

SECTION 7.

DIGITAL BILLBOARDS ON-PREMISE AND ON THE RIGHT-OF-WAY

Digital Billboards as On-Premise Signs.

On-premise signs, those that advertise products or services that are available on the property on which the sign is located, have been a mainstay in the US for generations. The objectives of the current project were to “develop guidance for state DOTs and other highway operating agencies with respect to the safety implications of the digital display technology for outdoor advertising signs.” Traditionally, outdoor advertising signs refer to billboards, also known as off-premise signs. As such, on-premise signs are outside the scope of this report. However, to the average motorist, the difference between billboards and on-premise signs is transparent. In addition, as the cost of LED display technology comes down, and as the power of this technology grows, it becomes more likely that roadside businesses, particularly those with multiple users such as shopping centers, auto malls, sports complexes, and entertainment venues, will increasingly install large digital advertising signs on their property.

Generally, despite the fact that such displays may use the same technologies as billboards, the owners/operators of these signs are represented by different organizations, and they have been regulated quite differently than have roadside billboards. On-premise sign regulation is typically accomplished through local zoning codes, and may, in general, be far more variable and likely less stringent with regard to the means of the display, display characteristics, or the size of the sign than comparable controls on billboards. Many such codes have changed little in recent years, despite the growth of digital technology for on-premise displays.

From the traffic safety perspective, it is possible that the risk of driver inattention and distraction is higher for some on-premise signs than for some DBBs, because on-premise signs may be larger and closer to the road, mounted at elevations closer to the approaching driver’s eye level, and placed at angles that may require excessive head movements. In addition, many such signs may display animation, full motion video, sound, and other stimuli.

To our knowledge, the largest digital advertising sign in the world is an on-premise sign, mounted on the roof of a grocery warehouse and store in New York City. This sign, shown in Figure 7, is 90 ft tall by 65 ft wide¹⁵, and is mounted on a 165 ft tall steel post on the roof of the warehouse, adjacent to a major interstate highway. The sign, claimed to be visible for over two miles, was recently used during a five-month period to present a rotating series of 19 animated spots for a local magazine. The animation took advantage of the “billboard’s ability to display high-impact full motion video and graphics.” The

¹⁵ The face of this sign measures 5,850 sq ft, nearly nine times the size of a typical roadside DBB.

president of the company that created the commercials said: “It’s really a blast to be driving around the city and suddenly see your work looming over all of this traffic entering and leaving the city” (Black Hammer, Undated).



Figure 7. The world’s largest LED sign; an on-premise sign in New York City. The sign measures 90 ft tall by 65 ft wide and is mounted on a 165 ft tall steel post on the roof of building.

For transportation agencies and traffic safety organizations concerned about the risks of driver distraction, digital on-premise signs should not be overlooked as a potentially important near-term concern.

Strictly from the perspective of driver safety, agencies might want to consider restrictions for on-premise sign operations at least as rigorous as those for billboards, as well as restrictions on size, height, proximity to the right-of-way, and angular placement with regard to the oncoming driver’s line of sight. Of all of the guidelines proposed in this report for DBBs, there may well be an equal or greater need to consider similar controls for on-premise signs. In addition, consideration must also be given to such signs’ capacity for animation, flashing lights or other special effects, and full motion video.

DIGITAL BILLBOARDS WITHIN THE RIGHT-OF-WAY

On October 10, 2008, Nevada Director of Transportation, Susan Martinovich, transmitted an SEP-15 project application to FHWA’s Nevada Division Administrator, Susan Klekar, titled: “Auctioning Rights to Construct Enhancements on and within Roadway Interchanges” (Martinovich, 2008).

The heart of the proposed program is the “enhancement” of selected interchanges by private partners that have submitted the highest or best value bids to the State. The application suggests that these enhancements may include landscaping, “architectural facades such as archways, public art or other aesthetic features” (p. 2). In exchange for developing and constructing these enhancements (and, it is suggested, removing them at the end of the lease term) the winning bidder “would be allowed to advertise within the interchange right of way limits” (p. 2). Although the application places no restrictions on the type of advertising that might be considered, the State suggests that this advertising might likely take the form of “incorporating the private partner’s trade name, trademark, logo or other similar device into the design of the proposed enhancements” (p. 2).

The application States: “No design or enhancement would be accepted that would create a safety issue for motorists or pedestrians” (p. 2), and “safety will be foremost. No design will be allowed that will compromise safety” (p. 5). Given that the State proposes no *a priori* assessment of potential safety impacts, that the installations will be in place for 10 or more years, and that the only suggested safety analysis would be an undefined comparison of accidents; it is difficult to understand how this commitment to safety could be fulfilled.

Further, although the State’s application does not mention that any of the potential enhancements will involve electronic signage, neither are such displays foreclosed. In fact, the final paragraph of the application states: “The tourism based economy of Nevada relies on spectacular displays, be they man-made or natural. Such exceptions (sic) of grandeur make this program an ideal match” (p. 9). When the recognition of man-made spectacular displays is associated, as this proposal is, with “context sensitive design,” the potential for the types of enhancements that are associated with Las Vegas and Reno cannot be discounted.

On August 27, 2008, the Director of the California Department of Transportation (Caltrans) wrote to the Secretary of the US Department of Transportation seeking support for the expansion of its efforts “to integrate private sector participation in the provision of infrastructure, service, and ongoing maintenance of the State’s transportation system” (Kempton, 2008). One of the “potential opportunities” for such partnership was described as follows:

The Department’s system of changeable message signs could be enhanced through private sector participation. In exchange for use of the space on the signs for commercial purposes, businesses could enhance the level of graphics, provide a steady income source, and use state-of-the-art technology to increase the quality of transportation and safety-related messages that are relayed to the signs.

At the time of the Caltrans request, the popular press (see, for example, McGreevy, 2008, Miranda, 2008) reported that the initiative was proposed by Clear Channel Outdoor, one of the country’s largest providers of DBBs. The Caltrans proposal has raised numerous concerns within the highway safety community. A significant concern is that this

initiative, if it went forward, would be in direct violation of several key sections of the Manual of Uniform Traffic Control Devices (MUTCD, 2003). Examples include:

Traffic control devices or their supports shall not bear any advertising message or any other message that is not related to traffic control” (p. 1A-1).¹⁶

Changeable message signs shall display pertinent traffic operational and guidance information, not advertising” (p. 2E-20).

When a changeable message sign is used to display a safety or transportation related message, the display format shall not be of a type that could be considered similar to advertising displays. The display format shall not include animation, rapid flashing, or other dynamic elements that are characteristic of sports scoreboards or advertising displays (p. 2A-3).

Other sections of the MUTCD, including those that address signage that might be considered closer to messages that are commercial in nature, nonetheless prohibit advertising. For example:

The content of the legend on each panel (of a Tourist-Oriented Directional Sign) shall be limited to the business identification and directional information for not more than one eligible business, service or activity facility. The legends shall not include promotional advertising” (p. 2G-1).

Indeed, in official interpretations of the MUTCD and its purposes over the years, the FHWA has consistently taken a strong position in opposition to advertising within the right-of-way, and has supported its views with the legal opinion of its chief counsel.

For example, in 2001, in a policy memorandum addressing the purpose of ”Adopt-a-Highway” signs and their treatment in the MUTCD, then FHWA Deputy Executive Director Vincent F. Schimmoller stated, in part:

Recently, it has come to our attention that there are a significant number of Adopt-a-Highway signs throughout the country displaying commercial trade logos, slogans, telephone numbers, Internet addresses, and similar forms of commercial promotion... These signs are clearly intended for advertising to the passing motorists rather than acknowledging the litter pickup service of an organization for which the program was intended... These actions concern us and we would like to clarify Federal Highway Administration’s (FHWA) position on this subject.

Adopt-A-Highway signs displaying commercial trade logos, slogans, telephone numbers, Internet addresses, and similar forms of commercial promotion are not in conformance with the 2000 MUTCD.

¹⁶ Note that this “Standard” is the very first requirement specified in the MUTCD and is included in Section 1A.01, titled: “Purpose of Traffic Control Devices.”

Further, the placement of commercial advertisement within the roadway rights-of-way is a violation of Federal law and regulation. . . . Allowing the use of commercial advertising signs along the roadway is a disservice to the traveling motorist who is relying on roadside signs for regulatory, warning, and guiding information. The Specific Sign Logo program and the Tourist Oriented Destination Sign programs, which are in compliance with the MUTCD, have been developed to provide guidance information to the traveling motorist.

This memorandum was supported by an attached legal opinion from the FHWA Chief Counsel (Malone, 1996). This document stated, in part:

Signs erected solely as advertising signs do not fit any of the accepted categories of the MUTCD. They certainly do not regulate or warn motorists. Nor do they “give such information as will help them [motorists] along their way in the most simple, direct manner possible” . . . They are not concerned with promoting “the safe and efficient utilization of the highways” . . . Advertising signs on the right-of-way therefore are not approved signs under the MUTCD.

It would be ludicrous to suggest that Congress, while mandating the States to control advertising along thousands of miles of Interstate and Federal-aid primary highways, would also allow the States to erect billboards on the rights-of-way of those same thousands of miles of highway.

In closing, the Chief Counsel expressed his belief that “FHWA clearly has the authority to withhold funds from a State that allows the erection of billboards on the rights-of-way, an act which constitutes a failure to comply with Title 23 requirements.”

More recently, Federal Highway Administrator Peters (2003) issued in interim policy on Acknowledgment Signs on rights-of-way. She said, in part:

The FHWA recognizes a distinction between signing intended as advertising and signing intended as an acknowledgment for services provided.

With regards to advertising signs within the highway right-of-way, the FHWA reaffirms its long held position that advertising is not permitted on highway rights-of-way.

Generally speaking, an advertisement has little if any relationship to a highway service provided. The advertiser wants to get its recognizable company emblem or logo before the motoring public, and, if possible, information on how or where to purchase the company products or service. If the acknowledgment sign goes beyond recognizing the company’s contribution to a particular part of the highway and includes phone numbers or Internet addresses, the sign would more properly be termed an advertising sign.

Even in her recognition of the acceptable role of acknowledgment signs in specific applications, Peters stated that “a compelling responsibility for public safety” leads the FHWA to find certain locations inappropriate for such signs, including “on the front, back or around the perimeter of any traffic control devices, including but not limited to:

- Traffic signal heads and supports,
- Any regulatory, guide or warning sign,
- Changeable message sign,
- Traffic control device posts or structures
- Bridge piers
- At any site where the acknowledgement sign would obscure the ability of a driver to detect and understand existing traffic control devices.”

Further, she stated that such signs would be “inappropriate and not allowed on public highways...at key decision points where a driver’s attention is more appropriately focused on traffic control devices or traffic conditions. These locations include, but are not limited to:

- Exit and entrance ramps and other lane-weaving areas
- Highway-rail grade crossings
- Work zones
- Areas of limited sight distance

In short, FHWA’s ongoing policy, and its interpretation of the MUTCD and the legislation at 23 U.S.C. § 402(a) and § 109(d) under which the MUTCD was promulgated, have clearly expressed opposition to advertising of any kind within the right-of-way. Regardless of any benefits from the public-private partnerships that California and Nevada have suggested, and regardless of any State budgetary difficulties that might be eased by revenue from such partnerships, FHWA’s position against advertising on the right-of-way has been consistently and, we believe, appropriately, based on its interpretation of the Federal Highway Administrator’s authority to decide which signs “promote the safe and efficient utilization of the highways” (Malone, 1996).

Other highway and toll road operating authorities have been approached by advertising companies (see, for example, Dudek, 2008, p. 35), or have independently considered the use of outdoor advertising on new or existing signage within their rights-of-way (see, for example, The Port Authority of New York and New Jersey (PANY, 2006). There can be

little doubt that an official acceptance by FHWA of the ideas promulgated by California or Nevada in their recent SEP-15 initiatives would have important ramifications nationwide. Indeed, there is concern that some roadway operating authorities may not wait for FHWA action and may consider taking steps to approve advertising on their rights-of-way regardless of FHWA's position. The FHWA legal opinion discussed above (Malone, 1996) came in response to "a decision by the New Jersey Turnpike Authority to erect 12 double-sided billboards in the right-of-way of the New Jersey Turnpike..." And the PANY Request for Proposal advised proposers that "for the purpose of this analysis, the Consultant shall assume that the Authority is exempt from local, State, and Federal regulations, including FHWA policy" (Attachment A, Page 1).

Whether the placement and operation of DBBs within the right-of-way is a safety concern is an issue that is central to the present report. In addition, the precedent that would be set by the installation of such signs has important ramifications for the nation's highway system, and for the continued role of the MUTCD as the national standard for the design and use of official traffic control devices on streets and highways. Although a discussion of the history, development, and impact of the MUTCD is beyond the scope of this report, it bears comment that the document is unambiguous when it comes to the potential for commercial messages to be displayed on official signs.

It is the opinion of this author that permitting California to study its proposed exceptions to the requirements of the MUTCD and existing Federal law would bring about several adverse consequences:

- It would undermine decades of human factors research and application that ensures that information important to the driving task is conveyed to the motorist in the most clear, concise, succinct and unambiguous manner possible.
- It would set a dangerous precedent that would lead to similar actions by State and local governments, toll roads, and other private road operators nationwide.
- It would open to challenge the entire basis of the MUTCD, and erode confidence in and respect for the country's only standard for the proper use of traffic control devices on streets and highways.

And, most significantly, it would likely diminish safety and traffic flow on our streets and highways through a direct and immediate increase in driver inattention and distraction.