

IDA STATEMENT ON ARIZONA HOUSE BILL 2507

Electronic Message Centers, or EMCs – more commonly known as “digital” or “electronic” billboards – are an updated form of conventional advertising enabled by the rapidly maturing technology of LED lighting. In contrast to most conventional billboards, EMCs display dynamic messages, enabling advertisers to sell effectively more ad space. Messages can be timed according to particular constraints, and can even perform a public service in relaying amber alerts and other information.

But EMCs also represent a new source of artificial light at night whose design characteristics make them impossible to effectively shield. Light emitted from EMCs is directed horizontally, resulting in the scattering of a significant fraction upward into the night sky. The rapid proliferation of EMCs threatens to displace conventional billboards, whose external illumination is subject to effective shielding. The International Dark-Sky Association generally opposes public policies that permit EMCs, given that their design makes it impossible to mitigate the emission of stray light at angles above the horizontal.

EMCs are currently only allowed in parts of Arizona as the result of a 2012 agreement between the outdoor advertising industry and the professional astronomy community. An initial proposal to allow EMCs throughout Arizona was approved by the Arizona Legislature but vetoed by then-Governor Jan Brewer, who wrote in the letter to the Legislature accompanying the veto that “the astronomy industry has invested \$1.2 billion in Arizona, represents more than 3,300 jobs and has an estimated economic impact of \$250 million a year. I simply refuse to place all of this in jeopardy.” Advertisers hammered out a compromise² with the astronomers later in the same legislative session that allowed EMCs, but placed several important constraints on their distribution and operation³:

- EMCs cannot feature animated images;
- Images displayed must be static for at least eight seconds, and transitions between images can last for no longer than two seconds;
- Luminance values for EMCs are limited to either 300 or 342 nits⁴, depending on display size, between sunset and 11PM;
- EMCs may only be erected in a restricted region of Arizona including the greater Phoenix metro area and the Interstate 8 and 10 corridors, running west to the Colorado River, in which they do not threaten operations at certain professional astronomical observatories.

Arizona lawmakers are currently considering House Bill 2507, a proposal that would increase the territory in western Arizona in which EMCs are permitted under the restrictions of the 2012 compromise. On the attached map, the green-shaded region shows the part of Arizona in which EMCs are allowed under the compromise, while the red-shaded region indicates new territory in which EMCs would be allowed if the bill becomes law. The other requirements of the 2012 compromise would still apply to EMCs erected in this new region, but HB 2507 would effectively

² [HB 2757](#) (2012)

³ [Arizona Revised Statutes §28-7902\(E\)](#)

⁴ A nit is a non-SI unit of luminance. One nit is equal to one candela per square meter.

double the land area where EMCs are permitted. Expanding the zone in which EMCs are permitted will add new sources of unshielded artificial light at night to one of the naturally darkest regions of Arizona, including Grand Canyon-Parashant National Monument (blue shaded region), an IDA International Dark-Sky Park⁵.

Furthermore, if HB 2507 is successfully enacted into law, the outdoor advertising industry will certainly return during future legislative sessions seeking to further expand the reach of EMCs into other presently dark corners of the state. Such a move would endanger other IDA-designated Dark Sky Places⁶ in Arizona, indicated on the map in yellow, and directly imperils the state's burgeoning "astrotourism" industry. It may also harm efforts to bring future professional astronomy facilities, and their associated economic activity, to Arizona.

IDA opposes this legislation. We are joined in our opposition by the editorial board of the Lake Havasu News-Herald⁷, the Arizona Astronomy and Planetary and Space Sciences sector, the Arizona Optics Industry Association, and the National Park Service⁸. Anyone concerned about dark skies in Arizona should similarly oppose the advance of EMCs into new corners of the state represented by HB 2507 until their impact is better understood.

EMCs add more unnecessary light to the nighttime environment, and contrary to advertising industry claims, EMCs may be distracting to drivers, even with no animation, long message dwell times and quick transitions. It is simply not established scientifically whether EMCs present a public safety hazard. Furthermore, we believe HB 2507 is a bad-faith effort on the part of the outdoor advertising industry, which previously agreed to halt the expansion of EMCs into new parts of Arizona.

We urge all Arizona legislators to vote "no" on HB 2507 and oppose further changes to ARS §28-7902 contradictory to the spirit of the 2012 compromise. Interested Arizona residents should direct comments on HB 2507 to the following individuals:

Rep. David M. Gowan (Dist. 14; Speaker)

Arizona House of Representatives
1700 W. Washington, Room 130
Phoenix, AZ 85007
Phone: 602-926-3312
Fax: 602-417-3130
Email: dgowan@azleg.gov

Rep. Sonny Borrelli (Dist. 5; bill sponsor)

Arizona House of Representatives
1700 W. Washington, Room 310
Phoenix, AZ 85007

⁵ <http://darksky.org/idsp/parks/parashant/>

⁶ <http://darksky.org/idsp/>

⁷ http://www.havasunews.com/opinion/electronic-billboards-dark-skies-don-t-mix/article_bd62e1bc-d2e1-11e5-97df-63fac743f2ca.html, 13 February 2016

⁸ See attachment.

Phone: 602-926-5051

Fax: 602-417-3003

Email: sborrelli@azleg.gov

Rep. J. Christopher Ackerley (Dist. 2; House Transportation and Infrastructure
Committee member)

Arizona House of Representatives

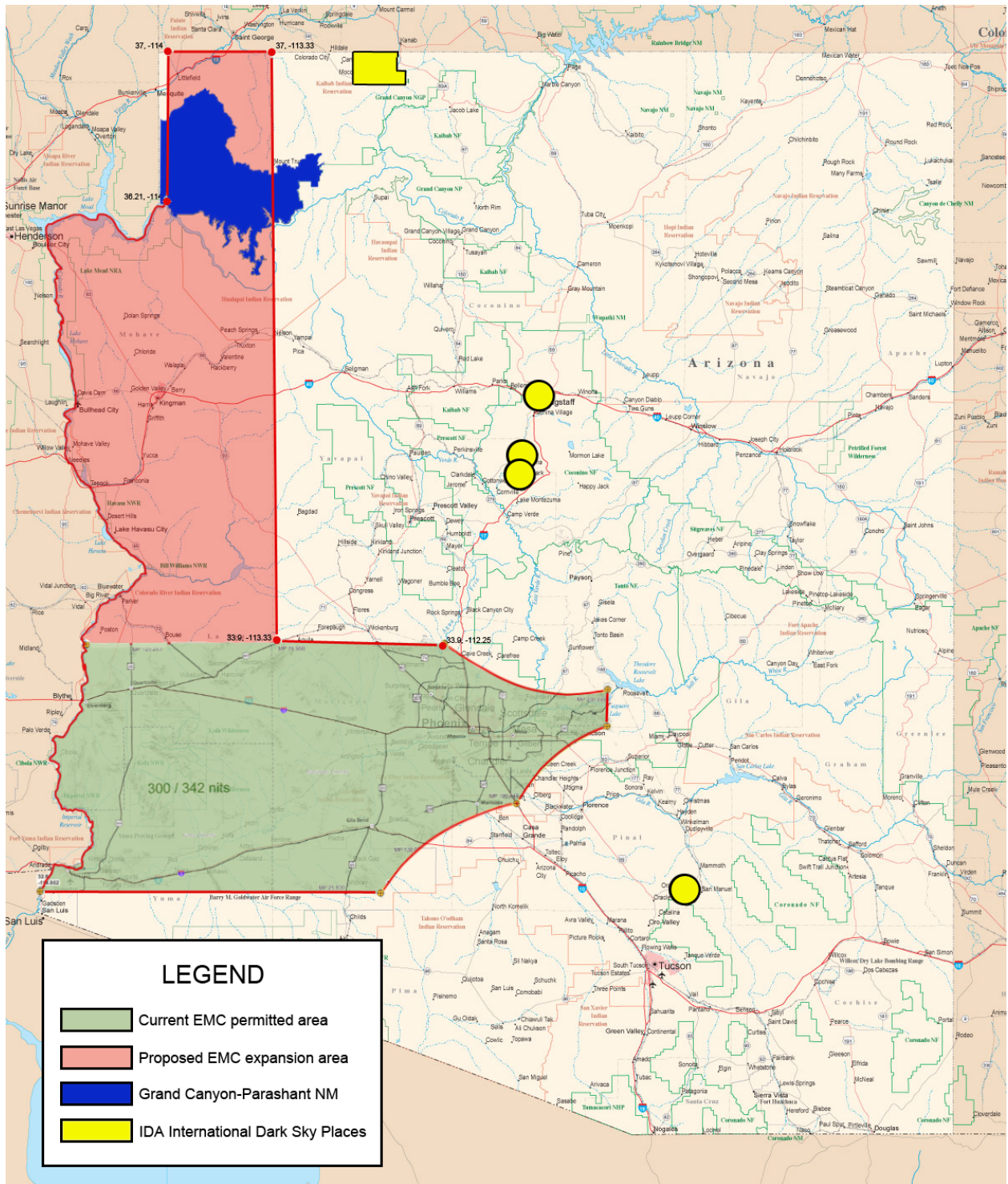
1700 W. Washington, Room 127

Phoenix, AZ 85007

Phone: 602-926-3077

Fax: 602-417-3277

Email: jackerley@azleg.gov



LEGEND

- Current EMC permitted area
- Proposed EMC expansion area
- Grand Canyon-Parashant NM
- IDA International Dark Sky Places



United States Department of the Interior



NATIONAL PARK SERVICE
Grand Canyon-Parashant National Monument
345 East Riverside Drive
St. George, Utah 84790
www.nps.gov/para

February 17, 2016

Susan Donahue
AZ State Senate, District 5
1700 W. Washington, Room 304
Phoenix, AZ 85007

Re: Proposed Legislation Regarding Outdoor Advertising, HB2507

Dear Senator Donahue:

I am providing comments on behalf of the National Park Service regarding HB2507 (Amending Section 28-7902, Arizona Revised Statutes; Relating to Outdoor Advertising) This bill proposes the expansion of electronic outdoor advertising within the Northwest portion of Arizona along the right-of way of interstate, secondary or primary roads.

This expansion has the potential to affect the natural and night environment of Grand Canyon-Parashant National Monument (Monument), jointly managed by the Bureau of Land Management (BLM) and National Park Service (NPS). The Monument was designated an International Dark Sky Park in 2014 in recognition of the natural dark skies of this area important to ecological function, nocturnal habitat, public recreation, wilderness character, and astronomy-based tourism. The installation of these electronic outdoor advertising devices will impact these important monument resources due to the unnatural light levels emitted, which are beyond typical highway levels, for 10 miles in all directions due to their effect of scattering bright light and rapidly changing images.

In order to mitigate impacts from light pollution on Monument resources, the National Park Service requests that you carefully review the need to expand the electronic outdoor advertising along Interstate 15 through Arizona, especially the portion that traverses through the Virgin River Gorge of the Paiute Wilderness, an area of exceptional dark sky viewing. Natural night skies have become rare. We are fortunate to have an International Dark Sky Park in our community, and hope we can preserve it for perpetuity. We appreciate the opportunity to comment on this proposed legislation. If we can answer any questions or provide additional information, please contact me.

Sincerely,

Rosalie M. Pepito
(435) 688-3226
Superintendent
National Park Service
Grand Canyon-Parashant National Monument