HOUSE HB 916 RESEARCH Gallego, Culberson **ORGANIZATION** bill analysis (CSHB 916 by Wolens) 05/12/1999 SUBJECT: Restricting state funding for outdoor lighting fixtures COMMITTEE: State Affairs — committee substitute recommended VOTE: 14 ayes — Wolens, S. Turner, Alvarado, Bailey, Counts, Craddick, Danburg, Hilbert, Hunter, D. Jones, Longoria, Marchant, McCall, Merritt 0 nays 1 absent — Brimer WITNESSES: For — Robert Gent, International Dark Sky Association; James Walker, Big Bend Astronomical Society and Big Bend Regional Sierra Club; David Clark; Valerie Clark; Kelley Knight; Michael McCants; Ruben Solis Against — None On — Mark Adams, McDonald Observatory; Karl Burkett, Texas Department of Transportation DIGEST: CSHB 916 would create standards for state-funded outdoor lighting fixtures in a new chapter of the Health and Safety Code. Under the bill, state funds could be spent to install, replace, maintain, or operate an outdoor lighting fixture only if: the new or replacement outdoor lighting fixture was a full cutoff • luminaire allowing no direct light to travel upward into the night sky if the rated output of the lighting fixture was greater than 1,800 lumens; the minimum illuminance specified by local ordinance was used, if a local • ordinance applied, or the minimum illuminance adequate for the intended purpose was used, if a local ordinance did not apply; for lighting a highway, the Texas Department of Transportation had • determined that the installation of "passive" methods such as reflective road markers, lines, or warning or informational signs would not suffice for the intended purpose; and full consideration had been given to energy conservation, reducing glare, • minimizing light pollution, and preserving the natural night environment.

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The prohibition against state funding for an outdoor lighting fixture would not apply if:

- a federal law, rule, or regulation preempted state law;
- the outdoor lighting fixture was used temporarily by emergency personnel for emergency procedures;
- special events or situations required additional illumination;
- the outdoor lighting fixture was used solely to enhance the aesthetic beauty of an object; or
- a compelling safety interest existed that could not be addressed by another method.

Special events or other situations that might require additional lighting would include sporting events and illumination of monuments, historic structures, or flags. Illumination for these events or situations would have to be installed to shield light fixtures from direct view and to minimize upward light and light pollution.

The bill would define "outdoor lighting fixture" to include billboard lighting, street lights, searchlights and other lighting used for advertising, and area lighting. It would define "light pollution" as the night sky glow caused by the scattering of artificial light in the atmosphere, and "full cutoff luminaire" as a luminaire that allows no direct light emissions above a horizontal plane through the luminaire's lowest light-emitting part.

This bill would take effect September 1, 1999, and would apply only to an outdoor lighting fixture designed, installed, or replaced with state funds on or after that date.

SUPPORTERSCSHB 916 would put Texas at the forefront in reducing light pollution. If
state agencies and facilities had to conform to these simple requirements,
private individuals and industry would be more likely to follow suit. In fact,
the Texas Department of Criminal Justice (TDCJ) already follows many of
the standards set forth by this bill because of a budget rider.

CSHB 916 would set some simple standards for state outdoor lighting, with certain exemptions, and these standards would help keep the night sky visible to astronomers at McDonald Observatory, for school children on astronomy

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	field trips, for hobbyists, and for the general public who would like to look up and see the natural night sky rather than the glow of city lights.
	Light pollution affects all people, especially those in the city, by blocking the view of the natural night sky. A dome of light hangs over a city and destroys the visible environment, severely limiting the hobby of stargazers and the science of astronomy. Other effects of light pollution are wasted energy and excess generation of electricity.
	Because urban sky glow can extend for miles, driving out of the city is not a solution. For example, the sky glow of Phoenix is visible from more than 100 miles away, and the sky glow from Los Angeles is visible from an airplane 200 miles away.
	Efficient outdoor lighting can result in significant energy and cost savings. In many cases, there is no need for nighttime outdoor lighting, or else that lighting can be reduced greatly.
OPPONENTS SAY:	No apparent opposition.
NOTES:	The committee substitute added the definition of "full cutoff luminaire" and the provision that the prohibition on use of state funding for an outdoor lighting fixture would not apply if a compelling safety interest existed that could not be addressed by another method.
	In the General Appropriations Act for fiscal 1998-99, Rider 54 for TDCJ contains very similar language to that of CSHB 916.