court of Appeal to include natural and man-made topographic features. See *Denny's v. City of Agoura Hills (1997) 97 Daily Journal DAR 10317.* In the Denny's case, the court also ruled that the city's prohibition of pole signs fell within the protections of the law because such a classification was based on height or size.

SPECIAL NOTE: VESTED RIGHTS

The vested rights doctrine in California refers to the right of a developer or builder to complete a project under the laws in effect at the time approval of the project is obtained. The doctrine is intended to protect development from late-occurring governmental changes (or changes of mind) that would negatively impact the progress of the development. Generally, however, a builder must comply with the laws in effect at the time the building permit is issued.

The California Supreme Court has ruled that not until a developer has obtained the permit, done substantial work, and incurred substantial liabilities in reliance may a vested rights claim be made. Once vested rights have been established, however, the developer may finish the project (erect the sign) under the previous approvals and land-use regulations.

Typically, vested rights and permits come late in the development process, so land developers frequently use the development agreement process to preserve their rights against subsequent changes to the general plan, zoning laws or other regulations. A development agreement is a contract between the city and the developer in which the parties agree to maintain in effect the current ordinances, and other policies and regulations, which will apply to the project.

From a signage perspective, developers should negotiate the signage criteria in their development agreements. Often, tenant signage needs, and project identification, are an afterthought, which run afoul of overly restrictive ordinances. Also, developers should be cautious about agreeing to uniform color schemes or letter styles, as these restrictions, while perhaps satisfactory to an errant planner, will likely result in the loss of a tenant whose logo can't conform (whether or not registered). With regard to erecting the sign, once the permit is obtained, substantial work has been done and substantial liabilities have been incurred, a vested rights claim can be argued.

Appendix I

Amortization Explained

This often-used process can produce serious consequences for business, property owners, and communities.

The city notice demanded that the shop remove its freestanding sign within six months. The shop had ordered the sign to be built because the building was set back so far from the street and was hard to see.

Later, when the city changed the spacing requirements for freestanding signs, the sign became nonconforming. Now the city was notifying the shop that its "amortization" period was expiring and the sign would have to go. With it, however, would likely go its business.

The scenario outlined above is fictional, but it represents real situations. Amortization of nonconforming business-identification signs raises serious legal, economic, and political concerns.

The Validity of Amortization

A "nonconforming" sign is one that was erected according to the laws in effect when it was built and does not conform to laws that took effect later.[1]

This can happen when a local sign code is amended, or when signs built to a county code suddenly fall under the jurisdiction of a more restrictive municipal code because of annexation.

Generally, the taking of property without just compensation violates the U.S. Constitution. The Fifth Amendment states that "private property [shall not] be taken for public use without just compensation"; the 14th Amendment likewise proclaims that states may not deprive any person of life, liberty, or property, without due process of law."

Therefore, local governments cannot force the immediate removal of legally existing property merely by changing laws. That would be an unconstitutional "taking."[2] Most state zoning laws designate affected property as "legally nonconforming."

Of course, public funds rarely are available to purchase nonconforming signs. Therefore, officials have looked for ways to eliminate nonconforming signs without paying for them. One such method is to permit the owners sufficient time to amortize, or recover their investment and then force them to remove the sign. The theory behind this: if the owners fully recovered their investment, nothing has been "taken" and compensation is not required.

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1) See, e.g., Missouri Rock Inc. v. Winholtz, 614 S.W. 2d 734, 739 (Mo App. 1981); Syracuse Aggregate Corp. v. Weise, 51 N.Y. 2d 278, 434 N.Y. S. 2d 150, 414 N.E. 2d (1980).
2) See City of Sanford v. Dandy Signs Inc., 303 S.E. 2d 228 (NC App. 1983); Cicerella Inc. v. Jerusalem Township Bd. of Zoning Appeals, 392 N.E. 2d 574, 577 (OH App. 1978).

Nonconforming signs are caught in a legal and political tug of war between competing public policies. On one hand, people should be able to rely on existing laws when investing in business and in business property. The U.S. Supreme Court has given legal recognition to such investment-backed expectations.[3] Without such protection, people would be reluctant to invest in business and property, an action that would have stifling effect on the community (and national) economy.

On the other hand, some people believe there is a legitimate public interest in a consistent, predictable visual environment. When laws affecting signage change, they reason, people should comply; existing businesses should not have an unfair advantage over new businesses. Therefore, public policy favors the eventual elimination of nonconformities,[4] including nonconforming signs. The delicate balance between these competing policies varies with time and from state to state.

Legal authorities are split on the validity of amortization as a solution. Many states have held amortization valid.[5] Others have rejected amortization on the basis that it conflicts with requirements to pay just compensation[6] or that it is unauthorized by state law[7] or that it conflicts with other laws protecting nonconforming uses.[8]

Where amortization has been permitted, courts generally have required the amortization period to be "reasonable."[9] Most amortization codes require nonconforming signs to be removed within a fixed period, sometimes dated from when the code becomes effective, others from when the sign was erected. The problem with the first approach is that it does not relate to the age of the sign, and hence unfairly places the investment in newer signs at a disadvantage with older signs. The problem with the second approach is that it is difficult to administer because local authorities must inventory and fix a date for each nonconforming sign.

Both types of codes suffer from the risk that the amortization period may be unreasonable. After all, if it is too short and the owners have not recovered their investment in the sign, the theory behind amortization disappears and the threat of compensation arises.

Ideally, a case-by-case analysis would be required and would consider the age of the sign, the type of construction and materials, the amount of investment, and other factors. To avoid the expense of this analysis, many municipalities have set blanket amortization periods. Although a blanket one-year period has been held unreasonable in several cases,[10] periods of

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3) See Penn Central Transportation Co. v. New York City, 438 U.S. 104, 124 (1978).
4) See, e.g., Off Shore Restaurant Corp. v. Linden, 282 N.E. 2d 299 (NY 1972).
5) See, e.g., Georgia Outdoor v. City of Waynesville, 900 F. 2d 783 (4th Cir. 1990); New Castle v. Rollins Outdoor Advertising, 475 A 2d 356 (DE 1984); Northern Ohio Sign Contractors Ass'n v. City of Lakewood, 513 N.E. 2d 324 (OH 1987).
6) Battaglini v. Town of Red River, 669 P. 2d 1082 (NM 1983), Root Outdoor Advertising v. Fort Collins, 759 P. 2d 59.
7) State v. Bates, 305 N.W. 2d 426 (IA 1981); City of Scottsdale v. Scottsdale Associated Merchants, 583 P. 2d. 891 (1978).
8) City of Paducah v. Johnson, 522 S.W. 2d 447 (KY 1975); James J.F. Loughlin Agency v. West Hanford, 348 A. 2d 675 (CT1974).
9) See, Modjeska Sign Studios v. Berle, 373 N.E. 2d 255 (1977).
10) See, e.g., National Advertising Co. v. County of Monterey, 464 P. 2d 33 (CA 1970).

three, [11] five, [12] and 10 years[13] have been upheld. Of course, a blanket time period may be unreasonable when applied to an individual sign.

One interesting approach to amortization has been the use of the federal tax code as the standard for the amortization period. The tax code permits tax deductions for depreciation of certain business assets according to an amortization schedule.[14] A sign's amortization period depends on its "useful life," which must consider type of construction and the rate of deterioration.

Under this analysis, a metal-and-masonry freestanding sign may be an improvement to real property that could be amortized over 19 years[15] or more, while a painted wood sign in a harsh environment might have a shorter useful life. The advantage of this approach is that a municipality may claim that federal, not local standards, are used and that they establish a reasonable means for investment recovery. The sign owner's tax records may be used to demonstrate the rate of depreciation.

There is some legitimate concern that traditional amortization is inadequate to apply to on-premise signs. Most reported amortization cases concern billboards. A billboard is itself a business, and the investment in the billboard structure is easy to determine. The income flow from the billboard can be sufficiently predicted to determine whether the amortization period is long enough.

An on-premise sign, however, is far more complicated. While the investment in a sign may be relatively low, the sign is integral to the business. Without the sign, the business may fall and the investment in the business would be lost, as in the beginning example. Other examples include highway-oriented restaurants, service stations, or motels forced to remove signage critical to highway visibility. What investment is protected--the sign only, or the investment in the business itself?

The answer is uncertain. However, on June 29, 1992, the Supreme Court issued an opinion holding that compensation is required when a regulation deprives property of all economically beneficial use.[16] This is not an amortization case, but the principle may extend to cases where forced removal of signs would destroy a business' viability.

A long line of court decisions has attempted to balance the public benefits of land-use regulations with the rights of the business or property owner. In the case just cited, the Supreme Court said that "when the owner of real property has been called upon to sacrifice all economically beneficial uses in the name of the common good, that is, to leave his property economically idle, he has suffered a taking."

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11) Naegele Outdoor Advertising Co. v. Village of Minnetonka, 162 N.W. 2d 206 (MN 1968).
12)Art Neon Co. v. City & County, 488 F. 2d 118 (10th Cir. 1973).
13)Lamar Advertising Assoc. v. Daytona Beach, 450 So. 2d 1145 (Fl App. 1984).
14) Internal Revenue Code, Section 167 (a).
15) I.R.C. Section 168 (b)(2)(A)(i); Rev. Proc. 86-14, 1986-1 C.B. 304; Rev. Proc. 72-10.
16) Lucas v. South Carolina Coastal Council, 1992 Westlaw 142517 (US Sup. Ct.)

Other issues suggest that amortization is not an appropriate way to deal with nonconforming signs. The availability of signs plays an important role in determining whether to establish a business in a given location. The threat of a future change in the sign code that would leave a business insufficient identification may place an owner at too much risk to obtain financing or to invest in that location, which would have a general negative effect on the local economy.

Likewise, business owners that are threatened with removal of their signs in years to come may be discouraged from maintaining those signs in their best appearance. This would contribute to an appearance of deterioration in their community. These effects are contrary to the beneficial economic and aesthetic benefits that a sign code should encourage.

Alternatives To Amortization

Officials should look at alternatives before considering the drastic measure of amortization. First, they should look at their sign code to see if it discourages business owners from voluntarily replacing nonconforming signs. Many communities require a nonconforming sign to be made conforming if it is replaced or renovated. Faced with potential loss of visibility, some business owners elect to keep the old signs.

One alternative is to permit replacement where the nonconformity is reduced, but not entirely lost. The community achieves reduction and a better-looking sign, while the owner maintains some advantages of the old, nonconforming sign.

Another approach is to create incentives for removing or reducing nonconformities. These may take the form of a development bonus or an enhancement of other signs on the property in some nonobjectionable aspect.

Amortization is not the ideal solution to the problem of nonconforming signs. Although courts in many states have upheld it, amortization tends to penalize property owners who have complied in good faith with previous laws. Amortization also may stifle business investment in a community.

Business signs are so strongly related to a business that amortization provisions may be unreasonable where the owner's investment in the business itself is threatened along with the sign. If removal of the nonconforming sign destroys the economic viability of the property, local government could even be liable for monetary damages.

In light of these concern and of the Supreme Court's decisions, local governments should seriously consider other methods to achieve voluntary removal or upgrading of nonconforming signs.

-- David K. Jones
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Appendix II

EQUAL PROTECTION CASES

Bohannon v. San Diego*, (1973) 30 CA3d 416*
Historic area sign classifications valid.

Carlin v. Palm Springs*, (1971) 14 CA3d 706*
Hotel rate sign classifications invalid.

City of Santa Barbara v. Modern Neon Sign Co.*, (1961) 189 CA2d 188*
Regulation prohibiting moving signs but permitting flashing signs invalid because there was no natural, intrinsic, or constitutional distinction.

Coast United Advertising v. Long Beach*, (1975) 51 CA3d 766*
Aesthetic distinctions valid as applied to bus bench advertising.

Appendix III

TAKINGS CASES

Agins v. City of Tiburon*, (1980) 447 US 255*
A land use regulation can effect a taking if it does not substantially advance legitimate state interests or denies an owner economically viable use of land.

Connoly v. Pension Benefit Guarantee Corp.*, (1986) 475 US 211*
Identifies helpful factors in determining whether there has been a regulatory taking.

First Evangelical Lutheran Church v. Los Angeles*, (1987) 482 US 304*
Analyzes compensation when a temporary taking occurs.

Lucas v. South Carolina Coastal Council*, (1992) 112 S Ct. 2886*
Discusses when a property owner is entitled to compensation for regulation of land.

Moore v. City of Costa Mesa*, (1989) 886 F2d 260*
To constitute a taking, the regulation must destroy a major portion of the property value.

Appendix IV

Theft By Design: Copyright Protection for Sign Plans

Under the Copyright Act of 1976, 17 U.S.C. subsection 101-810, copyright protection is extended to "pictorial, graphic, and sculptural works."[1] These are defined to include "two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, print and art reproductions, maps, globes, charts, technical drawings, diagrams, and models."[2] Thus, the language of the Copyright Act makes it absolutely clear that copyright protection is accorded to plans and specifications for signs.

Federal copyright protection is accorded to these plans from the moment of their creation. Contrary to public perception, it is not necessary to register a copyright for the copyright to be valid. Registration provides certain benefits. In some cases, it will make the proof of infringement easier. Registration is also required prior to bringing an infringement suit, but registration can be accomplished in the "11th hour," which is after an infringement and immediately prior to bringing suit.

The only step that needs to be taken to secure copyright protection is to affix a proper copyright notice to the plans prior to giving them to a third party. The Copyright Act does provide certain exceptions to the notice requirements. However, it is a simple matter to affix a copyright notice to plans, and taking such a step eliminates any possible grounds for forfeiture of copyright protection.

A proper copyright notice has three elements:

(1) the word "copyright" or the international copyright symbol ©;
(2) the name of the copyright owners; and
(3) the date of the copyright.[3]

Example:

In 1994, Joe Fastbuck walked into the offices of The Bright Idea Sign Co. and asked them to undertake a project. Fastbuck explained that he was opening a video arcade under the name of Fastbuck Palace. Fastbuck wanted an electric sign that would lure teenagers into his establishment to drop the better part of their lunch money into video games and pinball machines. He wanted a large sign with plenty of lights and color. Fastbuck had no specific

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1) 17 U.S.C. subsection 102(a)(5)
2) 17 U.S.C. subsection 101. The term "technical drawing" has been added to the statute
3) Publication is a term of art under the Copyright Act, and it is sometimes difficult to determine precisely when publication has occurred. Technically, a publication occurs when a copyrighted work is distributed, or made available, to the general public. Thus, submission of plans to a prospective client, like the submission of a manuscript to a publisher, is probably not publication. Nevertheless, the copyright notice affixed to the plans should indicate the year in which the plans were submitted to the client. The fact that the work may not have been published, and thus that the date on the copyright notice is technically too early, will not result in the notice being improper or ineffective.

ideas about how such a sign should be designed, and he wanted to commission The Bright Idea to come up with an idea.

Les Glare, president of The Bright Idea, agreed to have plans drawn up for such a sign and submit them to Fastbuck for approval, who promised that if he liked the plans he would commission The Bright Idea to build and install the sign for him. Glare immediately sent one of his graphic artists to work on the project, and two weeks after the initial meeting, Glare hand delivered a set of plans and specifications to Fastbuck for his approval, who said he would get back to Glare soon. Instead, several days later he received an envelope in which the plans were enclosed with a note from Fastbuck saying that he had decided not to use The Bright Idea's plans.

Months later, Glare's son, Les Jr., 14, asked for an advance on his allowance. Les Jr. explained that he had squandered his current savings, one quarter at a time, at Fastbuck Palace. Glare was furious. It was bad enough that Fastbuck rejected the sign plans without the additional insult of having lured his son into the arcade. Glare decided to give Fastbuck a piece of his mind. He immediately drove to the arcade and, upon arrival, noticed to his dismay that Fastbuck Palace was marked by a sign indistinguishable from the plans The Bright Idea prepared. Glare decided, at that point, that a visit to his lawyer would be in order.

Glare contacted his lawyer, Ashforth Dewey III, who, after several unsuccessful efforts to contact Fastbuck, advised that a suit be instituted in the state court in an effort to recover monetary damages. Glare agreed, and Dewey filed suit against Fastbuck for unfair competition. Several months later, Glare's suit was dismissed by the state court. The state court's dismissal was premised upon its findings that Glare's suit, because it was fundamentally the same as a claim of infringement of copyright, can only be brought in federal court under the Copyright Act.

Dewey drew up another complaint to file in federal court alleging copyright infringement by Fastbuck. Three months later, that suit was dismissed on the grounds that the plans submitted to Fastbuck did not bear a proper copyright notice. At that point, Dewey advised Glare that there was very little point in pursuing the matter, and Glare agreed.

Although the circumstances of Glare v. Fastbuck are entirely fictitious, they are not improbable. Piracy of plans and drawings is a serious problem and, if a sign designer or manufacturer does not take sufficient steps to protect himself, he may well find himself in the same uncomfortable position as Glare. Fortunately, there are various ways in which a sign designer or manufacturer can protect himself with minimal cost and effort. This article will set forth the ways in which those steps may be taken.

Three steps should be taken, which will provide a large measure of protection. The sign designer or manufacturer should:

(1) affix a proper copyright notice to any plans or drawings;
(2) place a legend on all drawings and plans, setting forth their limited permissible use and indicating the costs of services which will be due in the event that these limited purposes are exceeded; and
(3) if possible, enter into an agreement with the party to whom the drawings and specifications were submitted.

Thus, a proper copyright notice for Glare would have been:

© Copyright 1997, by The Bright Idea Sign Co. Inc.

If a proper notice is affixed, the Copyright Act will prevent copying of the plans by photostatic or other methods. Because in most instances it will be impossible for someone to plagiarize sign plans or specifications without making some copy of the plans, this provides a significant measure of protection under federal law. Indeed, one could be almost certain that Fastbuck simply photocopied The Bright Idea plans and took them to another shop.[4]

The matter of copyright protection would have been much more complicated if Fastbuck had, in fact, not made any copy of The Bright Idea's plans. Suppose, for example, that the plans had been relatively simple and used a layout that could be both remembered and explained to someone else. Or, suppose that Fastbuck had simply given the original plans themselves to another manufacturer. The problem in such a case is that production of a physical object described in copyrighted plans is not a copy of the plans, and thus does not infringe the underlying copyright in the plans.[5]

Contractual Protection For Sign Plans

Because copyright protection may not be sufficient where the sign plans themselves are not copies, it is important that a sign designer obtain additional protection for his plans. State laws regarding unfair competition or plagiarism claims have been preempted by the federal Copyright Act and do not provide adequate protection.[6] However, state-law actions relating to breach of contract arising from theft of sign plans may still be maintained.

Obviously, a contract claim can be brought if an agreement between the designer and the prospective client prohibiting use of those plans by the client has been made and evidenced. This first step necessary to establish such an agreement would be accomplished by inscribing a legend, or otherwise affixing a notice, on the plans, prohibiting their use by the client. A legend that would have provided Glare with a possible state-law contract claim would have read:

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4) See Nucor Corp. v. Tennessee Forging Streel Service Inc., 476 F. 2d 386 (8th Cir. 1973). There, the court held that damages could be awarded to an architectural firm whose blueprints and shop drawings had been copied and used to produce a building as specified in the copied plans. The essential basis of liability was the reproduction of the plans themselves. 476 F.2d at 391-92.

5) Shuchart & Assoc. v. Solo Serve Corp., 540 F. Supp. 928 (W.D. Tex. 1982); DeSilva Construction Corp. v. Herrald, 213 F. Supp. 183 (M.D. Fla. 1962).

6) See, for example, Shuchart & Assoc. v. Solo Serve Corp., 5-10 F. Supp. 928 (W.D. Tex 1982). There, the court refused to entertain a state-law claim for misappropriation where a party, who had access to architectural plans for a retail store, later used those plans to construct an identical retail store. Although the plans bore a copyright notice, there was no evidence that the defendants actually copied the plans; and the court made clear that building a structure exactly as described in those plans did not infringe the copyright in those plans. Nothwithstanding the unavailability of a federal remedy, the court held that state claims for misappropriation and unfair competition had been preempted by the federal copyright law. Nevertheless, the court also held that a state claim for unjust enrichment (essentially the value of the plans to the second party) was not preempted by the Copyright Act. However, three years later, In Ehat v. Tanner, 780 F 2nd 876 (10th Cir. 1985), the Court of Appeals said this theory was also preempted.

These plans are the exclusive property of The Bright Idea Sign Co. and are the result of the original work of its employees. They are submitted to your company for the sole purpose of your consideration of whether to purchase these plans or to purchase from The Bright Idea a sign manufactured according to these plans. Distribution or exhibition of these plans to anyone other than employees of your company, or use of these plans to construct a sign similar to the one embodied herein, is expressly forbidden. In the event that such exhibition occurs, The Bright Idea expects to be reimbursed $500 in compensation for time and effort entailed in creating these plans.

Such a legend has three benefits. First, it provides evidence of an agreement between the designer and the client. Second, even if a court is hesitant to find that a binding oral agreement has been entered into between the designer and the client, it may serve as the basis for a quasi-contractual action known as quantum merit.[7]

This is the term for an action under common law whereby one who has supplied services to another, which benefited that other person and which were used by that person, may obtain the value of these services even in the absence of a formal agreement between the parties. Finally, it makes it materially more difficult for the prospective client to claim to another manufacturer that the plans are his property and may be utilized by that manufacturer.

Naturally, an even safer course would be to enter into a written agreement with a prospective client prior to doing any work for him. Such a written agreement need be nothing more than a short letter that could embody language similar to that used in the legend. The prospective client's signature on such a written agreement would clearly bind him to the limitations on use of those plans set forth in the agreement.

The methods suggested in this article clearly entail minimal time, effort, and expense by the designer, and there is very little reason for them not to be employed. The Bright Idea Sign Co., after its unfortunate experience with Fastbuck, had rubber stamps made up for its copyright and legend.

In addition, Glare had a form letter printed on the company letterhead to which he adds the date, the name of the customer and a brief description of the work to be done, and states the substance of the legend. He must remember to get the letter signed in all cases, but he absolutely won't release any plans to a first-time customer without a signed letter. If all of Glare's design people are tied up and he goes to a free-lance designer to get the work done in a hurry, Glare should be certain there is a "work-for-hire" agreement between himself and the free-lancer.

Such an understanding would grant the exclusive use of the design to The Bright Idea. However, mere payment for the design without such an understanding would give The Bright Idea only a nonexclusive right to the design, leaving the free-lancer the right to peddle the design wherever and whenever he or she wishes. Similar work done by regular employees within the scope of their employment is regarded as work for hire without a specific agreement on each design.

-- ***Wayne Coy and Richard M. Schmidt Jr.***
attorneys, Cohn and Marks

7) See, for example, Shuchart & Assoc. v. Solo Serve Corp., 540 F. Supp. 928 (W.D. Tex 1982), at 945. See Ehat v. Tanner, Ibid.

Appendix V

TRADEMARK CASES

***Motel 6 v. South Lake Tahoe**, (1990, ED Cal. DC) CIV-S-90-0527 EJG/EM*
City cannot compel trademark owner to alter its protected mark on sign.

***Owings-Corning v. Trademark Trial and Appeal Board**, (1995) 774 F2d 1116*
Color can be trademark protected.

***Two Pesos v. Taco Cabana**, (1992) 112 S Ct. 2753; 505 US*
Thorough discussion of trade dress and its treatment as protected under trademark laws.

Appendix VI

FIRST AMENDMENT CASES

***Carlin v. Palm Springs**, (1971) 14 CA3d 706*
There is no aesthetic difference between a sign that displays hotel rates and one that does not.

***City Council v. Taxpayers for Vincent**, (1984) 466 US 789*
Discusses factors to be considered in regulating aesthetics and commercial speech.

***City of Indio v. Arroyo**, (1083) 143 CA 3d 151*
Case holds there is no legitimate governmental interest in regulating noncommercial expression solely for aesthetic purposes.

***City of Ladue v. Gilleo**, (1994) 114 S Ct. 2038*
Although a city has a valid interest in minimizing visual clutter, the ordinance at issue (dealing with display of a political message) was an unconstitutional restriction of free speech. The ordinance was not a valid time, place, or manner restriction. Also discusses an analytical approach to determining the constitutionality of a sign regulation.

***Metromedia v. City of San Diego**, (1981) 453 US 490*
City ordinance unconstitutional because it impermissibly distinguishes between commercial and noncommercial messages. Reiterates acceptable bases for regulation of commercial speech. Also held that cities and counties may regulate solely on aesthetic grounds.

***Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council**, (1976) 425 US 748, 96 S Ct. 1817*
Advertising of prices not subject to prohibition by state law. Also holding that a recipient has the right to receive a communication. "If there is a right to advertise, there is a reciprocal right to receive advertising..." 96 S Ct. 1823.

Appendix VII

Trademark Infringement:

How Sign Regulations Infringe Business Trademarks

In early 1995, the U.S. took action against China for violation of intellectual property rights. The piracy of intellectual property--including trademarks--was at the heart of the dispute between the U.S. and China. Eventually, an accord was reached.

Also, in 1995, the U.S. warned the 15-nation European Union, Brazil, Greece, Japan, Saudi Arabia, Turkey, South Korea, and India, that they were put on a "priority watch list" for failure to adequately protect U.S. copyrights, patents, and trademarks. Both actions underscore how the administration protects intellectual property rights in the global economy. The question is, who protects trademarks in the domestic economy?

Too often, when a local community writes a sign code, or when a business appears before a design review board or architectural review board, or applies for a variance, trademarks or logos are not allowed, or the business is asked to change its trademark. The federal government protects trademarks in the global economy, local governments should protect trademarks in the domestic economy.

Trademark Value

Whether described as a "brand asset," "brand name," or "logo," a trademark that identifies a successful business represents considerable value. *Financial World Magazine*, reports, "Coca-Cola has the most valuable brand name in the world" - worth $35.9 billion.

As noted by Bob Coleman ("Watch Those Trademarks," Prodigy, March 21, 1995), "as long as you take the proper steps to protect your mark and use it in commerce, it can keep its value virtually forever. Not even the claim of a birthright is strong enough to overcome the rights of ownership of people with a trademark." That is until you go before a city like Mayfield Heights, Ohio, Norwood, Massachusetts; or for that matter, any community whose officials lack business experience or are not versed in commercial law.

Use It, Protect It, Or Lose It

Unfortunately, many of our 80,000 local communities not only do not protect trademarks, but infringe on them by forcing changes in federal trademarks through sign regulations. Merrill Lynch, for example had to remove its "bull" from their logo in its sign in order to get a sign permit in Boca Raton, Florida. Also, to install its trademark sign in Palm Springs, California, Mobil Oil's franchisee in Palm Springs had to remove the red "O."

As have all businesses in recent years, Merrill Lynch and Mobil went along with the city.

When awarded a trademark by the federal government, a business is enjoined to "use it, protect it, or lose it." If a business is asked by a local community, planning commission, design review board, or developer, to alter its trademark, and it does...it is not using it properly, nor is it protecting it.

Signs Should Replicate The Trademark Of A Business

The 80,000 governmental entities are not alone in failing to protect trademark rights; many office-building developers and shopping-center owners do so as well. For 30 years, architectural bronze and white signs, forced on business by well-intentioned architects and designers, have dominated our streetscapes, shopping centers, and office buildings. In recent years, all one color, or all the same letter style, has gained popularity. Recently, McCrory Stores was asked by a shopping-center owner in Birmingham, Alabama, to install channel letters instead of its trademarked rectangular-shaped sign.

McCrory's was able to overcome the landlord's objections. Uniformity in architectural design has its place, but it cannot supersede uniformity in trademarks. Consistent with U.S. law, it is the uniformity of the trademark that protects the public interest.

A major shopping center that opened recently in Reston, Virginia, was the most "business-friendly" center to open in recent years. Unlike most new centers, it did not require its tenants to conform to any one color, letter style, or type of sign. Boston Market, Burger King, Mobil Oil (displaying a new "on-the-run" window neon sign with a red O in "On"), Payless Shoe Store, Baskin Robbins, Radio Shack, and some 20 other businesses were allowed to install signs that accurately reflected their individual trademarks. This is a rare case of intellectual property rights being protected. Like the Reston shopping center, signs should replicate the trademark of a business.

In March 1995, the U.S. Supreme Court ruled that companies can register color alone as a product trademark. Justice Stephen G. Breyer noted that the Lanham Act of 1946 does not refer to colors when it gives a seller the exclusive right to register a trademark. But he said the law's reference to "symbol" or "device" should be read broadly to cover almost anything "capable of carrying meaning" including color.

In 1991, South Lake Tahoe, California, informed Motel 6 it had to tone down its logo colors (same as the American flag) in order to get a sign permit. Instead of yielding as so many businesses have done in the past, Motel 6 filed a trademark infringement suit in federal court and won. Judge Edward Garcia ruled that the "city infringed on the trademark rights of the businesses." After the decision, an editorial appeared in the *Sacramento Times* chastising Motel 6 for not "going along." The business community has been "going along" for many years, it's time it stood its ground and resisted infringement of trademarks by well-intentioned local communities and developers.

Some Businesses Are Protecting Their Trademarks

Texaco Refining & Marketing was told by Ormond Beach, Florida, it could not use black in its sign. Being familiar with Motel 6's experience, Texaco politely put the city on notice they would file a trademark infringement suit in federal court. The city backed off.

In another recent case, Ameritech Corp. was denied a sign permit in Mayfield Heights. The sign ordinance prohibited the corporate logo from exceeding 50 percent of the allowable sign face (illegal content control). The city suggested that if Ameritech dropped the red orbit from its logo the surviving logo size would conform to the ordinance, and they would be granted a permit. Since the "red orbit" is an integral part of its logo, Ameritech declined, appealed, and was denied. Businesses invest a great deal of time, effort, and money creating a name and image that will describe and sell their products and services. When Ameritech's management adopted the "red orbit" as part of their logo, they were dedicated to protecting their brand asset.

Control of color is the primary objective of trademark regulation by local government and developers. The business community can only view the practice as an illegal form of sign regulation. Communities, by failing to protect trademarks, violate federal law, create confusion for the consumer, can substantially reduce sales of the business, and can encourage "knockoff" of brand names by the unscrupulous. Most businesses practice trademark control in the day-to-day conduct of their businesses. In part, to protect themselves from trademark infringement law suits.

Go to a Kinko's to get something copied with someone else's trademark on it without first getting written permission--they won't do it. Following Kinko's lead, all 80,000 of our communities should refuse to issue sign permits without first receiving proof in writing that approval was obtained from the sign company to reproduce the trademark in its federally registered form. Rather than object to trademarks or their colors, local governments should take the lead, much the same as the administration has on the international level, and protect the business segment of their community.

While the business community must recognize the right of the local community to protect its visual environment, business rights must be protected by the local community. Businesses tend to "go along" with overly restrictive regulations because they need to compete and grow. A business cannot afford to abandon development of a desirable location solely due to a forced change in the color, shape, or graphic element in its sign.

Local governments, shopping-center owners, and office-building developers, should share responsibility in protecting the trademark rights of businesses by not taking advantage of the entrepreneurial spirit to develop and grow.

Rep. Dana Rohrabacher (R-CA) is fighting to protect U.S. intellectual property rights. In *Omni* magazine, Rohrabacher writes: "America's greatest asset is not found in its vast natural resources, or even in its great universities. The mainspring of our progress is our people's creative genius, entrepreneurial spirit, and their willingness to invent, innovate, and change. America has led the world in revolutionary inventions such as the airplane, transistor, and microprocessor, which in turn have created jobs and brought tremendous increases in our gross domestic product and uplifted our standard of living. This, in large part, is due to America's recognition and protection of intellectual property."

Clearly, Rohrabacher's argument for the protection of intellectual property rights applies to business trademarks. Under the U.S. Constitution, a sign code has to be "content neutral." Size, number, and the height of signs can be regulated, but not the content or wording of the sign.

Norwood is one of many cities that enforces a clause in their sign code that controls "content." Phillip K. Howard's book, *The Death of Common Sense: How Law is Suffocating America*, is timely.

All we need do is paraphrase the title to fit the issues at hand--*The Death of Common Sense: How Sign Regulations Are Suffocating America's Businesses*. Over-regulation is the subject of Howard's book. Excessive or unreasonable regulation does tend to suffocate our people's creative genius and entrepreneurial spirit.

In a closing paragraph of his book, Howard refers to the writings of Charles Alexis Tocqueville to state what is happening in our democracy. "Tocqueville, with his usual clairvoyance, suggested that when democracy fails, it would not die as Rome did, through invasions of the barbarians...it will fade little by little."

This happens, he predicted, when we "lose sight of basic principles" and are "only able to make a clumsy and unintelligent use of wise procedures no longer understood." Reproduction of trademarks in signage is an intelligent use of a wise, understood business procedure.

At least it is understood by law, the consumer, and business people, if not by those who regulate trademarks in signs. Local community understanding of intellectual property rights has faded little by little. Like Motel 6, Texaco, McCrory Stores, Ameritech, and Kinko's, the business community should stand fast in protecting federal trademarks against all who would have us change them.

Domestic and Global Protection of Trademarks Should be the Goal

Although the issue of protecting trademarks in signage pales when compared to issues between the U.S., China, and the other 22 nations, trademarks are a basic component of free enterprise that must be understood and protected. We have no right to demand that the rest of the world protect our copyrights, patents, and trademarks -- unless and until we do on our own soil.

-- ***William Delaney***
president, Business Identity Council of America

References

Appendix I

Jones, David K., attorney, David K. Jones, P.C., *Amortization Explained.* Reprinted with permission from the International Sign Association brochure, 1995

Appendix IV

Coy, Wayne and Schmidt, Richard Jr., *Theft by Design: What You Can Do About Sign Plagiarism.* Reprinted with permission from the International Sign Association, 1994

Appendix VI

Delaney, William, *Trademark Infringement: How Sign Regulations Infringe Business Trademarks.* Reprinted with permission from the Business Identity Council of America, 1995.