

Fiscal impact reports (FIRs) are prepared by the Legislative Finance Committee (LFC) for standing finance committees of the NM Legislature. The LFC does not assume responsibility for the accuracy of these reports if they are used for other purposes.

Current FIRs (in HTML & Adobe PDF formats) are available on the NM Legislative Website (legis.state.nm.us). Adobe PDF versions include all attachments, whereas HTML versions may not. Previously issued FIRs and attachments may be obtained from the LFC in Suite 101 of the State Capitol Building North.

## FISCAL IMPACT REPORT

ORIGINAL DATE 02/26/09

SPONSOR Irwin LAST UPDATED \_\_\_\_\_ HB 461

SHORT TITLE Night Sky Protection Act Shielded Lighting SB \_\_\_\_\_

ANALYST Haug

### APPROPRIATION (dollars in thousands)

Appropriation		Recurring or Non-Rec	Fund Affected
FY09	FY10		
	None		

(Parenthesis ( ) Indicate Expenditure Decreases)

Duplicates Appropriation in the General Appropriation Act  
Relates to Appropriation in the General Appropriation Act

### ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY09	FY10	FY11	3 Year Total Cost	Recurring or Non-Rec	Fund Affected
<b>Total</b>		\$1,140.0*	\$890.0	\$2,030.0	Recurring	General Fund

(Parenthesis ( ) Indicate Expenditure Decreases)

### SOURCES OF INFORMATION

LFC Files

#### Responses Received From

Higher Education Department (HED)  
Energy, Minerals and Natural Resources Department (EMNRD)  
Regulation and Licensing Department (RLD)  
Department of Finance and Administration (DFA)  
Environment Department (ED)  
New Mexico Municipal League (NMML)

### SUMMARY

#### Synopsis of Bill

House Bill 461 changes the definition of shielded lighting to mean a fixture that cuts off all upward transmission of light. The statute currently provides that shielded means a fixture that does not permit light rays to project below a horizontal plane through the lowest point of the light emitting portion of the fixture.

The bill replaces the provision making the Act applicable to fixtures installed after January 1, 2000, and inserts a provision that:

1. makes the law applicable to all light sources of 65 watts or greater or with intensity exceeding 750 lumens;
2. requires that such light sources be shielded to prevent light from “trespassing” on another’s property; and
3. requires protection of the night sky view of adjacent landowners.

The bill adds the following requirements:

1. limits a light standard to 10 feet unless it has full cutoff of upward transmission of light;
2. prohibits light sources fixed to buildings in a way that light rays are perpendicular to the building face and project light into another owner’s property; and
3. requires all direct rays of a light source to be confined to the owner’s property and not infringe or trespass on another owner’s property.

The bill makes the Act applicable in any county or municipality that does not have an ordinance restricting light pollution, and makes the provisions of the Act the minimum standard in municipalities and counties that do have such an ordinance.

The bill deletes the requirement that the Construction Industries Division (CID) permit and inspect new construction on State buildings to the standards of the Act and inserts a requirement that CID verify compliance on new “state construction” in all counties and investigate complaints of noncompliance with the act.

## **FISCAL IMPLICATIONS**

The CID states:

CID currently investigates licensed and unlicensed contractor complaints, statewide, with a combined staff of 10 FTE. The total cases managed annually by these FTE is approximately 2,000, and the approximate annual cost of the program operation is \$890,000.

The number of violations of the Night Sky Protection Act can be expected to greatly exceed licensing violations because the opportunity for violation is present on virtually every residence and commercial structure in the State - as well as on all streets, parking lots and recreational facilities. Clearly, it is not possible for CID to enforce the Act with existing personnel, nor could it do so with less than 10 new FTE. Even at this minimum staffing, the resulting minimum operating budget increase would be approximately \$890,000 annually, and require start up costs of approximately \$250,000 for vehicles, computers, office and light measurement equipment. CID would be required to hire new staff who would work at night using sophisticated, expensive light measurement equipment.

The maximum penalty for violation of the Act is \$25.00. This insignificant consequence does not justify the administrative effort or cost of the investigation and enforcement of a violation.

The EMNRD notes that adoption of this bill would create mandates for State Parks Division and other state agencies to upgrade existing outdoor lighting installed after the Act but not in compliance with HB 461 amendments as to new shielding requirements, but no budget is allocated for this task.

The HED comments that HB461 would place requirements on the shielding of all light sources 65 watts or greater, as well as standards on nonconforming light fixtures. The act currently states that when existing lighting fixtures become irreparable, their replacements are subject to all provisions of the Night Sky Protection Act. The fiscal impact of such changes to the public college and university facilities is unknown; however the cost of replacing lighting at higher education facilities to comply with HB461 could be substantial.

### **SIGNIFICANT ISSUES**

The CID comments:

The amendments in this bill expand it to cover “light sources,” prohibiting “trespass” of light from one owner’s property to another, and requiring owner’s to protect the “night sky view” of adjacent landowners. There are no objective criteria in the bill for measuring whether such violations have occurred, and to the extent such criteria could be developed, investigation of alleged violations would have to be conducted at night. Such investigations could not be performed by any existing CID staff because each of them works a full, day shift.

The bill also requires CID to verify compliance on all new “state construction” in all counties, but CID does not have building code enforcement authority in all counties. NMSA 1978, Section 3-17-6 gives counties authority to adopt a building code ordinance, and NMSA 1978, Section 3-18-6 gives them exclusive planning and permitting authority.

CID does not have jurisdiction over all “state construction.” It can only enforce the building code, including the requirements of the Night Sky Protection Act, through its plan review, permitting and inspections process. If construction is not required to be permitted, CID has no enforcement authority over it. Not all construction, such as certain construction on farms and ranches, is required to be permitted.

The State building codes currently contain codes reflecting the objective standards that are required in the Act now. It would be difficult if not impossible to provide building codes requirements governing the “protection” of a night sky view or ensure that no light will “trespass” from one owner’s light source to another’s property.

The amendments now make the portions of the building code that enforce the Night Sky Protection Act applicable only to “state construction.” Currently, this portion of the building code is a minimum standard for all local building programs and can be interpreted to apply to all construction.

The ED comments that the new requirement in HB 461 that all direct rays of a light source be confined to the owner’s property site could impair the ability of convenience store owners to comply with requirements of occupational health and safety rules that require the employer to “provide and maintain exterior lighting during all evening and nighttime operating hours that ensures clear visibility of the parking areas, walkways, building entrances and exits, and gasoline pump areas.” If HB 461 is enacted, existing occupational health and safety rules might have to be modified.

The SPD states that it has built an extensive education program (“Reach for the Stars) around a focus on astronomy and the night sky, and has made significant financial investments in this area. State Parks also is building small astronomy observatories at parks around the state where the dark skies are best for nighttime viewing. Two observatories have been opened (at City of Rocks State Park near Deming and Clayton Lake State Park near Clayton). Additional observatories facilities are planned for Heron Lake State Park and Oasis State Park in 2009 and others will hopefully follow these. These capital and program investments in the parks, as well as the one of the most beautiful and fragile basic park resources—a star-filled night sky—are at serious risk if the Night Sky Protection Act is not implemented and enforced and New Mexico’s night sky is allowed to deteriorate further.

## **CONFLICT**

The CID asserts:

The Night Sky Protection Act currently states that local jurisdictions may enforce the requirements of the Act. This section is not deleted by HB 461, but it is deleted in HB 362, which proposes a new enforcement provision in its place.

If HB 362 fails, and HB 461 passes, there will either be no enforcement provision in the Act, or CID would be required to investigate complaints of violations that local jurisdictions can elect not to enforce.

If both HB 362 and HB 461 pass, CID and local jurisdictions will be required to “fully enforce” the Act (under HB 362) but only CID has is charged with complaint investigation under HB 461.

## **TECHNICAL ISSUES**

The CID states:

The amendment removes the requirement that CID make recommendations to amend the building code to include the standards in the Act. CID has made these recommendations and they have been incorporated into the State electrical code, NMAC Title 14 Chapter 10 Part 4 (See NMAC 14.10.4.10. H. (4). These standards are required by CID on all new construction of public/state buildings. Violation subjects the licensee/contractor to disciplinary action including fines and/or suspension or revocation of license under the Construction Industries Act. Failure to comply with the code requirements can also result in work stoppage on the project until compliance with the Act is achieved. The amendment creates ambiguity with respect to what construction this portion of the electrical code applies to and removes the specific requirement that CID enforce these codes on State buildings through its plan review, permitting and inspection processes.

The bill references “state construction” but does not define it. It could be interpreted to mean: construction performed by the state: construction that is performed for the State (eg. leased buildings), or construction that is under the State’s building code jurisdiction. CID is responsible for enforcing building code compliance. Existing lighting that violates the Act is outside that purview. The division is not structured, funded or authorized to address violations of performance standards by lighting equipment or any other non-construction related standards.

**ALTERNATIVES**

The CID suggests that it a criminal infraction to violations of the Act be a criminal infraction, and have the State Police and local law enforcement agencies cite violators. Local building programs could be required to enforce compliance with the Act on all construction through their planning and permitting programs.

GH/mt