



An Outdoor Advertising Control Language Guide

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The purpose of this guide is to promote uniformity of language and commonality of definitions in the execution of the outdoor advertising control (OAC) program. This guide is intended to enhance communication between the FHWA, the States, the outdoor advertising industry, and other stakeholders. It is also intended to support the development of robust database inventories. The guide may be useful to states that are creating computerized outdoor advertising database inventories or converting manual inventories to computer based systems. It is appropriate at this time to provide the following resource for your consideration and use.

Background

Members of the outdoor advertising industry use common terminology, which clearly and concisely describes their products, operations, and basic business elements. Those involved in highway beautification and OAC enforcement may benefit from adopting the language used by the private sector.

Purpose

The principal reasons for adopting a common language for outdoor advertising control are clarity of communication, professional credibility, and the contribution that clear terminology makes to the development of an operations manual and design of an effective inventory database.

A common language will allow us to communicate more effectively with each other and to avoid misunderstandings and confusion. Using the industry's terminology will enhance the credibility of those involved in outdoor advertising control activities when they interact with industry representatives.

In developing an outdoor advertising database, and in the normal course of business, it is disadvantageous simply to refer to an outdoor advertising structure as a billboard or a sign. If one is communicating with a professional in the outdoor advertising industry, the use of specific, rather than generic, terminology will reinforce the role of the speaker as a knowledgeable professional. For example, properly referring to a sign as a "wrapped 30 sheet" or a "premiere panel", is more credible and conveys a much more distinct picture of the sign in question than a simple reference to a "billboard."

Content

The first section of the guide contains a short glossary of outdoor advertising terms. As noted, additional terms are defined in the "Signage Source Book" as published by the Signage Foundation for Communication Excellence. The Outdoor Advertising Association of America's website contains a glossary which may be accessed at <http://www.oaaa.org/outdoor/sales/terms/o.asp>.

The second section of the guide contains a listing of sign types and descriptions.

The third section of the guide presents data fields that you may consider as you create or update your inventory system. It is not anticipated that you will use each item on the list, but it may be beneficial to make your database as comprehensive as possible.

Section 4 of the guide lists additional on-line outdoor advertising resources.

Use of Terminology in Writing an Operations Manual

A manual of operations is the basic building block on which any OAC inventory system or database depends. A well-conceived manual will contain a glossary of terms and an accurate description of sign types. In de-centralized administrative environments, a well-written manual is essential for statewide uniformity. Integrated business rules and practices should be clearly presented and scrupulously honored. An effective manual of operations will be a key part of your OAC toolkit. Uniformity of language, clearly defined photographic techniques and technical standards are essential elements of an effective manual. Field inspection schedules,

data collection routines, and data capture methodologies should also be clearly defined.

Use of Terminology in Creating an Inventory Database

Significantly, the use of generic terminology seriously limits the ability of an OAC database system to graphically display important information. Ideally, a state's database system will be both visual and tabular and will support multilayer digital mapping. With the proper sign description and data entered in the database, the mapping feature could graphically differentiate sign types and display the various locations with predefined icons of different shape, size and color. Additional graphical features could, for example, highlight non-conforming signs, on-premise signs, or other signs that may merit additional scrutiny.

Database elements for your consideration include the following:

The system should be GPS/GIS capable.

The database should be both tabular and visual.

The system should be digital photography enabled.

The database must only be populated with validated information.

The system should be web-based (net-centric) rather than based on a mainframe host.

The system should integrate with other automated right of way and permitting systems.

As you design your inventory and database system, it is more important to include all potentially useful data fields than to populate those fields in the initial effort. A data field should never be populated with unconfirmed data.

Summary

An accurate and up-to-date operations manual and sign inventory/database are essential in order to establish and maintain effective control of outdoor advertising. The time and resources required for the creation and maintenance of these systems will provide benefits that will more than reward you for your up-front efforts.

Questions on anything in this transmittal or guide may be directed to John Turpin at John.Turpin@fhwa.dot.gov.

Section 1

Glossary of Outdoor Advertising Terms ^[1]

AADT - Average Annual Daily Traffic is a measurement representing the total number of vehicles passing a given location, based upon 24-hour counts taken over an entire year. Mechanical counts are adjusted to an estimate of annual average daily traffic figures, taking into account seasonal variance, weekly changes and other variables.

Ambient Media - Refers to any non-traditional out-of-home medium, but specifically includes media designed to reach audiences close to the point of purchase. Ambient media ranges from street vision, mobile media, venue advertising, washroom advertising and small screen advertising such as ATM and CCTV.

Amortization - In accounting terms, this refers to the method in which an intangible asset is depreciated over a specified period of time.

Audited Circulation - The Traffic Audit Bureau for Media Measurement (TAB) independently audits records and circulation data for outdoor advertising according to established national procedures approved by the buyer and seller community.

Bi-directional diagnostics: - Two-way communication between a display and its controller. Bi-directional diagnostics assist in pre-maintenance, maintenance, and troubleshooting.

Candela - A measurement of directional light/intensity from a point source.

Circulation - Gross Daily - All the people including passengers in autos, public transportation, trucks, pedestrian, going in all directions, who pass given a point during a 12-hour daylight period or an 18-hour period in case of illuminated panels.

Commercial/Industrial Area - Those districts established by the zoning authorities as being most appropriate for commerce, industry, or trade, regardless of how labeled. They are commonly categorized as commercial, industrial, business, manufacturing, highway service or highway business (when these latter are intended for highway-oriented business), retail, trade, warehouse, and similar classifications.

Cluster - A grouping of LEDs that act as a single pixel.

Color Temperature - The degree of hotness or coolness of a color, measured in degrees Kelvin. If a video display is said to have a color temperature of 7,000 degrees Kelvin, for example, the whites have the same shade as a piece of pure carbon heated to that temperature. Low color temperatures have a shift toward red, and high color temperatures have a shift toward blue. The standard white for the National Television System Committee (NTSC) in the United States is 6,500 degrees Kelvin.

Contrast Ratio - Ratio between the brightness or intensity measurement taken when the screen is displaying a blank video signal and a full, white video signal. This ratio determines the readability of the display so as to measure "depth" of an image or as a measure of how well the image can be seen in high ambient light.

Conspicuity - The capacity of a sign to stand out or be distinguished from its surroundings and thus be readily discovered by the eye. It is the noticeable contrast between a sign and its background, attributed to an exogenous (unplanned) or endogenous (planned) mindset, with the display having features that attract attention to the sign. Conspicuity is considered a subjective outcome.

Controller - computer or computer-type device used to program and operate digital displays.

CPM stands for Cost Per Thousand - the most common method for comparing media advertising costs. Expressed in dollars, the CPM is the media cost for generating one thousand exposures.

To calculate CPM for outdoor advertising, first multiply the daily effective circulation by the number of days in the showing period, then divide the result by 1,000 to determine the "number of thousands." Finally, divide the cost per board by this number.

DEC - Daily Effective Circulation . It is a measurement of the audience (18 years old and over) that has the opportunity to view the advertising message each day. It is based on the annual average daily traffic (AADT) count of a location taking into account the average number of persons 18 and over in each vehicle, the visible traffic flow and the hours of illumination of the display. The resulting number is expressed in thousands to facilitate the calculation of the costs per thousand (CPM) impressions per month.

Degradation - The standard method used to express the life of a display is the time it takes to reach 50% of its day one brightness.

Dimming - Changing the brightness of a display, or the capability of increasing or decreasing the overall display intensity. The brightness level should be highest during the day to compete with daylight, and lower at night.

Dissolve - A mode of message transition on an LED display accomplished by varying the light intensity or pattern, where the first message gradually appears to dissipate and lose legibility simultaneously with the gradual appearance and legibility of the second message.

Fade - A mode of message transition on an LED display accomplished by varying the light intensity, where the first message gradually reduces intensity to the point of not being legible and the subsequent message gradually increases intensity to the point of legibility.

Frame - A complete, static display screen on an LED display.

Frame Effect - A visual effect on an LED display applied to a single frame to attract the attention of viewers.

GPS (global positioning system) is a Satellite Navigation System. It is funded by and controlled by the U. S. Department of Defense (DOD). While there are many thousands of civil users of GPS worldwide, the system was designed for and is operated by the U. S.

military. GPS provides specially coded satellite signals that can be processed in a GPS receiver, enabling the receiver to compute position, velocity and time. Four GPS satellite signals are used to compute positions in three dimensions and the time offset in the receiver clock.

GRP stand for Gross Rating Points. It refers to the total number of impressions delivered by a media schedule, expressed as a percentage of the total market population. In outdoor advertising, GRP's refer to the total number of impressions made on a daily basis, and are synonymous with "showings".

Intensity - Often called brightness. The LED industry measures display intensity in candelas per square meter, which is also referred to as "nits".

Just Compensation - Just compensation is an amount paid for the rights and interests for the sign and site owner based on a fair market value estimate. The Highway Beautification Act of 1965, as amended, requires the payment of just compensation for the removal of an off-premise sign along a federally-controlled highway.

Lease - (license, permit, agreement, contract or easement). An agreement, oral or in writing, by which possession or use of land or interests therein is given by the owner or other person to another person for a specified purpose.

Leasehold Value - The leasehold value is the present worth of the difference between the contractual rent and the current market rent at the time of the appraisal.

LED - Light Emitting Diode - a semiconductor diode that emits light when a voltage is applied to it and that is used in an electronic display.

LED brightness - The brightness level of an LED is measured in milli-candelas. The materials used to manufacture the LED determine the brightness of the LED.

Light Detector, Light Sensor - An electrical component used to detect the amount or level of ambient light surrounding a display. If dimming has been set to "AUTO", the light detector or sensor adjusts the intensity of the LED accordingly.

Message Area - The area within the sign panel describing the limits of the message.

Milli-Candela - One thousandth of a candela.

MSA - Metropolitan Statistical Area - The U.S. government uses a three-tiered classification of metro markets. The purpose of this census system of market designation is to enable federal agencies to use consistent geographic definitions when collecting and disseminating metro area statistics. The basic unit - the MSA - is defined as a geographic area comprising a significant population nucleus together with adjacent communities having a high degree of economic and social integration with that nucleus.

Plant - The term "plant" refers to an outdoor advertising company in a geographical location. It may also refer to all the advertising structures in a market operated by such a company.

Permit - A license granted by the state and/or locality to authorize a sign structure on a site. All states have laws requiring state permits for billboards along the Interstate, Federal-Aid Primary highways and the National Highway System. Localities may also require permits for billboards.

Pixel - The smallest single point of light on a display that can be turned on and off. For LED displays, a pixel is the smallest block of light emitting devices that can generate all available colors. For incandescent displays, a pixel is an individual lamp on the matrix.

Reach - Reach is an estimate of percentage of the total target audience's population, which will be potentially exposed to the advertising message one or more times during all advertising programs common to all media.

Reflective Disks - Metallic disks attached to the surface of an outdoor structure that sparkle or shimmer in sunlight.

Resolution - The basic measurement of how much information is displayed on a screen, expressed in units of pixels. The pixel pitch and the physical dimension of the display determine resolution. To calculate resolution, divide the area of the display by the area of an individual pixel. Most displays of video quality have a resolution greater than 10,000 pixels. Generally, the greater the resolution,

the better the image will appear. Commonly listed as number of pixels per square meter.

Saturation - The color intensity of an image. An image high in saturation will appear to be very bright. An image low in saturation will appear to be duller and more neutral. A 100 percent saturated color does not contain any white; adding white reduces saturation. An image without any saturation is also referred to as a grayscale image.

Scotchlite © - The registered trade name of reflective sheeting made by bonding tiny glass spheres to a flexible resin backing. Each sphere reflects lights directly back to its source. Since Scotchlite gleams brightly when illuminated by the headlights of approaching vehicles, it is often used on non-illuminated highway painted displays to give them nighttime circulation value. Reflectorized paints (Scotchall) are also manufactured employing the same principle, but permit more flexibility in change of copy and wider range colors.

Scroll - A mode of message transition on an LED display where the message appears to move vertically across the display surface.

Sequence - Group of two or more frames that may consist of words, graphics or animation that are grouped together under one name. May range in size from a few frames up to a hundred or more.

Sign Face - The surface area of a sign on which the advertising message is displayed. A sign may have more than one face.

Sign Facing - The cardinal direction that an outdoor unit faces. As an example, vehicles traveling south would view a north-facing bulletin.

Snipe - Refers to a small, added strip along a poster design to announce special or revised messages. Originally, a snipe was a small advertisement illegally pasted on the surface of a legitimately rented poster space.

TAB is the Traffic Audit Bureau of Media Measurement; an independent firm that provides its members with audited circulation figures for outdoor boards in accordance with nationally recognized standards. TAB covers more than 225,000 advertising billboards in over 1,000 U.S. markets. What Nielson is to TV and the Audit Bureau of Circulation is to newspapers, TAB is to the outdoor advertising industry.

"Transit" outdoor category is defined as: Advertising displays affixed to moving vehicles or positioned in the common areas of transit stations, terminals and airports. It may consist of the following: Airport Displays, Bus Displays (interior & exterior), Mobile Displays, Subway and Rail Displays (exterior graphics, interior posters & train cards),

Transition - A visual effect used on an LED display to change from one message to another.

Travel - A mode of message transition on an LED display where the message appears to move horizontally across the display surface.

Unilluminated Unit - An outdoor unit that has not been equipped with lighting for nighttime illumination of an advertising message. The daily effective circulation for an unilluminated unit is calculated using a 12-hour viewing period. Sometimes referred to as a regular unit.

Viewing Angle - The area that will provide optimum viewing of a display. The angle is determined by the horizontal and vertical points at which the measured light intensity is 50 percent of that measured directly in front of the display. Expressed another way, the maximum viewing angle is defined by the vertical and horizontal points where the information displayed can no longer be interpreted by the viewer. (This does not mean that the LED cannot be seen outside the viewing angle. Viewing angle is an industry-accepted term and used by the LED manufacturers themselves.)

Wavelength - The distance in a periodic wave between two points of corresponding phases. The LED's wavelength determines its color.

Section 2

Outdoor Advertising Sign Types and Descriptions ^[2]

Abandoned Sign - One in which no one has an interest, or as defined by State law.

Backlight Unit (Backlit) - Advertising structures which house illumination in a box to throw light through translucent advertising printed on plastic or heavy-duty paper for higher visibility especially at night.

Billboard - Large format advertising displays intended for viewing from extended distances, generally more than 50 feet. Billboard displays include, but not limited to: 30-sheet posters, 8-sheet posters, vinyl-wrapped posters, bulletins, wall murals and stadium/arena signage.

Bulletin - The largest standard format of outdoor media, the most common size is 14' high x 48' wide. Design copy is most commonly reproduced on vinyl, and then wrapped around the surface of a bulletin structure. Design copy can also be painted directly onto the surface of a bulletin or printed on paper and applied. Bulletins are sold either as permanent displays or in rotary packages.

Changeable Message Sign - A sign with the ability to change content by means of manual or remote input.

Chaser Border - A border of incandescent electric bulbs or luminous tubes placed around a display which flash on and off in rotation. The lights thus appear to be rapidly moving around the border. This is frequently used on theatre marquees.

Conforming Sign - A sign that is legally installed in accordance with federal, state, and local permit requirements and laws.

Cutouts; Extensions; Embellishments - Temporary add-ons to the structure (usually bulletins) that extend beyond the standard structure area to command greater attention to the message. Can include letters, packages, 3-D elements, fiber optics, etc.

Dioramas - These signs are custom designed creations which incorporate sign face messaging with additional physical features to catch the eye of the public. The signs may use mannequins, fencing, custom lighting, or themed architectural features in their construction. This type of sign is usually found only in the most intense urban environments.

Directional Sign - 1: A sign erected for the convenience of the public such as for directing traffic movement or identifying public facilities but containing no advertising. 2: An advertising sign whose purpose it is to direct the public to the advertiser's premises.

Double-Faced Sign - A sign with two parallel faces.

Electronic Variable Message Sign (EVMS) - A sign depicting action, motion, light, or color changes through full motion video, electrical or mechanical means. Although technologically similar to flashing signs, the animated sign emphasizes graphics and artistic display.

Fascia Sign - A building mounted sign.

Illegal Sign - A sign or billboard unlawfully erected or maintained.

Listed Sign - A sign label to indicate that the manufacturer of the sign is identified on a list published by a nationally recognized testing laboratory as producing signs in conformance with the applicable American national standard.

Mobile Billboard - A truck or trailer equipped with one or more poster panel units. The unit can either be parked at specified venues or driven around designated localities.

Nonconforming Sign - One which was lawfully erected, but which does not comply with the provisions of State law or State regulations passed at a later date or which later fails to comply with State law or State regulations due to changed conditions. Illegally erected or maintained signs are not nonconforming signs.

Off Premise Sign - A sign directing attention to a specific business, product, service, entertainment event or activity, or other commercial activity that is not sold, produced, manufactured, furnished, or conducted at the property upon which the sign is located.

On Premise Sign - A sign whose message and design relates to a business, profession, product, service, event or other commercial activity sold, offered, or conducted on the same property where the sign is located.

Paint (Permanent) Bulletins - 14 feet by 48 feet - These signs are large and quite expensive to build. They are usually found along the Interstate system and are typically supported by a single monopole.

Poster Panel - An advertising structure on which standardized posters are displayed.

"8 Sheet" Posters - These signs are usually only found on secondary arterial highways and in urban areas. 8 sheet posters are targeted primarily at automotive travelers and pedestrians. Also known as "junior posters".

"30 Sheet" Posters - Primarily found in commercial and industrial areas on secondary arterial roads and are primarily aimed toward the automotive traveler. Overall signboard surface is approximately 12 by 24 feet, with an advertising image of 10.5 feet by 21 feet.

Wrapped Square Posters - These signs are 24.5 feet by 24.5 feet in size and display vinyl advertising copy. They may be found in areas similar to those that use standard 30 sheets and "wrapped" 30 sheets.

Wrapped "30 sheet" Posters - These signs are the same size as the traditional "30 sheet" poster, but they maximize copy size by taking the message surface out to the very perimeter edge of the structure. Overall copy size is approximately 12 by 24 feet.

Premiere Panel - A standardized display format measuring 12' 3" x 24' 6" in overall size. Premiere panel units offer the impact of a bulletin by utilizing a single sheet vinyl face stretched over a standard 30-sheet poster panel.

Premiere Square - A standardized display format measuring 25' 5" x 24' 6" in overall size. The premiere square offers spectacular impact by utilizing a single-sheet vinyl face stretched over two stacked 30-sheet poster panels. In some markets, this same technique can be applied to stacked 8-sheet poster panels measuring 12' 6" x 12' 1" in overall size.

Sign - An outdoor sign, light, display, device, figure, painting, drawing, message, placard, poster, billboard or other thing which is designed, intended of the advertising or informative contents of which is visible from any place on the main-traveled way of the Interstate or Primary Systems, whether the same be permanent or portable installation.

Spectaculars - Very large and expensive, spectaculars have no standard dimension. Signs are custom built, frequently incorporate motion and/or fiber optic technology and 3-D features.. These signs are typically used in areas of mass consumer exposure, such as Times Square or the Las Vegas Strip.

Stacked Panels (Decked Panels) - Two advertising panels built vertically, one above the other, and facing the same direction.

Street Furniture - Advertising displays, many that provide a public amenity, positioned at close proximity to pedestrians for eye-level viewing or at a curbside to impact vehicular traffic. Street furniture displays include, but are not limited to: transit shelters, newsstands/news racks, kiosks, shopping mall panels, convenience store panels and in-store signage.

Taxi Displays (tops, trunk and interior displays & exterior wraps), truck side displays (sides, tails & headers) and/or vehicle wraps (cars, vans & SUVs)

Trim (Molding) - A frame of metal, fiberglass, plastic or wood that surrounds the surface of an outdoor advertising structure.

Tri-Vision - A painted display embellishment, which, through use of triangular louver construction, permits the display of three different copy, messages in a pre-determined sequence. (Also called Multi-Vision).

V-Type Sign - An off-premise sign structure that consists of multiple sign facings placed at angles to each other, oriented in different directions and not exceeding 10 feet apart at the nearest point to each other.

Wall Scapes - These signs are murals that are typically painted onto the side of a building or other massive structure. In certain applications, vinyl advertising copy may be applied to or suspended from a wall. These signs may be huge vinyl signs draped down or wrapped around buildings, suspended from construction scaffolding, or other supporting framework. These signs and are sometimes referred to as "building warps".

Wall Mural - An advertising display applied directly onto the exterior surface of a building. Painting directly onto the surface is the most common application method; however, a painted or printed vinyl substrate can also be applied to a wall surface, depending on the location.

Wall Sign - A building-mounted sign either attached to or displayed or painted on an exterior wall in a manner parallel with the wall surface, and not projecting more than 1 inches from such surface. (See fascia sign.)

Section 3

Data Fields You May Consider as You Create or Update Your Inventory System

Ad Copy - "On-Premise" or "Off- Premise"
 Advertiser name
 Advertiser product
 Advertiser's phone number
 Date of last inspection
 Date of sign construction
 Date of Zoning
 Distance from the highway right of way line to the sign
 Distance from the sign to the pavement centerline of the closest road that intersects with the highway along which the sign will be erected
 General physical condition of structure
 Height of the sign above ground level (HAGL)
 Highway name
 Highway number
 Inspected/confirmed by (name)
 Inspected/confirm by (phone number)
 Is the grant of the permit discretionary?
 Is the permit site-specific?
 Land lease or license date
 Land lease or license option term
 Land lease or license term
 Land lease or license termination provisions, if any
 Landowner - name, address, phone number and email address
 Land zoning
 Landlord
 Landlord phone
 Last inspection date
 Latitude/longitude (GPS reference)
 Left-hand or right-hand read
 Lot and parcel number
 Mile post number
 Next inspection date
 Number of faces permitted
 Permit date
 Permit expiration date
 Permit number
 Scenic Byway: yes or no
 Side by side, over-under, N/A
 Sign height and width
 Sign owner - name, address, phone number and email address
 Sign status
 Sign structure - overall height
 Sign structure type
 Single face, back to back, "V" type
 Site Control: fee simple, easement, lease or license
 Size and number of main support members
 State highway district
 Tenant
 Town and county in which sign is located
 Type of illumination: steady light, no light, changeable message
 Year sign was built
 Year sign was reconstructed

Section 4

Reference Materials and Resources

Manual on Uniform Traffic Control Devices - <http://mutcd.fhwa.dot.gov/>

National Alliance of Highway Beautification Agencies - <http://www.nahba.org/>

Outdoor Advertising Association of America - <http://www.oaaa.org/>

Scenic America - <http://www.scenic.org>

[1] Definitions contained in this exhibit are from the Outdoor Advertising Association of America website and from The Signage Sourcebook published by the Signage Foundation for Communication Excellence, Inc. , first edition, October, 2003 , and from other sources.

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