PROPOSED REGULATION OF THE DEPARTMENT OF TRANSPORTATION

LCB File No. R153-16

NAC 410.350 is hereby amended to read as follows:

NAC 410.350 Sign construction: Illumination; commercial electronic variable message signs. (NRS 410.400)

- 1. Signs [must] shall not be [placed with] erected or maintained which shall be so illuminated [ion] that they interfere[s] with the effectiveness of or obscures any official traffic sign, device or signal. Signs must not include or be illuminated by flashing, intermittent or moving lights, except any parts necessary to give public service information such as the time, date, temperature, weather or similar information. The terms flashing, intermittent or moving lights is not limited to actual lighting, and includes stationary and or moving reflective disks and rotating slats that reflect light in a flashing or moving manner, and create the effect of moving or flashing light, or emit odors, smoke or sound. Signs must not cause beams or rays of light to be directed at the traveled way if the light is of such intensity or brilliance [or is likely to be mistaken for a warning or danger signal or] as to cause glare [or] that impairs the vision of [any] the driver [,] of [a] any motor vehicle or [to] interfere with any driver's operation of a motor vehicle. Illumination or lights for signs must not resemble or simulate any lights used to control or warn traffic or provide danger signals.
- 2. [A c] Commercial electronic variable message signs (CEVMS) [,] include [ing, without limitation, a] trivision signs and digital billboard signs. A digital billboard shall contain static messages only, and shall not have movement, or the appearance or optical illusion of movement during the static display period, of any part of the sign structure. Each static message shall not include flashing or the varying of light intensity. CEVMS technology, shall, not, in itself. constitute the use of [, may be approved as an off-premise outdoor advertising sign in an urban area if the sign does not contain] flashing, intermittent or moving light or lights. A CEVMS sign when operated in accordance with the operating standards in Section 3 below shall not constitute [does not cause a] glare [on the roadway and the following conditions are met:] or the use of flashing, intermittent or moving light or lights hereunder. A CEVMS sign does not include a sign located within the right-of-way that functions as a traffic control device and that is described and identified in the Manual on Uniform Traffic Control Devices (MUTCD).
- 3. A CEVMS including, without limitation, a trivision sign. may be approved as an off-premise outdoor advertising sign in an urban area if the sign does not contain flashing, intermittent or moving light or lights, does not impair the vision of the driver of any motor vehicle, or interfere with any driver's operation of a motor vehicle within the right-of-way, and the following conditions are met:
 - (a) An existing sign may be modified or updated if the sign conforms with established criteria relating to zoning, size, lighting and spacing.

(b) In a county whose population is less than 1,000,000, a message on a trivision sign shall have a minimum static display time of eight (8) seconds and a maximum change interval of three (3) seconds. A message on a digital billboard sign shall have a minimum display time of eight (8) seconds and shall transition instantaneously to the human eye.

In a county whose population is more than 1,000,000, [A] a message on a trivision sign [may] shall have a minimum static display time of six (6) seconds and a maximum change interval of three (3) seconds. A message on a digital billboard sign shall have a minimum display time of six (6) seconds and shall transition instantaneously to the human eye.

- (c) A trivision sign must contain a mechanism that will stop the sign in one position if a malfunction occurs. A digital billboard sign shall be operated with sufficient safeguard systems and monitoring in place to prevent unauthorized access, use or hacking, including infrastructure, hardware, software and networks by unauthorized users.
- (d) In the event of a malfunction the digital billboard owner must either turn the display off, show a "full black" image, or freeze an authorized image on the display in one position until such time as the situation has been corrected. [If a sign is installed that does not comply with the provisions of this subsection, the owner of the sign shall correct the violation or remove the sign at the owner's expense.]
- (e) It does not violate any applicable sections of 23 U.S.C. § 131, and amendments thereto and regulations promulgated thereunder. [Prior approval from the Department is required to modify existing signs to include the commercial electronic variable message sign, and a new permit fee of \$150 will be charged.]
- (f) A digital billboard shall use automatic dimming technology to adjust the brightness of the digital billboard relative to ambient light so that at no time shall a digital billboard exceed a brightness level of three tenth (0.3) foot-candles above ambient light, as measured using a foot-candle meter and in conformance with the following distance table:

Sign Face Size	Distance of Measurement
681-1200 square feet	350 feet
385-680 square feet	250 feet
300-385 square feet	200 feet
200-300 square feet	150 feet

Each digital billboard shall be equipped with a light sensing device that will adjust the brightness as ambient light conditions change. The measurement shall be conducted at least thirty-minutes (30-minutes) after sunset or at least thirty-minutes (30-minutes) before sunrise.

(g) In a county whose population is less than 1,000,000, if the foot-candle reading exceeds three tenths (0.3) foot-candles above ambient light maximum, then the nighttime luminance shall not exceed two-hundred-fifty (250) nits (candelas per square meter (cdlm2)) which may be measured with a nit gun or luminance meter that can read to the accuracy of five (5) nits.

In a county whose population is more than 1,000,000, if the foot-candle reading exceeds three tenths (0.3) foot-candles above ambient light maximum, then the nighttime luminance shall not exceed three-hundred-fifty (350) nits (candelas per square meter (cdlm2)) which may be measured with a nit gun or luminance meter that can read to the accuracy of five (5) nits.

- (h) A digital billboard when operated in accordance with the operating standards in this Section 3 shall not constitute glare or the use of flashing, intermittent or moving light or lights.
- (i) If a CEVMS display is installed that does not comply with the provisions of this section, the owner of the CEVMS display shall correct the violation or remove the CEVMS display at the owner's expense within sixty (60) days. If sixty (60) days after the receipt of written notice from the Department the owner has not corrected the violation or removed the CEVMS display, the Department may remove the CEVMS display at the owner's expense. Notwithstanding the foregoing, the owner may continue to operate the outdoor advertising structure with conventional non-CEVMS static display faces.
- (j) The permit may be amended when seeking to modify or upgrade existing signs to include a CEVMS. For any approved amendments for upgrade or modification, a permit fee of eight-hundred dollars (\$800.00) shall be charged to cover the Department's cost of administration and regulation of tire signage. An existing static outdoor advertising sign may be upgraded to a CEVMS, or a CEVMS may be converted to a static display sign, provided that:
 - 1. the sign has been approved by the local government, if applicable, or is a legal non-conforming sign, under local law only, and conversion has been approved by the local government: or
 - 2. is a conforming sign; and all applicable and outstanding fees paid.

[Dep't of Highways, Outdoor Advertising Control Manual p. 11, eff. 1-28-77]-(NAC A by Dep't of Transportation by R058-97, 12-11-98)

Definitions:

A Trivision sign means;

A type of CEVMS, is defined as an off-premise sign utilizing changeable message technology, capable of changing the static message or copy on the sign electronically or mechanically, or by remote control, by movement or rotation of panels or slats.

A Digital Billboard sign means;

A type of CEVMS, is defined as an off-premise sign utilizing digital message technology, capable of changing the static message or copy on the sign electronically. A Digital Billboard may be internally or externally illuminated. Digital Billboards shall contain static messages only. and shall not have animation, movement, or the appearance or optical illusion of movement, of any part of the sign structure. Each static message shall not include flashing or the varying of light intensity.

Glare means;

A visual condition in which there is excessive contrast or an inappropriate distribution of light sources that limits the ability to distinguish details and objects. A Digital Billboard operating at or below the maximum brightness allowed in this section, shall not be considered to be a source of glare.

luminance means;

lu·mi nance / 'lumenens / [loo-muh-nuhns] - noun

- 1. the state or quality of being luminous.
- 2. Also called luminosity. the quality or condition of radiating or reflecting light: the blinding luminance of the sun.
- 3. Optics. the quantitative measure of brightness of a light source or an illuminated surface, equal to luminous flux per unit solid angle emitted per unit projected area of the source or surface.

Illuminance means;

l·lu mi·nance / i'lumenens / [i-loo-muh-nuhns]

Illumination, Also called illuminance, intensity of illumination. Optics. the intensity of light falling at a given place on a lighted surface; the luminous flux incident per unit area, expressed in lumens per unit of area.

Foot-candle means;

A traditional unit of illuminance or illumination, defined as the illuminance received by a surface at a distance of one foot from a source of intensity.

Also:

A unit of illuminance on a surface that is everywhere one foot from a uniform point source of light of one candle and equal to one lumen per square foot

Nit means:

A unit of illuminative brightness equal to one candle per square meter.