



July 14, 2014

Rule Comments
Office of General Counsel
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483

Dear TxDOT General Counsel:

On behalf of the Scenic Texas Board of Directors and its members, I am writing to comment on the proposed rule changes for the regulation of outdoor advertising.

We support the agency's stated explanation of the proposed rules, to consider rule changes that conform to the public purposes of the Texas Highway Beautification Act, Chapter 391 of the Transportation Code: (1) to promote the health, safety, welfare, morals, convenience, and enjoyment of the traveling public, and (2) to protect the public investment in the interstate and primary systems. Because the increased billboard height proposed in Section 21.189 will not conform to the public purposes set forth in Chapter 391, will create greater distractions for the traveling public, and will add to the contingent liability TxDOT already faces in condemnation, we object to this rule proposal in its entirety. Instead we recommend the billboard height be reduced to 30 feet, a recommendation that would conform to the public purposes of Chapter 391, would be safer to the traveling public, and would not add to TxDOT's contingent liability at condemnation.

This letter is intended to be supplementary to the Scenic Texas testimony made at the June 24 public hearing (testimony attached as Ex. C).

Our specific comments:

1. Proposed Rule §21.189(a) to increase the current height from 42.5 feet to 65 feet and give the regulated industry the option to choose how to measure height. Scenic Texas Observations, Objections and Alternative Recommendation: The major reason articulated by TxDOT for the rule change is a request by the regulated industry stakeholders for increased visibility for their advertisements. Scenic Texas finds nothing in statute or case law that mandates such accommodation by TxDOT to the industry it regulates. The only public purpose articulated by TxDOT for this rule is to assist the traveling public to safely read commercial advertisements while traveling at high speeds. First Scenic Texas finds nothing in TxDOT's mission or as part of the statutes it is charged with enforcing to suggest that it has a duty to provide the traveling public with readable commercial advertisements. Second, even if TxDOT believes that it has a duty to provide the traveling public with readable commercials, there seems to be no documented safety issue with the current height. According to TxDOT's own records (in response to an open records request), TxDOT has no accident reports of traffic safety-related issues caused by the current height of 42.5 feet. Here are the Scenic Texas open records questions and TxDOT's answers to me by a July 9, 2014, email:

“1. All reports taken or received by TxDOT of traffic accidents or injuries allegedly caused by the 42.5 foot height limit on outdoor advertising billboards. **Answer: None Exist.** 2. All complaints received by TxDOT from members of the non-regulated industry that 42.5-foot billboards are not visible enough. **Answer: None.**”

If there are no reported safety problems with the current height, why is there a need to change the rule? Finally, if TxDOT could somehow convert no safety-related evidence into some safety-related evidence by use of the “safety” report TxDOT purports to rely on, that report has serious flaws (see Exhibit A attached) that TxDOT should consider. Exhibit A is a report from traffic safety and distracted driver expert Jerry Wachtel of the Veridian Group who concludes that,

“The proposed changes to the Texas Transportation Code that would permit billboard heights to be raised from 42.5 to 65 feet are unwise and unwarranted. It is based on flawed research, developed and peer reviewed by

the same individuals working on behalf of the same organizations. It conflicts with guidance in the MUTCD, and serves the purpose of making commercial advertising signs more important and more attention getting than official traffic control signs. And it is based on the unreasonable belief that advertising signs must be visible to drivers continuously (i.e. without loss of eye contact) which ensures that such drivers must have their eyes off the road continuously to be able to read these commercial signs.”

Given the fact that TxDOT has no evidence of accidents or safety-related issues with the current 42.5 foot height, and given the serious questions surrounding the credibility and reliability of TxDOT’s safety report, there appears to be no demonstrative evidence to indicate that signs standing at 65 feet are any safer than those standing at 42.5 feet, and, according to Mr. Wachtel, the 65-foot height may be more distracting and create highway safety issues that do not exist today.

Scenic Texas Alternative recommendation: In a second letter written to Scenic Texas, attached as Exhibit B, Mr. Wachtel supports our 30-foot height recommendation. Regarding the safety of the recommendation, he states that, “Since we cannot force advertisers to design their billboard messages to be short and simple, we should, at the very least, bring the billboards closer to eye level so that the total amount of time that a driver must take his or her eyes off the road to read a message is reduced to the extent possible.” And he concludes, “For these reasons, I believe that lowering billboard mounting heights to 30 feet will reduce the “eyes off road” time for drivers, while still permitting sufficient sight distance for properly designed billboards to be read.”

Therefore, if TxDOT believes there is a safety issue with the 42.5-foot height, it should adopt a 30-foot height. Not only would it be safer than the current height or the 65-foot proposed height, it would comply with the public purposes of Chapter 391, and it would not add to the value of signs that may need to be bought for future highway projects.

2. Scenic Texas provides two additional suggestions for TxDOT’s consideration that emanate from this rule change. TxDOT will create additional taxpayer burdens by adopting this rule. The proposed height changes to 21.189 will increase the visibility and thus the value of each billboard that is raised, adding to the existing taxpayer burden at condemnation. In fact, at least two prior TxDOT rules already added huge

taxpayer burdens – the biggest burden was created in 2007 when TxDOT chose to allow digital billboards in Texas, without performing a single economic analysis to determine the impact to future highway funding. TxDOT has not yet faced this in condemnation but the Minnesota DOT has and paid dearly---\$4,321,000 for one digital billboard face plus the DOT allowed the relocation of the sign so it is still operating today. Just a couple of months ago, TxDOT adopted an unrestricted relocation rule that will further add value to billboards, again without engaging in an economic analysis.

TxDOT is adopting rules that increase the value of the assets it could be buying or condemning someday, and is doing so while litigating the issue at the Texas Supreme Court. The underlying issue is how a billboard is to be valued for takings purposes. If the State loses this case, the cost of billboards, and thus highway construction, will increase even with no additional rule changes. At the exact time the State is litigating the value of billboards to keep them manageable, TxDOT is considering adopting a third rule that will increase that value.

Recommendation: Scenic Texas recommends that TxDOT refrain from adopting this rule or any future changes to the outdoor advertising rules that will increase the cost of highway construction due to condemnations. In fact, we recommend that TxDOT reconsider the wisdom of adopting the 2007 digital billboard rules and the recent relocation rule. Notwithstanding this recommendation, we make two suggestions:

- a. That TxDOT issue a conditional permit for each billboard that will automatically expire if and when the State needs the land for highway construction. Nothing in this recommendation would prevent the billboard owner from operating his sign for as long as it is legal to operate, but it would make it clear that the State's need for highways would be superior to that of a permit holder.
- b. That TxDOT support the repeal of the current sales tax exemption on the advertising income received by billboard companies and request that the funds be dedicated to the highway fund. With 30,000 to 40,000 billboards operating in Texas, this could easily add over \$100

million each year to the State highway fund (amount must be confirmed by the State Comptroller).

Reasoning: All highway users should pay for their use of the public road. Billboards are unique in that they gain 100% of their value from the use of the public highway but pay nothing for that use. The annual permit and license fee covers the issuance of the permit/license and the enforcement of the law. But it does not cover the use of the public highway. Moreover, unlike newspapers and magazines (also types of exempt advertising), billboards gain all of their value from the publicly funded highway.

Thank you for the opportunity to comment on the proposed rules and make alternative recommendations.

Very truly yours,

A handwritten signature in cursive script that reads "margaret Lloyd".

Margaret Lloyd, Vice President
Board of Directors, Scenic Texas

cc: Members, Texas Transportation Commission
Ron Johnson, Right of Way Division

Attachments:

- Exhibit A Veridian Review of TxDOT safety study
- Exhibit B Veridian Report supporting 30-foot height
- Exhibit C Scenic Texas public hearing testimony



Dear TxDOT Right of Way Division:

Ms. Margaret Lloyd, Vice President of Scenic Texas, recently provided me with several documents pertaining to proposed rule changes regarding outdoor advertising signs. Ms. Lloyd asked me for my professional opinion about the merits of this proposed change and the strength of the underlying research. My opinions in this matter are contained in this brief report. Please feel free to contact me if I can provide additional information or clarification.

This report contains my written comments concerning the proposed rulemaking. In accordance with Transportation Code, §201-811 (a) (5), I declare that I do not do business with the department, I do not stand to benefit monetarily from the proposed amendments, and I am not an employee of the department.

Documents provided and reviewed:

1. Texas Transportation Commission Minute Order, dated may 29, 2014, 1 page.
2. Texas Department of Transportation - Right of Way, marked Exhibit A, dated May 23, 2014, 7 pages.
3. Texas Department of Transportation - Right of Way, marked Exhibit B, dated May 23, 2014, 8 pages.
4. Texas Department of Transportation - Right of Way, marked Exhibit C, dated May 23, 2014, 4 pages.
5. "The Right Sign for Your Business," by the International Sign Association, dated May 20, 2014, 2 pages.
6. "Research Based Approach to: Sign Size, Sign Legibility, Sign height" by the United States Sign Council, USSC, 2 pages, September 1, 2009 (although note the copyright date of 2003). Only "Page 7 - Vertical Offset or Sign Height" and an unnumbered page headed "Detection...Conclusion" were included.
7. "On-Premise Signs Guideline Standards. Research Based Approach to: Sign Size, Sign Legibility, Sign Height" by the United States Sign Council (USSC), authored by Andrew D. Bertucci. Undated, although © 2003, 39 pages.
8. Email from Tim Cunningham to Margaret Lloyd, dated June 11, 2014, in response to Ms. Lloyd's request for "all of the scientific studies..."

MY BACKGROUND AND QUALIFICATIONS:

Before addressing this proposed rulemaking, the studies relied upon, and my opinions in this matter, I have provided below a brief overview of my qualifications to review this material and render an expert conclusion.

I am a human factors/engineering psychologist with more than 40 years of experience in the area of human performance in fields as diverse as highway safety, nuclear power plant operations, and aerospace.

I was employed as a Research Psychologist by the Federal Highway Administration (FHWA) for 11 years, and during that time I directed the agency's Highway Aesthetics Laboratory, established as a result of the Highway Beautification Act (HBA). I was the senior author of FHWA's first report on the safety aspects of digital billboards, which I named "Commercial Electronic Variable Message Signs (CEVMS). That report, published in 1980, was judged the Outstanding Technical Achievement of the Year by FHWA, and was cited in an Amicus brief filed with the U.S. Supreme Court by the U.S. Department of Justice.

Since retiring from Government service, the consulting firm that I established, The Veridian Group, Inc., has served to advise and assist State, County and local Governments, as well as billboard owners and operators, in matters of driver and traffic safety. I have testified as an expert witness in numerous jurisdictions throughout the U.S., and have never been denied qualification as an expert.

I am a Fellow of the Human Factors and Ergonomics Society (HFES), a Certified Professional Ergonomist, and a Member Emeritus of the Transportation Research Board (TRB). I currently serve as Chair of TRB's Digital Billboards Subcommittee.

I have given invited presentations on the subject of roadside digital signage in several countries, and authored numerous peer-reviewed publications on this topic. I also serve as a reviewer for several prestigious professional journals and conferences.

I believe that I am eminently qualified to address the question that has been posed to me.

THE ISSUE.

As I understand it, the Texas Transportation Commission (Commission) issued a "Minute Order" on May 29, 2014, in which it proposed several rule changes regarding the control and regulation of outdoor advertising along interstate and primary roads. One of the proposed changes concerns the permitted height of such billboards; i.e. the rule change to Chapter 21, Subchapter I, Section 21.189(a) would change the maximum sign height from 42.5 ft, to 65 ft. This change is based, at least in part, on "scientific studies indicating that to have a functional viewing distance at 60-70 mph a sign should have approximately 65 feet of vertical offset."

TxDOT'S MISAPPLICATION OF THE CITED RESEARCH.

There are two principal forms of outdoor advertising visible to motorists traveling on interstate and primary routes. The first type is the *off-premise* advertising sign, commonly referred to as a *billboard*. The second type is the *on-premise* sign. The two types of signs serve two completely different purposes and hence are controlled or regulated quite differently. On-premise signs, as their name implies, typically announce the name of the business or service that is conducted on the premises on which the sign is located. They serve a purpose not unlike that of an official Tourist Oriented Destination (TOD) sign - i.e. they help the motorist to identify and locate the business and therefore assist in the driver's guidance or wayfinding task. On-premise signs are not regulated via the Highway Beautification Act; rather they are governed by local zoning codes, if at all.

Off-premise signs (billboards), conversely, do not serve the same purpose. They are not located on the same premises as that in which the business or service being advertised is conducted, and hence generally do not serve the same purpose of wayfinding that may be provided by an on-premise sign. Indeed, billboards commonly advertise products or services but serve no immediate guidance or wayfinding purpose - e.g. ads for movies, new cars, credit cards, or attorneys, to name a few. Billboards erected and operated along federal highways are regulated in accordance with the Highway Beautification Act (HBA) and through Federal-State agreements entered into as a result of the HBA.

Within the United States, the on-premise signage industry is represented by two major organizations, which often collaborate on projects: the United States Sign Council (USSC) and the International Sign Association (ISA). Conversely, the off-premise (billboard) industry is represented by the Outdoor Advertising Association of America (OAAA). Because of the different purposes served by off- and on-premise signs, there is little overlap or collaboration between the two industries, despite the fact the their signage products increasingly employ the same technology - that of light emitting diodes, or LEDs, which permit remote and instantaneous change.

The studies relied upon by TxDOT were sponsored, conducted, and published by the USSC, with the intent of application specifically to on-premise signs. There is nothing in these three documents to suggest or imply that the recommendations made are, or should be, applicable to roadside billboards.

Because on-premise signs may experience more constraints in location and placement than billboards, arguments about sign size, legibility, and height that the industry believes should be applicable to such signs are inappropriate when applied to billboards.

For this reason alone, I believe that TxDOT is unjustified in relying upon the recommendations contained in these documents to billboards.

APPROPRIATENESS OF THE TxDOT CITATIONS TO THE SCIENTIFIC STUDIES.

Although a TxDOT representative provided Ms. Lloyd with three PDF documents claimed to be responsive to her request for *all of the scientific studies relied upon* by TxDOT in its proposed rulemaking, a review of the three documents demonstrates that only one (Ref. 7 above) can be considered a "scientific study." Reference #5, "The Right Sign for Your Business," as provided in response to Ms. Lloyd's request, clearly does not meet the requirement of being a scientific study because:

It is but a fragment of a larger report that was *not* provided. Note that it contains only two unnumbered pages, and two tables –labeled Table 4 and Table 5, demonstrating that there is more to this report than was provided by TxDOT.

There is no research, and no reference to any research (with one exception) contained in this report. There is merely a series of self-serving recommendations meant to provide a basis for signs that are as large, as bright, and as tall as they can possibly be. I further note that the single research citation is to a paper prepared by Mr. Richard N. Schwab. I have known Mr. Schwab for 40 years; I worked with and for him at FHWA. I respect him and his work, but the paper cited in the provided document is not research – it is simply an opinion piece prepared by Mr. Schwab under contract to the signage industry.

The assumptions made that form the basis of the recommendations in this report excerpt are simply erroneous, and, in some cases absurd. Here are but two examples.

The report states: "Experts recommend designing signs with letters a minimum of one-inch tall for every twenty-five of distance." This is simply untrue. FHWA, in its Manual of Uniform Traffic Control Devices (MUTCD) previously recommended one inch of letter height to 40 ft of distance. To accommodate the aging U.S. population, that recommendation was recently changed to one inch of letter height to 30 ft of distance. It is not, and never has been, 25 ft.

The report bases its "required legibility distances" (which in turn drives its recommendations for sign size and height) on "how far a car at different speeds will travel from the time a driver first sees the sign *until the car safely comes to a stop*" (italics mine). It is patently absurd to assume, and to incorporate into guidance, that a driver, traveling at freeway speeds, will actually stop on the roadway because the driver has read an advertising sign. Can TxDOT find some justification for including stopping sight distance in its determination of the size and height that should be permitted for roadside billboards?

The claims made in the document (at least in the two isolated pages provided) are offered with no research basis.

For example, the report states: "Table 5 sets out generally accepted sign height guidelines." But no such basis is provided for this "general acceptance." There is certainly no acceptance from FHWA, which, through the MUTCD, sets out both minimum and maximum height guidelines for official traffic control signs (including regulatory, warning, and guidance signs), which all can agree deserve a greater precedence for roadside signage visible to drivers than do advertising signs. The authors state: "Freeway signs intended to be read from great distances should be very tall." We already know that these "great distances" include the provision for the driver viewing the sign to come to a complete stop (on the freeway).

But there is another factor to consider here. The MUTCD lays out in great detail the required size and height for signs that are intended to convey direct traffic-safety related messages. The very largest signs recommended in the MUTCD do not exceed 124 sq. ft., and the very tallest do not exceed 17 ft above the roadway grade. Can the authors of this report excerpt justify the need for advertising signs that are nearly five times taller than official highway signs? Can TxDOT make such a justification? If so, it should be spelled out.

In another ISA document¹ (not provided in support of this proposed rules change) the organization lists a series of "position statements" which represent "ISA's official positions on various important industry issues." One of these positions, titled: "On Premise Sign Size Standards," includes the following discussion: "... cities must consider the latest in scientific research and data regarding the relationship between sign sizes and motorist visibility (sic). Observing these guidelines is just as important with reference to commercial signs as it for traffic safety signs, the latter of which are governed by the Manual on Uniform Traffic Control Devices, *which uses minimum sign standards* italics added). What the ISA document fails to mention, however, is that the MUTCD also identifies *maximum* sign sizes.

Using the example provided by the supplied ISA document, a sign for Lydia's Beauty Shop, and using the data from their Table 4 which shows a "required" 720 foot readability distance at freeway speeds (> 65 mph as per their example) each of the sign's 18 letters would need to be 28.8 inches tall (at their misapplied 1 in. of letter height for each 25 ft. of distance). Using their math, if each letter occupied a square measuring 28.8 inches per side (i.e. 829.44 square inches per letter), and this sign included 18 letters, the sign message itself would have to occupy 14,929.92 square inches, not including the recommended additional 40% of empty/white space to surround the message. This would require the message area of the sign to be 103.68 square feet in size, the white space would require an additional 69.12 sq ft, and the overall sign would be 172.8 sq ft. This suggested size makes this example of an on-premise sign larger than certain formats of billboards known as posters, which are often 5 ft. high x 11 ft. wide (55 sq ft).

Now imagine, because these are on-premise signs under discussion, that these signs are to be placed in front of, or on the roof of, a small strip shopping center adjacent to the roadway, and that this shopping center contained 10 stores, If each store had an 18-letter name, one can quickly see

¹ <http://www.signs.org/GovernmentRelations/PositionStatements.aspx#On-Premise>

how absurd this argument becomes, with 10 signs, each measuring 172 square feet, one sign immediately adjacent to the next.

AUTHOR AND EDITORSHIP OF THE SCIENTIFIC STUDIES.

Only one of the three studies (Ref. 7) identifies the individuals responsible for its writing, editing and review. This section discusses what we know about these contributors.

Mr. Bertucci is a principal of Bertucci Maren Associates. Their company address is the same as that for the United States Sign Council (USSC), which sponsored this research. Bertucci Maren's phone number is 215-785-1920; that of the USSC is 215-785-1922. The Yellow Pages lists his company under: "Advertising Agencies and Counselors." They seem to have no website. An individual named Nancy Maren is the current Executive Director of the USSC. It seems likely that Ms. Maren is the other principal of Bertucci Maren Associates.

Richard B. Crawford, Esq. is listed as having provided "legal and technical review" of the report. Mr. Crawford is the owner of Mercer Sign Consultants, and served as President of the USSC as well as Chairman of the USSC Legislative Committee. Efforts to locate Mercer Sign Consultants on the web simply lead back to Mr. Crawford. Mr. Crawford seems to write or edit the USSC's periodic reports.

Philip M. Garvey is listed as having performed "research validation and peer review." Mr. Garvey is Senior Research Associate at the Thomas D. Larson Pennsylvania Transportation Institute of Penn State University. Mr. Garvey has performed several research studies for USSC and ISO over the years, some of which touch upon the subject of this report, sign height. This raises the question as to whether Mr. Garvey is truly a "peer reviewer" since much of the work in the present report is directly based on Mr. Garvey's earlier work for the same organization.

A look at the USSC website indicates how closely Mr. Garvey is linked with this organization:

On-Premise Sign Research Review, ...

www.signshop.com, 1 Jan 2014 [cached]

On-Premise Sign Research Review, presented by Philip Garvey, senior research associate, The Pennsylvania State University and Richard Crawford, legislative consultant, The United States Sign Council.

The USSC will be represented ...

www.signshop.com, 31 Mar 2010 [cached]

The USSC will be represented at the New Orleans APA event by Nancy Maren, USSC Executive Director; Rick Crawford, USSC Legislative Consultant; USSC President Perry Cook; Board Member Paul Tripp; and Philip Garvey, human factors research associate at Pennsylvania State University and a major contributor to the USSC Foundation research effort.

Looking further into Mr. Garvey's work for the USSC, it becomes clear that the current report under review is based heavily on his prior work for the organization, including:

"Sign Visibility Literature Review - Final Report," Submitted to United States Sign Council, December 15, 1995.

"What Message Are You Sending? - Improving Sign Visibility," Presented at ATSSA 26th Annual Convention and Traffic Expo '96, January 26, 1996.

"Model Guidelines for Visibility of On-Premise Advertisement Signs," funded by United States Sign Council, 1997.

Finally, a review of the USSC website under the heading "Publications," lists 19 studies that are available to the public for purchase. Of these 19 publicly available reports, the overwhelming majority (13) were performed by Mr. Garvey and his colleagues, and two were performed by Tantala. One was listed as being performed by Bertucci and Crawford.

Peter J. Tantala, P.E. is listed as providing "development of algebraic equations." Mr. Tantala is a principal in the firm Tantala Associates, based in Philadelphia, PA. This is a family owned consulting firm, and, together with Alfred Tantala and Michael Tantala, they have performed, under contract, many studies on behalf of the outdoor advertising industry (primarily OAAA). Their most recent study submitted for presentation and publication to the Transportation Research Board (TRB) of the National Academies was rejected in independent peer review as being biased and using inappropriate research methods and statistical analysis. (This was in 2009, and they have not submitted any of their subsequent research for TRB review). The volume of work that the Tantala firm has done for OAAA can be seen here:

<http://www.oaaa.org/Search.aspx?sb-inst=1002&sb-search=tantala>

HEIGHT REQUIREMENTS FOR OFFICIAL HIGHWAY SIGNS.

It should be without argument that official highway signs should take precedence on our primary and interstate routes over commercial advertising signs, whether on- or off-premise. This is clearly stated throughout the MUTCD. A search of the FHWA MUTCD website indicates 12 places where the word "advertising" appears in the 2009 edition of the MUTCD. These occurrences clearly indicate that advertising is never permitted as part of official traffic control devices:

http://search.fhwa.dot.gov/search?client=fhwa_web&site=fhwa_web&output=xml_no_dtd&proxystylesheet=fhwa_web&ie=UTF-8&oe=UTF-8&as_q=advertising+&num=10&btnG=Search&as_epq=&as_oq=&as_eq=&lr=&as_ft=i&as_filtype=&as_occt=any&as_dt=i&as_sitesearch=mutcd.fhwa.dot.gov/htm/2009&sort=date:D:L:d1&as_lq=&ulang=en&ip=162.233.200.238&access=p&entqr=3&entqrm=0&ud=1&start=0

Further, in the agreements between FHWA and the States as part of the Highway Beautification Act (HBA), there are clearly stated prohibitions on the time, place, and manner in which roadside billboards may appear.

The purpose of the MUTCD is to communicate to drivers information that is timely, accurate, and relevant to their driving task. The design and placement of official signs has been based on nearly 100 years of research, and concerns every aspect of their size, appearance, and placement. This is done to ensure that they can be perceived, comprehended, and acted upon by drivers in a timely and safe manner. The fact that the largest recommended size of *any* official sign is 144 x 124 inches (124 sq ft), and signs this large are very rarely used, and the greatest recommended height above the roadway that any official sign should be is 17 ft. indicates that, for purposes of safety, there is no need to have signs be any larger or higher than these limits.

The fact that outdoor advertisers seek to have their signs dramatically larger (roadside billboards adjacent to highways are typically 14 ft by 48 ft (672 sq. ft) or 20 ft by 60 ft (1200) sq. ft) and dramatically higher (65 ft per the current proposal) simply so that advertisers can communicate their messages at the expense of official traffic control devices, is in direct conflict with the purpose of the MUTCD and the decades of research that has gone into its development and refinement focused on traffic safety.

Although each jurisdiction uses slightly different terminology, one of the universal prohibitions against billboards is that they shall not conflict or interfere with the visibility of traffic control devices, including signage. Permitting the installation of billboards at the height proposed in this draft legislation violates this prohibition and is harmful to traffic safety in several ways:

Because of their proposed height, they conflict with the ability of drivers to observe and read traffic control devices, which are, by design, located closer to the driver's eye level. They do this by drawing the driver's eye upward to their larger, brighter, more colorful display, at the expense of the official traffic signage.

Because of their height, they will require the driver to take his or her eyes off the road for a longer period of time. Official traffic signs are required to be placed at low elevations above the road surface precisely so that they can be read quickly and easily. The higher a sign is placed, the farther and longer a driver must look away from the road to read it.

If advertisers adhered to their own industry guidance to keep their signs simple, with few words, simple fonts, and reasonable figure-ground contrast, this type of distraction would be less of an issue. But despite the existence of such industry guidelines, and similar recommendations for readability published in the MUTCD, too many billboards are designed to be intentionally difficult and time consuming to read - based on the misguided assumption that the longer the driver focuses on the sign, the more memorable the message will be. Thus, allowing the proposed higher mounting locations will exacerbate, rather than reduce, this problem.

Finally, there is another, even more egregious error, in the development of this guidance by the USSC. The organization's recommendations for increased heights are based on the "need" for a

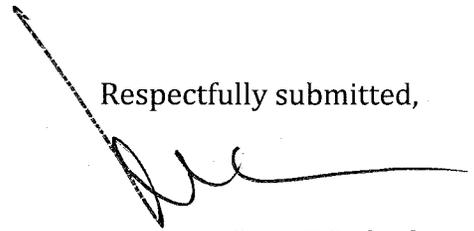
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driver to read these signs *without loss of eye contact* (italics added) – see Ref. 6, Line 1. In other words, these industry groups want drivers to be able to read such advertisements at great distances, while looking at them continuously. The obvious danger of this position is that, while looking continuously at an advertising sign, the driver cannot be simultaneously looking at traffic or the road ahead. In fact, the same document suggests two different “reading times,” one that is five seconds long, the other that is eight seconds long. Since we know that, when a driver takes his/her eyes off the road for a period of two seconds or longer, the risk of crash or near crash increases by 2.8 times, it seems outrageous that the signage industry would propose an increase in sign heights so that drivers could read such signs, without interruption, for five or eight seconds. Yet that is exactly what this proposal is intended to accomplish. Indeed, if we extend the USSC’s argument to its logical conclusion, if there are multiple advertising signs adjacent to the roadway, and if each sign was placed such that drivers could view them “without loss of eye contact” for five or eight seconds, the driver would never be able to look at the road or the traffic ahead.

CONCLUSION.

The proposed changes to the Texas Transportation Code that would permit billboard heights to be raised from 42.5 to 65 feet are unwise and unwarranted. It is based on flawed research, developed and peer reviewed by the same individuals working on behalf of the same organizations. It conflicts with guidance in the MUTCD, and serves the purpose of making commercial advertising signs more important and more attention getting than official traffic control signs. And it is based on the unreasonable belief that advertising signs must be visible to drivers continuously (i.e. without loss of eye contact) which ensures that such drivers must have their eyes off the road continuously to be able to read these commercial signs.

Respectfully submitted,



Jerry Wachtel
President



July 11, 2014

Ms. Margaret Lloyd
Vice President, Board of Directors
Scenic Texas

Re: Proposed TxDOT Rule §21.189(a) that would increase the current height from 42.5 to 65 feet.

Dear Ms. Lloyd:

I understand that you provided testimony before a TxDOT Public Hearing on June 24, 2014, concerning the Department's proposed rule change to allow an increase in the height of roadside billboards from 42.5 to 65 feet.

Your arguments in favor of an alternate proposal, one that would reduce billboard heights to 30 feet, are based primarily on environmental and aesthetics grounds. I would like to add another reason in favor of such a height reduction: a reduced level of driver distraction caused by such signs.

Billboards are intended and designed to attract the driver's attention long enough to communicate the advertiser's message. It is well understood, and supported by numerous scholarly articles and texts, that a shorter, simpler message, using clear fonts and proper image-to-background contrast, is far more successful at communicating than longer messages which are difficult to read. Yet advertisers using billboards as a medium continue to violate their own industry guidelines in the mistaken belief that the more time consuming or difficult the message is to read, the longer the driver will attend to it, and thus the more "effective" it will be. When coupled with billboards that are mounted high above the road surface, driver distraction is further increased because of the time necessary for the driver to lift his head and turn his eyes to view such a sign.

Since we cannot force advertisers to design their billboard messages to be short and simple, we should, at the very least, bring the billboards closer to eye level so that the total amount of time that a driver must take his or her eyes off the road to read a message is reduced to the extent possible.

The billboard industry's argument that billboards must be placed higher above the road surface to allow them to be read without obstruction from large trucks or buses in the traffic stream or from fixed objects such as trees and flyovers makes little sense, for two reasons promulgated by the industry: (1) The industry calculates the amount of time that a driver needs to read a billboard to include the time necessary for the driver to come to a complete stop;¹ and (2) the industry makes its calculations and decisions based on its position that the driver must have an uninterrupted time of five or eight seconds (depending upon the type of roadway) to view and read an

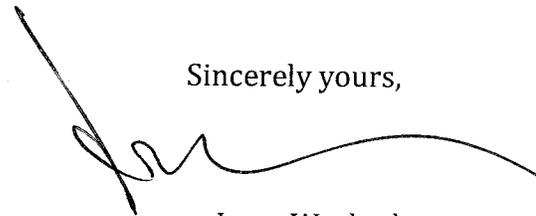
July 13, 2014

advertising sign.² The absurdity of these arguments are apparent: we never expect (or condone) a driver stopping on a high speed roadway as assumed by the industry; and we know from recent research that when a driver takes his or her eyes off the roadway for two or more seconds, the likelihood of a crash or near crash increases by 2.8 times.

For these reasons, I believe that lowering billboard mounting heights to 30 feet will reduce the "eyes off road" time for drivers, while still permitting sufficient sight distance for properly designed billboards to be read. (It should be noted that official traffic control signs, which are typically much smaller than most roadside billboards, are rarely if ever mounted more than 17 feet above the road surface).

Please let me know if I can provide any additional information or clarification of my position in support of your proposal.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Jerry Wachtel", with a long horizontal flourish extending to the right.

Jerry Wachtel

¹ See International Sign Association - *The Right Sign for Your Business*. © 2013.

² See United State Sign Council - *USSC Research Based Approach To: Sign Size, Sign Legibility, Sign Height*, © 2003.

Exhibit C
Testimony of Margaret Lloyd, Scenic Texas
TxDOT Public Hearing June 24, 2014

Scenic Texas works to preserve and enhance the visual character of Texas. We have chapters in the cities of Houston, Fort Worth, Dallas, Austin, and San Antonio, in the counties of Comal and Fayette, and an affiliate in Galveston. Scenic Texas is an affiliate of Scenic America. I am the Vice President of Scenic Texas and Vice Chair of Scenic America.

Scenic Texas has no comments to the first two rule changes regarding on-premise sign exceptions and spacing.

We do object to all the increased height proposals under Section 21.189. Our members believe the rules proposed under 21.189 would cause visual degradation of the views along all federal highways that run through unincorporated areas of our state and could greatly surprise those cities that haven't adopted height standards other than the 42.5 feet imposed by this agency 30 years ago.

Today I'd like to make some observations and provide an alternative suggestion to the 65-foot limit.

My observations focus on the lack of public purpose of the proposed height rules.

In fact the stated purposes contained in the notice have very little, if anything, to do with the public. Instead we are told that this rule change was requested by certain stakeholders, and that those stakeholders are members the very industry this agency regulates---outdoor advertisers---to increase visibility of their signs.

This need for greater visibility is supposedly documented by "scientific studies" suggesting that the current 42.5 ft. height may be dangerous to the traveling public.

Although I could provide many reasons why this proposition is not intellectually honest, today I will only mention a handful.

First, we understand that there is one report with excerpts from that one report presented so it appears there is more than one report.

Second, the sign industry funded the group that produced the one report, which means the independence and reliability of the report should be considered.

Third, the report has nothing to do with off-premise advertising billboards; it only addresses the size of on-premise business signs.

Fourth, even if TxDOT believes that the current sign height is dangerous, shouldn't the signs be removed or lowered rather than raised? In other words shouldn't they be less visible and less distracting? IF the current height has caused accidents, we urge TxDOT to provide the accident reports to the public.

Actually it may be true that these billboards are dangerous but possibly not because travelers can't see them. Last week, a billboard fell on a pump station in Midland and caused TxDOT to

close the highway to the traveling public until the billboard could be removed. This is not an isolated incident. I encourage TxDOT to review the national records on billboard accidents to see how many others have fallen or caused damage to property---not to mention billboard workers who have been seriously injured or killed while working on these signs.

Yes, if billboards are falling down on our highways, that does create a traffic hazard. And if the signs are dangerous, we believe TxDOT should take action---but not be to make the signs even taller and more dangerous than they are now.

The public purposes are set forth in the Texas Highway Beautification Act, Chapter 391 of the Transportation Code, that is:

- (1) to promote the health, safety, welfare, morals, convenience, and enjoyment of the traveling public; and
- (2) to protect the public investment in the interstate and primary systems.

So let's be honest---raising billboard height is a private industry desire to increase the value of their signs. Nothing about that equates to a public purpose.

Other than from billboard owners and advertisers, we have heard nobody request more invasive visual pollution. The members of Scenic Texas and others we have spoken to from the public have no desire for billboards to become more visible---they do not want them any taller, larger, brighter, or more prominent. In fact, our members believe the existing height is too tall and would like to see them less visible than they are today.

So today we recommend that instead of adopting a rule that raises them to 65 feet, they be lowered to 30 feet ---especially in all areas located outside a city's jurisdiction. We make this recommendation because we work with public officials and Texas leaders every day who are trying to make their cities more beautiful and less cluttered. They understand that Beauty is good for Business, for Tourism, and for the quality of life of those in their communities. For example, in Houston the number of billboards have been reduced from some 15,000 in 1980 to about 1,500 today. And in only a few years of being in existence, the Scenic City program has recognized about 40 cities in Texas for adopting ordinances that will ultimately result in a more beautiful community.

So we make this 30 foot height recommendation because it DOES have a public purpose. Lowering billboards meets the stated public purposes of Chapter 391. Raising the billboards is contrary to these purposes.

Because your mandate is to adopt rules to further these public purposes, we believe the proposed rule must be removed from consideration and that the 65 foot proposal should be changed to 30 feet. Especially on highways outside major urban areas, a 30 foot sign (or about 3 to 4 stories tall) is more than sufficient to tell us what fast food, sodas or type of alcohol to buy, and it's more in line with the height of the official TxDOT signs.

I was raised in the south and taught to be grateful when others gave me a gift---I was taught to say thank you. And I was in corporate America for decades where free enterprise and less government were legitimate corporate goals---the bottom line was the primary consideration for every transaction.

BUT even in corporate America, there is a recognition that certain risks must be assumed by the business---that all risk cannot and should not be transferred to the customers, the public, or others. Risk is inherent to every business.

What we see here today is corporate greed without gratitude.

I say that because the publicly-funded highway is the ONLY reason the billboard has value in the first place. It is the public highway location and our passing vehicles that give the billboard its value. And that valuable location is granted to the billboard owner for the cost of an annual permit and license.

The rest of us pay fuel taxes or tolls for the construction and maintenance of the highways. No fuel taxes or tolls are paid by the billboard companies that also use our highways. Most businesses pay sales taxes. But billboard companies in Texas pay no sales taxes on their advertising revenues---they are legislatively exempt. And billboard owners pay very little property taxes since their values are based upon personal property renderings.

But when the land where the billboard sits is needed for public highway purposes, the owners that have paid next to nothing for all these years argue that the sign is real property and they should recover future lost income. And, on the very issue, you have a case pending at the Texas Supreme Court right now. Why consider making billboards more visible and thus more valuable?

Honestly, this is the only polluter I know of that is provided a government permit to pollute, that it then allowed to pollute for as long as they wish to be there, and after that is paid to stop polluting when we need the land.

When I invite someone to stay in my home, rent free, in exchange for a small entrance fee to get their room ready, I would expect them to be grateful and say thank you. I wouldn't expect them to ask if they can leave their lights on all night, turn their music up to volume 10, and keep their room in shambles. And, in my wildest dreams, I wouldn't expect them to ask for a cash payment to vacate when I need the room back for my own family. No---I would expect them to say thank you and even give me a nice going away gift for the years of consideration.

But here, there are no thank you's. Instead there are requests for more----for the signs to be taller and more visible, the lights to be taller so more intrusive into our dark nights, and the sign pollution to be taller and more obvious.

So, how much is enough?? The OAAA reports that our public highway system and our agreements to allow their advertisements line our publicly-funded highways has given them rich rewards. The stakeholders your proposed rule accommodates is a 7 billion dollar industry.

In fact, here are the exact numbers. Outdoor advertising revenue – grew 17% in the past 5 years:

5.9 billion in 2009,
6.1 billion in 2010
6.4 billion in 2011
6.7 billion in 2012
and 6.9 billion in 2013

And outdoor advertising revenue rose another 1 percent in the first quarter of 2014. The revenue increase marks the industry's 16th consecutive quarter of growth. According to Kantar Media, outdoor advertising outperformed radio, newspapers, and magazines.

Now let's take a look at how much outdoor advertising exists across America.

49,082 — bus shelter displays
30,532 — shopping mall displays
158,868 — billboards
4,400 — digital billboards
33,336 — junior poster billboards
4,029 — wallscapes/spectacular signs
205,426 — displays on buses
68,560 — airport displays
184,078 — subway and rail displays
10,593 — truckside/mobile ad vehicles
46,194 — taxis/wrapped vehicles
17,800 — movie theater displays
300 — digital place-based networks
1,352 — arenas and stadiums

SO---how much is enough?

Almost 50 years ago when Texas' own President Johnson signed the federal HBA---the very reason we are here today---he said:

“This administration has no desire to punish or to penalize any private industry, or any private company, or any group, or any organization of complex associations in this Nation. But we are not going to allow them to intrude their own specialized private objective on the larger public trust. Beauty belongs to all the people. And so long as I am President, what has been divinely given to nature will not be taken recklessly away by man.”

So, 50 years later, I ask you---please do not adopt these new height rules that will recklessly give away the natural beauty of Texas. Instead we ask that you adopt our suggested 30-foot standard that will lower the advertisements along with their bright lights.

The 30 foot standard does have a public purpose.

A lower height would respect and preserve our beautiful rural landscapes, would make billboards less visible and thus safer for the traveling public, and would decrease rather than increase the contingent liability that is demanded at condemnation.

And adopting rules to decrease visual pollution rather than increasing it will promote the stated values of TxDOT: Trust, Integrity, Responsibility, Excellence and Service.

You are charged with enforcing and protecting the integrity of our publicly funded highway system---the larger public trust---from a seven billion dollar industry that makes its profit by polluting our highways. As such, we rely on you to always keep the interest of the public stakeholders clearly in focus.