Examples

Nightscapes Around Town

Some lighting is good...



Full cutoff lights direct all light downward to this path, which is brightly lit. Notice how the light does not extend upward into the upper half of the trees.



Full cutoff lights illuminate the school grounds without contributing to glare or direct sky



glow.



Billboards are among the most offense applications when the lights point upward, yet this example shows how a billboard can be well illuminated without the adverse effects. Here the lights simply aim down.



Car dealerships with good lighting? You bet. This dealership has well shielded lights that amply illuminate the inventory.





Wall packs aimed downward and lights under canopies brighten the property. In addition to saving the night sky, these applications save money, for less energy is required when the light is not wasted upward.



During closed business hours, the exterior of this storefront is bright and secure with zero glare.



One recessed bulb amply lights a residential front door without the need for additional wall-mounted porch lights.



Recessed canopy lights of a drive-through bank provide ample security without glare.



Dark-sky friendly lights benefit the National Parks, such as this installation at the Lake Yellowstone Lodge.



Some lighting is not so good...



Globe lights waste nearly half of their energy to the sky. Taxpayers could cut their energy bill significantly with more attractive, efficient lights.



A string of "acorn lights" waste energy skyward and shine directly into the eyes of drivers.



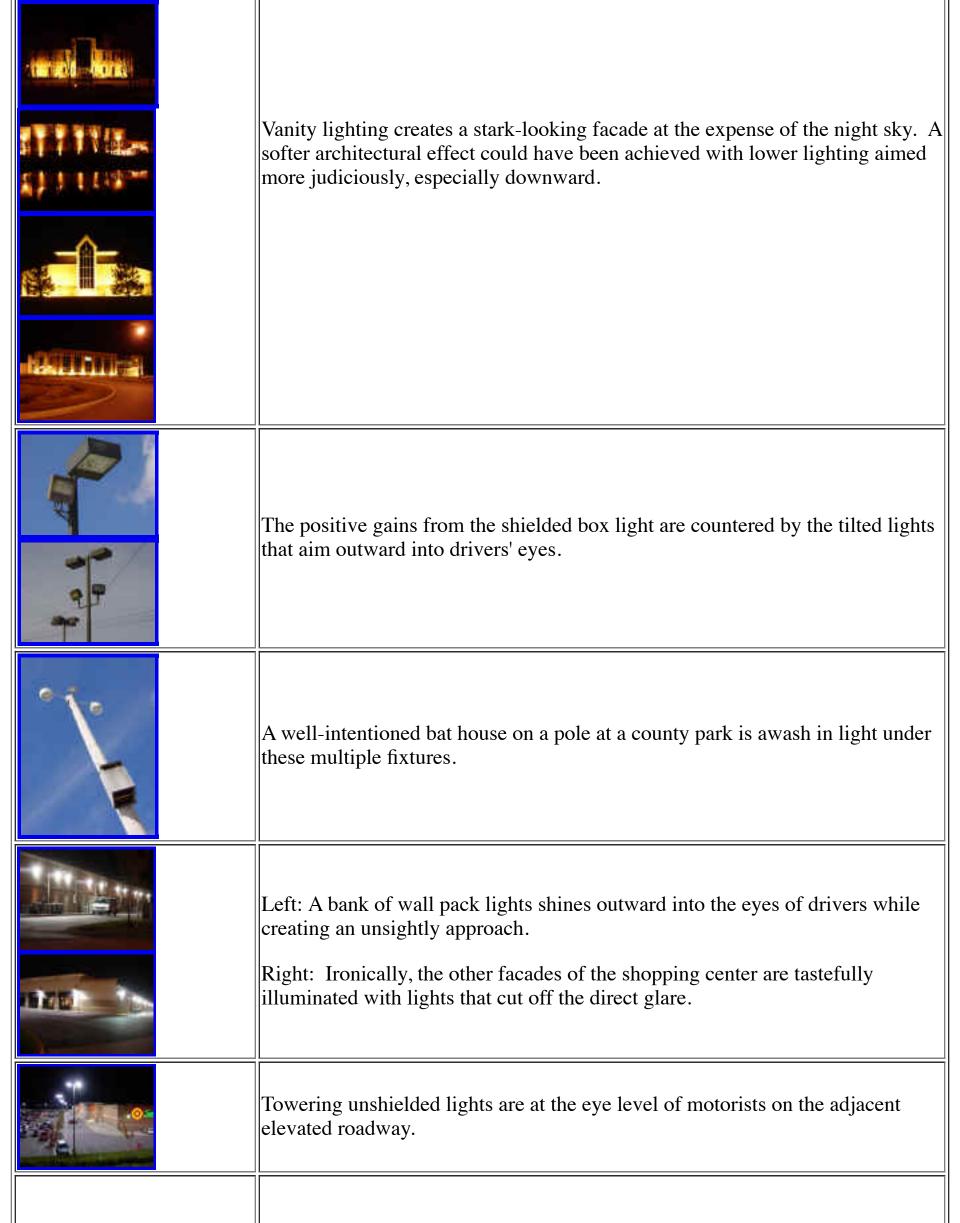
High light levels--well beyond the brightness needed for a parking lot--overwhelm the eyes at a road intersection. Note how the lighting hazard is compounded by the reality of a gentle rain falling on the windshield.



Excessively bright lights on high lamp posts spill light well beyond the property boundary.

The hazard of poor lights become even greater when motorists need the

illumination most, such as during poor weather conditions.
Floodlights aimed outward from a house shine indiscriminately into adjacent properties. See also before-after.htm.
Globe lights waste energyand tax dollarsby throwing much of their output to the sky. The glare from the unshielded lights creates such great contrast for the observer's eye that the pedestrians and roadway remain dark while the globes are bright.
Glare from an angled light creates such a bright veil of light across the field of view that the intended targetthe parking lotremains dark and unsafe, in spite of the bright light.
Left: Lights at a gas station extend below the canopy and into the eyes of drivers approaching the intersection. Note the obscured traffic signals near the line of sight. Right: A nearby gas station ramps up the brightness level well beyond the needs of customers. Because all of the bright lights are unshielded below the canopy, this exposure truly suggests the overlighting by one business.

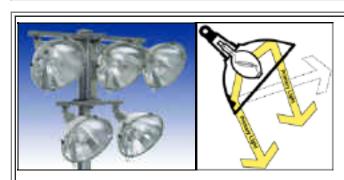


Parking lot lights encircling a funeral home are tilted upward, aiming into the eyes of nearby drivers and spilling well beyond the landscape buffering at the property line.
Flashy blinking signage obstructs the view at an intersection, distracts the attention of drivers, causes disabling glare, and detracts from the community appearance.
Angled lights aim into the eyes of drivers near an ice cream stand.
Left: Floodlights shine skyward beyond the upper portion of a church. Right: When the upper lights are turned off, the stained glass windows are visible, energy is saved, and the night sky is preserved.
A hotel on the edge of a corn field is awash in vanity lights aimed upward against its facade.
Lights aimed outward impair the visibility of motorists.
A few businesses compete for the distinction of having the most obnoxious outdoor lighting. Unshielded, angled lights that are the biggest culprits detract from the appearance of the community.
Round globes aim much light upward, while the downward light casts shadows and is impeded from reaching the ground by the triangular frame.



Yikes!

(See more examples from **Around Town**)







http://www.harrisbaseballsoftball.com

Harris Township Junior Baseball and Softball Association (HTJBSA) in Granger, IN, tripled the number of fields illuminated from one to three. While they installed Musco Lighting's <u>SportsCluster 2</u> system, they they did not install either Musco's <u>Level-8TM</u> or <u>Total Light ControlTM</u> options. According to the manufacturer, these environmentally sensitive features (shown below) "redirect wasted spill light" and offer "up to 95% reduction in spill light and glare."



HTJBSA officials suggested the new configuration will spill the light equivalent to a



Left: The glow of distant lights during a full moon with no field lights.



Left: During the off-season when the field is under snow, the glare of two lights remain.



Right: The lights from one ball field spill over with significant glare. Note that you can still see the two unshielded year-round lights.



Top: Opposite the ball fields with no lights on, the surrounding area is relatively dark, even during a full moon with snow on the ground.

Bottom: The spillover from only one ball field's lights illuminates the surrounding area well beyond the level of a full moon..





As seen from above, wasted light is directed upward toward the plane. Admittedly, some light is reflected off the snow, but the greater culprit is direct light (seen as glare) directed skyward.

http://www.urbanwildlands.org/conference.html#conference

Urban Wildlands Conference features abstracts and papers that address the impact of outdoor lighting on the natural habitat.



http://www.nynewsday.com/news/local/bronx/nyc-animation-4,0,6282467.realvideo?coll=nyc-manheadlines-bronx

Advocates of a proposed World Trade Center memorial entitled Freedom Tower suggest their massive outpouring of light is "a pioneer in environmental quality" and "a world-class model of energy efficiency and environmental sustainability." For the press release from Governor George E. Pataki, Mayor Michael R. Bloomberg, World Trade Center developer Larry A. Silverstein and architect David Childs, see http://renewnyc.com/displaynews.aspx?newsid=bd4d88dd-5d0b-446f-b945-00b785aba5cb.



Waste Management touts its conversion of trash into energy. Unfortunately, it promotes bright lights as a positive outcome.

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